

# Central University of Punjab

पंजाब केंद्रीय विश्वविद्यालय



## Profile and SWOC Analysis

**VOLUME-I**

## Profile of the University

### 1. Name and Address of the University

<b>Name:</b>	Central University of Punjab	
<b>Address:</b>	City Campus, Mansa Road, Bathinda – 151 001	
<b>City:</b> Bathinda	<b>Pin:</b> 151001	<b>State:</b> Punjab
<b>Website:</b>	www.cup.ac.in	

### 2. For Communication

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor	Prof. R. K. Kohli	O:0164-2430586 R:	98722-01516	0164-2864111	rkkohli45@yahoo.com
Registrar	Dr. Pankaj Khare	O:0164-2864106 R:	98685-13505	0164-2864106	registrar@cup.ac.in pankajkhare@gmail.com
IQAC Director	Prof. A. K. Dhawan	O:0164-2864130 R:	93547-60523	0164-2864130	dhawanashok@hotmail.com

### 3. Status of the University

State University	<input type="checkbox"/>
State Private University	<input type="checkbox"/>
Central University	<input checked="" type="checkbox"/>
University under Section 3 of UGC (Deemed University)	<input type="checkbox"/>
Institution of National Importance	<input type="checkbox"/>
Any other (please specify)	<input type="text"/>

### 4. Type of University

Unitary	<input checked="" type="checkbox"/>
Affiliating	<input type="checkbox"/>

### 5. Source of funding

Central Government	<input checked="" type="checkbox"/>
State Government	<input type="checkbox"/>
Self-financing	<input type="checkbox"/>
Any other (please specify)	<input type="text"/>

### 6. a. Date of establishment of the university:

28.02.2009

**b. Prior to the establishment of the university, was it a/an**

- |             |                            |     |                          |    |                                     |
|-------------|----------------------------|-----|--------------------------|----|-------------------------------------|
| <b>i.</b>   | PG Centre                  | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>ii.</b>  | Affiliated College         | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>iii.</b> | Constituent College        | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>iv.</b>  | Autonomous College         | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>v.</b>   | Any other (please specify) |     |                          |    | .....                               |

If yes, give the date of establishment ..... (dd/mm/yyyy)

**7. Date of recognition as a university by UGC or any other national agency:**

Under Section	dd	mm	yyyy	Remarks
i. 2f of UGC*				
ii. 12B of UGC*				
iii. 3 of UGC#				
iv. Any other^ (specify)	The Central University of Punjab was established on 28 February, 2009 vide the Central Universities Act No 25 of 2009.			

\* Enclose certificate of recognition.

# Enclose notification of MHRD and UGC for all courses/programmes/campus/campuses.

^ Enclose certificate of recognition by any other national agency/agencies, if any.

**8. Has the university been recognized**

a. By UGC as a University with Potential for Excellence?

Yes  No

If yes, date of recognition: ..... (dd/mm/yyyy)

b. For its performance by any other governmental agency?

Yes  No

If yes, Name of the agency ..... and  
date of recognition: ..... (dd/mm/yyyy)

**9. Does the university have off-campus centres?**

Yes  No

If yes, Name of the establishment ..... (dd/mm/yyyy)

date of recognition: ..... (dd/mm/yyyy)

**10. Does the university have off-shore campuses?**

Yes  No

If yes, Name of the establishment ..... (dd/mm/yyyy)

date of recognition: ..... (dd/mm/yyyy)

**11. Location of the campus and area**

	<b>Location*</b>	<b>Campus area in acres</b>	<b>Built up area in sq. mts</b>
<b>i. Main campus area</b>	Rural; Village Ghudda, Bathinda	500	Under Construction
<b>ii. City Campus</b>	Urban, Bathinda	37	9368.62 sq. mts.
<b>iii. Campuses abroad</b>			

(\* Urban, Semi-Urban, Rural, Tribal, Hilly Area, Any other (please specify)

If the university has more than one campus, it may submit a consolidated self-study report reflecting the activities of all the campuses.

**12. Provide information on the following: In case of multi-campus University, please provide campus-wise information.**

- *Auditorium/seminar complex with infrastructural facilities*

**Auditorium** – At the City Campus, an air-conditioned auditorium is available for holding Lectures, Seminars, University level functions. It can accommodate around 250 persons and is equipped with multimedia projectors, tablet PCs and 5.1 surround-sound theatre system. On the main Campus, it is to be constructed in Phase II.

**Seminar Hall** - An air conditioned seminar hall in the academic block has a seating capacity of 90. It is Wi-Fi enabled, has a multimedia projector and CCTV cameras which facilitate the presentations made by invited academicians, experts, faculty and the

students. On the main Campus, two Halls are to be constructed in Phase II.

- *Sports facilities*

- \* Playground – Available at City Campus and Main Campus
- \* Swimming pool – Available at Main Campus
- \* Gymnasium – Available
- \* Any other (Please specify) – An air-conditioned fully functional fitness centre is available for the students and staff of the Central University of Punjab. Facilities in the centre include: Aerobic studios with high-power treadmills, Decline bench, Upright stationary bike. Incline bench, Free-Weight training, Preacher curl bench, Cross trainer, Weight rack, Chest and shoulder presses, Dumbbells 1 kg-20 kg, Leg press and extension, Rubber -coated weight plates, Cross pull down, Weighing machine, Smith machine, Twister, Olympic flat bench, Stretching equipment

Sports facilities like physical fitness centre /Gymnasium, athletic tracks (200 m), badminton courts, basketball and volley ball courts, Boxing gloves and punch bags, cricket pitch and many indoor games (chess, carom, table tennis) are available on Campus. In addition, yoga, aerobic and self-defence boxing classes are also conducted every day.

- *Hostel*

- \* *Boys' hostel*

- Number of hostels – 05
- Number of inmates – 236
- Facilities
  - Medical Facility
  - 24 hr. hot and cold water supply and 24 h electricity supply
  - Wi-Fi connectivity
  - Air-conditioned common room
  - Gensets installed
  - 24 h security

- \* *Girls' hostel*

- Number of hostels – 04
- Number of inmates – 242
- Facilities
  - Medical Facility

- 24 hr. hot and cold water supply and electricity supply
- RO purified water
- Wi-Fi connectivity
- Air-conditioned common room
- Gensets installed
- Female security guards

- \* Working women's hostel
    - i. Number of hostels
    - ii. Number of inmates
    - iii. Facilities
- } NA

- *Residential facilities for faculty and non-teaching* – Transit accommodation available for newly joined faculty for a period of 3 months
- *Cafeteria*- Available
- *Health centre* – Nature of facilities available – inpatient, outpatient, ambulance, emergency care facility, etc.
- *Facilities like banking, post office, book shops, etc.* - Two ATM Machines are available
- *Transport facilities to cater to the needs of the students and staff* - One Bus is available
- *Facilities for persons with disabilities*: Required facilities are available
- *Animal house* – Not available as yet
- *Incinerator for laboratories* – Not available
- *Power house* – Yes  
Connected electricity load is of 440 kw. Main Power Supply electric panel is housed in the Power House along with four gen sets.
- *Waste management facility* – Yes
  - Vermicomposting facility is available in the university premises.
  - Composting Pit for biodegradable waste is available.
  - Two Sewage Treatment plants
  - Different Coloured Bins for disposal of different wastes.

**13. Number of institutions affiliated to the university –**

CUPB has no affiliated Colleges, as per the Central Universities Act

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University

CUPB has no affiliated Colleges, as per the Central Universities Act

Yes  No  Number

15. Furnish the following information:

Particulars	Number	Number of Students
a. University Departments Undergraduate Post graduate	0 19	Total = 904 (Including 30 in certificate course and 40 in diploma)
b. Constituent colleges	-	-
c. Affiliated colleges	-	-
d. Colleges under 2(f)	-	-
e. Colleges under 2(f) and 12B	-	-
f. NAAC accredited colleges	-	-
g. Colleges with Potential for Excellence (UGC)	-	-
h. Autonomous colleges	-	-
i. Colleges with Postgraduate Departments	-	-
j. Colleges with Research Departments	-	-
k. University recognized Research Institutes/ Centres	-	-

16. Does the university conform to the specification of Degrees as enlisted by the UGC?

Yes  No

If the university uses any other nomenclatures, please specify.

17. Academic programmes offered by the university departments at present, under the following categories: (Enclose the list of academic programmes offered)

Programmes	Number
UG	-
PG	34
Integrated Masters	-

M.Phil.	07
Ph.D.	15
Integrated Ph.D.	07
Certificate	01
Diploma	01
PG Diploma	-
Any other : Short term courses	07
Total	72

18. Number of working days during the last academic year – 181

19. Number of teaching days during the past four academic years.

2011-12	2012-13	2013-14	2014-15	2015-16
176	179	170	181	195

(‘Teaching days’ means days on which classes were engaged. Examination days are not to be included)

20. Does the university have a department of Teacher Education?

Yes  No

If yes,

a. Year of establishment:

01/08/2013

b. NCTE recognition details (if applicable)

Notification No.: NRC/NCTE/NRCAPP-9698/238<sup>th</sup>/104363

c. Is the department opting for assessment and accreditation separately?

Yes  No

21. Does the university have a teaching department of Physical Education?

Yes  No

If yes,

a. Year of establishment Applied (dd/mm/yyyy)

b. NCTE recognition details (if applicable)

Notification No.: Applied

Date: ..... (dd/mm/yyyy)

c. Is the department opting for assessment and accreditation separately?



Yes  No

22. In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered?

Not applicable

Yes  No

If yes, please enclose approval/recognition details issued by the statutory body governing the programme.

23. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

AICTE and NCTE

24. Number of positions in the university

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	Associate Professor	Assistant Professor		
Sanction by the UGC/University/ State Government	20	40	80	131	11
<i>Recruited</i>	02+05	08+01	63+5	36	
<i>Yet to recruit</i>	13	31	12	95	
Number of persons working on contract basis	05	01	05		

Also, one Ramalingam fellow and one DST INSPIRE faculty work at CUPB

25. Qualifications of the teaching staff

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	02	-	04	04	50	11	71
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	01	01	02*
Temporary teachers							
Ph.D.	04	01	01	-	02	01	09



s										
Foreign students	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	178+335= 513	-	61+61= 122	15+13= 28	64+107= 171	-	24+06=30	37+3= 40	

**29. Unit Cost of education**

*(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)*

(a) Including the salary component = Rs. 9.70 lakhs\*

(b) Excluding the salary component = Rs. 5.48 lakhs\*

\*Includes expenditure on research activities of Faculty and students

**30. Academic Staff College**

- Year of establishment NA
- Number of programmes conduction (with duration)
  - \* UGC Orientation
  - \* UGC Refresher
  - \* University's own programmes

**31. Does the university offer Distance Education Programmes (DEP)?**

Yes  No

If yes, indicate the number of programmes offered.

Are they recognized by the Distance Education Council?

**32. Does the university have a provision for external registration of students?**

Yes  No

If yes, how many students avails of this provision annually?

**33. Is the university applying for Accreditation or Re-Assessment? If Accreditation, name the cycle.**

Accreditation: Cycle 1  Cycle 2  Cycle 3  Cycle 4

Re-Assessment

**34. Date of accreditation\*** (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: .....(dd/mm/yyyy), Accreditation outcome/Result ....

Cycle 2: .....(dd/mm/yyyy), Accreditation outcome/Result ....

Cycle 3: .....(dd/mm/yyyy), Accreditation outcome/Result ....

Cycle 4: .....(dd/mm/yyyy), Accreditation outcome/Result ....

\*Kindly enclose copy of accreditation certificate(s) and peer team report(s)

**35. Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated/constituent/autonomous colleges under the university. –**

NA

**36. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).**

IQAC 06/02/2015

AQAR (i) ..... (dd/mm/yyyy)

(ii) ..... (dd/mm/yyyy)

(iii) ..... (dd/mm/yyyy)

(iv) ..... (dd/mm/yyyy)

**37. Any other relevant data the university would like to include (not exceeding one page).**

On various research parameters such as relative *h*-index, Relative research papers citation and relative ranking RG score, CUPB has not only been ranked at no 1 among the 13 central university established in 2009, but also is way ahead of the universities at next position. If compared on the basis of per capita, per year on these parameters, CUPB is at no. 4 among all universities in India.

CUPB currently runs a total of 72 academic programmes: 34 Postgraduate programmes, 07 M. Phil., 15 Ph.D., 07 Integrated Ph.D., 01 Certificate course, 01 Diploma and 07 Short term courses. The university offers M. Phil-Ph.D. and Masters programmes in areas as diverse as Engineering, Biochemistry and Microbial Sciences, Animal and Plant Sciences, Chemical Sciences, Pharmaceutical Sciences and Natural Products, Physical Sciences, Mathematics and Statistics, Environmental Sciences, Environmental Law, Education and Physical Education, Computer Sciences and Technology, South and Central Asian Studies, Geography and Geology, Sociology, Comparative Literature and languages and Classical and Modern Languages.

These programmes, many being interdisciplinary in nature, make CUPB students uniquely qualified in undertaking major initiatives in diverse areas.

The Central University of Punjab takes pride in its exceptionally qualified and committed faculty of 84 teachers in the 19 Centres spread over nine Schools. In addition CUPB also has 8 Visiting Professors and 1 Adjunct professor.

As a general practice of appointment at CUPB, an Assistant Professor is appointed only if he/she has both Ph.D. and NET and is from a reputed National/ International laboratory. Generally, some experience of foreign universities is also expected. The faculty members have a large number of publications and research projects. There are four DST Inspire Fellows, three D.S. Kothari post-doctoral fellows one Ramalingaswami DBT Reentry Fellow, one Ramanujan Fellow and one J.C. Bose Fellow. Mostly, Faculty has training from the best universities of US, Canada, Germany, England, Japan, Israel, Australia. It is remarkable that at this young age, CUPB has over 50 Research Projects worth about Rs. 9 Crores.

The cultural diversity in the CUPB can be judged from the fact that the students are from 25 different states, Faculty from 13 states and staff from nine states.

The air-conditioned University Library opens 24 h, all 365 days except three National Holidays. It has Radio Frequency Identification (RFID) and electromagnetic security (EM) systems and security arrangement comprising of 20 CCTV cameras. The library has 25070 book titles, 9030 e- and print journals and full text resources, including 'UGC INFONET' programme, Science Direct, Springer, J-STOR, Wiley-Blackwell, SAGE, Taylor & Francis, Project Muse, Science Online, IEEE/IEL online, ACS, Cambridge University press, Oxford, Indiasat.com and PROWESS. Library provides access to periodical collections of 22 university libraries in India through JCCC UGC-INFONET, World Bank E-Library and has institutional membership of DELNET. Sophisticated scanners like V-cradle planetary scanner for automated scanning are available and the library has its entire bibliographic collection in online electronic database (OPAC).

Apart from a strong emphasis on meeting national and social needs, curriculum at CUPB has a focus on student's employability and research capability. This is evident from a very high selection rate of CUPB students in the National Level Competitive Examinations: 159 students have cleared various national level examinations in the last years.

CUPB prepares its students to be the leaders of tomorrow in academic, industry, administration, politics and other spheres of life. The opportunities are provided for personality enhancement, skill development and

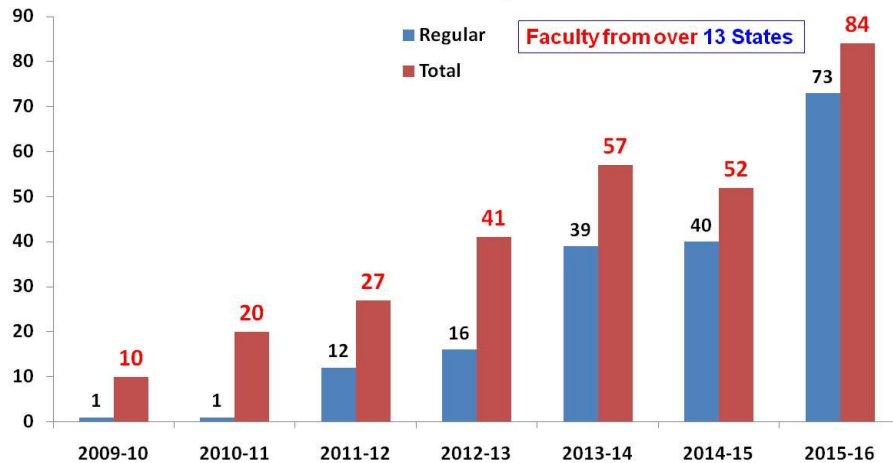
communication skills through started short term value added. Sports and social work remain at the centre of activities and CUPB is set to move ahead from position one among the new Central universities to the top notches of academic organizations in the country.

## SWOC Analysis

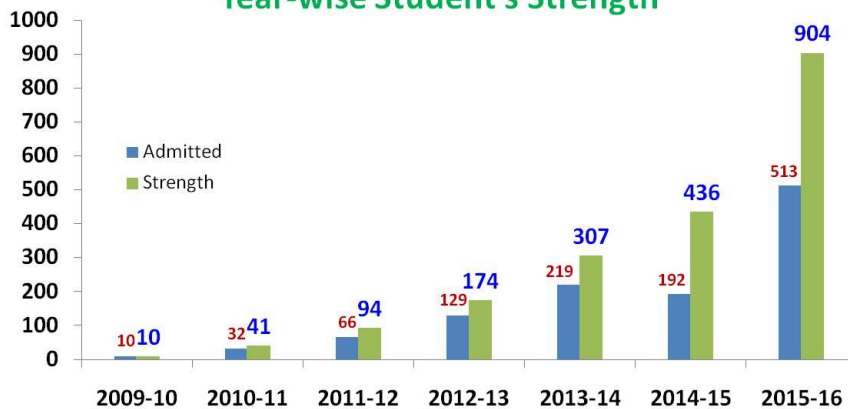
The Central University of Punjab is on a rapid path of expansion and academic excellence. In the Academic Session 2015-16, the number of students has increased from 436 last year to 904; the Faculty increased from 52 to 84 and the number of academic programmes being run at the University increased from 25 to 72. The number of non-teaching staff increased from 59 to 69 only, but approval of CRR rules will soon enhance the process of recruitment of staff.

Not only the numbers have increased, but also there is a qualitative enhancement in all these parameters because of very transparent and stringent procedures and policies that have been put in place.

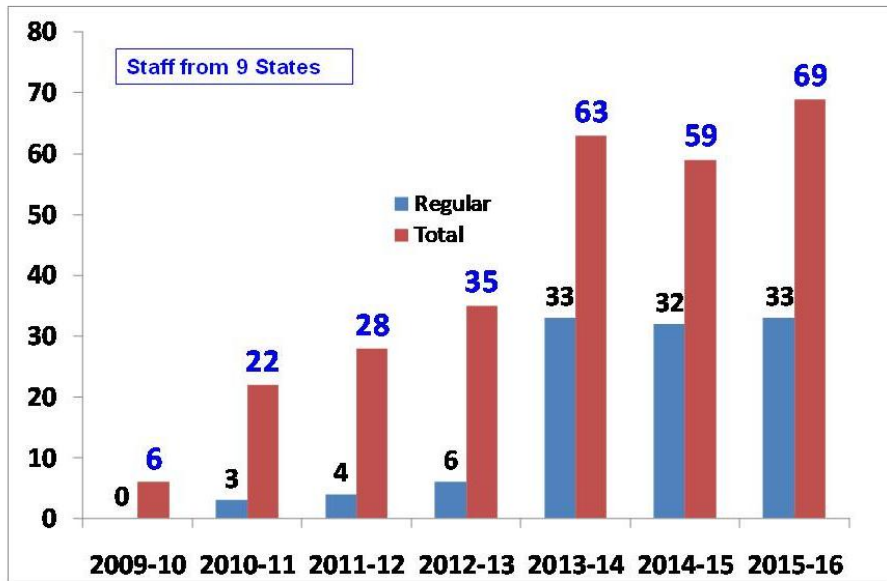
### Number of Faculty Members



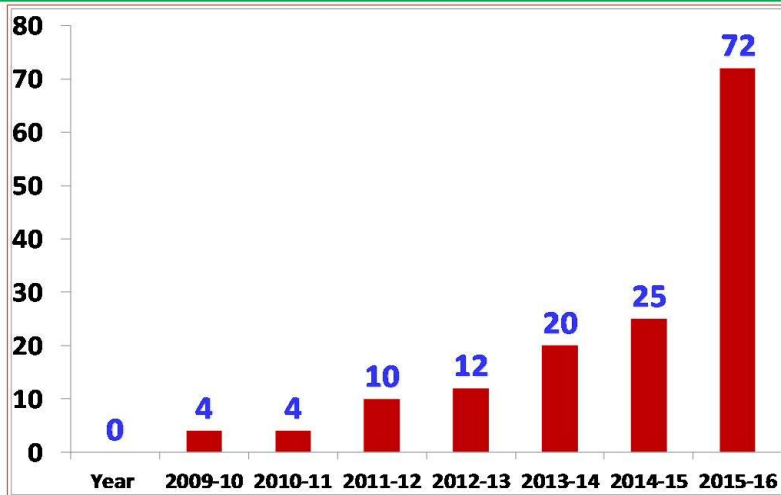
### Year-wise Student's Strength



## Number of Non-teaching Staff



## No. of Courses offered





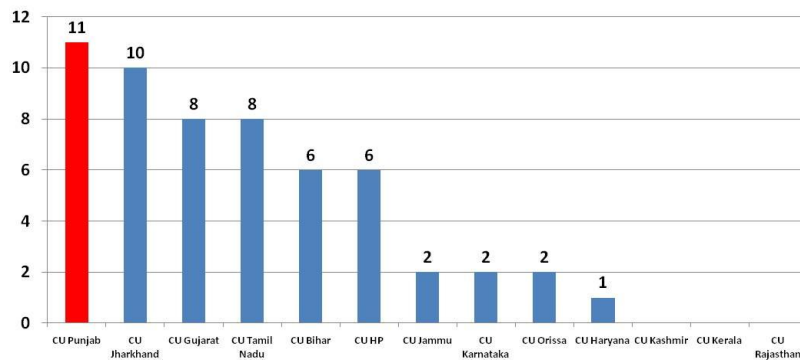
## Strengths:

1. *An exceptionally qualified and committed faculty:* A Faculty of 84 teachers is CUPB's biggest strength. There are 8 visiting professors and 1 adjunct professor also. Nearly all Assistant Professor have both Ph.D. and NET and are from reputed National/ International laboratories. The faculty members have a large number of publications and research projects. There are four DST Inspire Fellows, three D.S. Kothari post-doctoral fellows, one Ramalingaswami DBT Reentry Fellow, one Ramanujan Fellow and one J. C. Bose Fellow. Mostly Faculty are trained in US, Canada, Germany, England, Japan, Israel. It is remarkable that at this young age, CUPB has over 50 Research Projects worth about Rs. 9 Crores.

### Relative *h*-index of New Central Universities

Source: Elsevier Inc., USA  
[www.scopus.com](http://www.scopus.com)

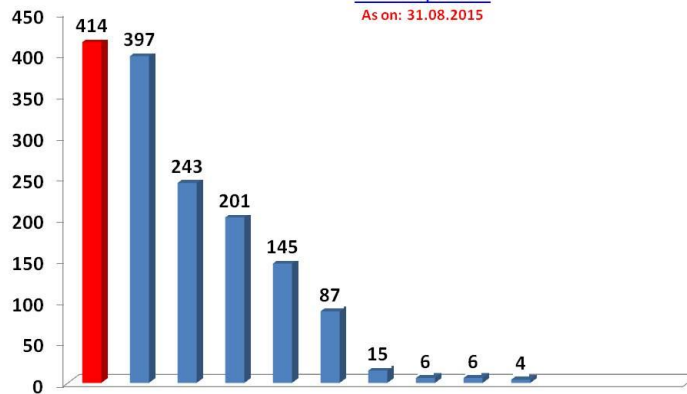
As on: 31.08.2015



### Relative Research Paper Citations of New CU's

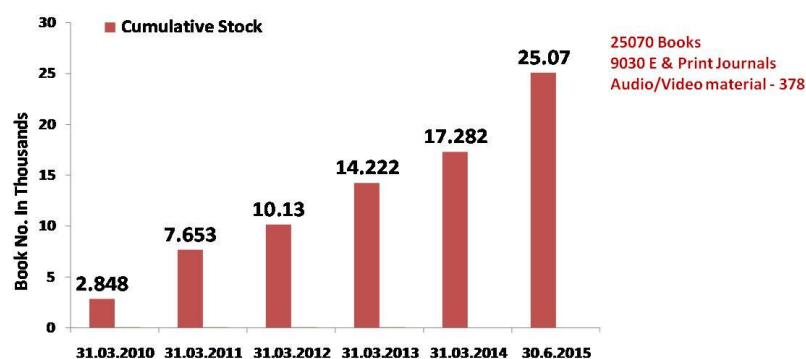
Source: Elsevier Inc., USA  
[www.scopus.com](http://www.scopus.com)

As on: 31.08.2015



2. *Library is a huge strength of CUPB:* Fully equipped and air-conditioned University Library has Radio Frequency Identification (RFID) and electromagnetic security (EM) systems and security arrangement comprising of 20 CCTV cameras. The library has 25070 book titles, 9030 e- and print journals and full text resources, including ‘UGC INFONET’ programme, Science Direct, Springer, J-STOR, Wiley-Blackwell, SAGE, Taylor & Francis, Project Muse, Science Online, IEEE/IEL online, ACS, Cambridge University press, Oxford, Indiasat.com and PROWESS. Library provides access to periodical collections of 22 university libraries in India through JCCC UGC-INFONET, World Bank E-Library and has institutional membership of DELNET. Sophisticated scanners like Bookeye V-cradle planetary scanner for automated scanning and digitalization are available and the library has its entire bibliographic collection in online electronic database (OPAC).

### Modern, Fully Automated, RFID enabled Library



3. *Excellent infrastructure facilities for research are CUPBs major strength:* Because of a much focused approach to create research infrastructure, CUPB is known to be among the best equipped Universities of the region. The university has established a Central Instrumentation Facility to provide high end facilities to its faculty and students. The Central Instrumentation Facility which houses Fluorescence Microscope, Ultra High Performance Liquid Chromatography, UV-Visible Spectrophotometer, Fourier Transform Infrared Spectrometer, Atomic Absorption Spectrometer, Gas Chromatography Mass Spectrometry, Confocal Laser Scanning Microscope with FCS, Field Emission Scanning Electron Microscope and Gas Chromatography.

The Molecular biology facilities include DNA sequencer, RT-PCR, Gradient PCR, several DNA Thermocyclers, Gel Documentation Systems, Ultra Low Deep Freezers, High Speed Cooling Centrifuges, CO<sub>2</sub> incubators, Milli Q Water Purification Systems, Olympus FV1200 Automated Karyotyping

System. Flow Cytometer, Elisa Readers, 2D Gel electrophoresis, Freeze dryers. Excellent facilities for plant tissue culture and culturing of animal and human cell lines have been created in addition to the availability of cold rooms for long term storage of experimental materials, a screen house and a growth house for raising plants under controlled conditions

The other major equipment available in University are: Inductively Coupled Plasma (ICP – order placed for procurement), Stereo Binocular Research Microscopes, Inverted Microscopes, Phase Contrast Microscopes, Freezing Microtome, Microbial Fermenter, Mercury analyzer Vacuum Concentrators, Accelerated solvent extractor, Muffle furnace, Trace Metal Analyser etc.

The science laboratories are equipped with facilities for training of students and research in the disciplines of Biosciences, Chemical and Pharmaceutical Sciences, Environmental Science and Technology, Human Genetics, Molecular Medicine and Computer Science and Technology including Cyber Security.

Research support facilities include uninterrupted power supply, IT facilities, common instrumentation facility and 30 acres of experimental areas for field research.

4. *The IT Infrastructure is a unique set up:* The air-conditioned Computer Centre equipped with 170 Dell and 15 Apple McIntosh desktop computers and six high end computing machines with 8GB RAM and 42” LCD monitors for their academic pursuits. All the laboratories, class rooms, offices, guest houses, residents have 1 GB connectivity. The entire campus is Wi-Fi enabled.
5. *Robust and transparent systems:* are CUPB’s fifth biggest strength. The policies for admission of students to their graduation are all clearly laid out.
6. *Sound Financial Health:* Being a Central University, there is no financial crunch as yet

**Weaknesses:**

1. *The locational Disadvantage:* CUPB has a strong locational disadvantage. The City of Bathinda is located in a rather backward region of Punjab and does not have good connectivity through air or by train. It is also known as “Cancer Belt” of Punjab and this adverse publicity in the media becomes an obstacle in talent hunt as also in visits of experts for lectures and meetings.

2. *The Campus:* The university does not have a Campus of its own and is presently functioning from a rented building. This was an abandoned and dilapidated building of Bathinda Cooperative Integrated Cotton Ginning and Spinning Mills (BACOSPIN). However, a 500 acre GRIHA-4 compliant campus will become available in about 18 months.
3. *Other Issues:*
  - (a) Non availability of the senior faculty and senior statutory position holders such as librarian and finance officer, though largely due to non-portability of GPF (Pension), results in lack of guidance to young faculty and delay in policy decisions.
  - (b) In the city campus from where CUPB is functioning at present, there is a serious problem of space and very little chance of further expansion.
  - (c) Being in a remote area the supplies (sophisticated equipment and fine chemicals) is a problem.

### **Opportunities**

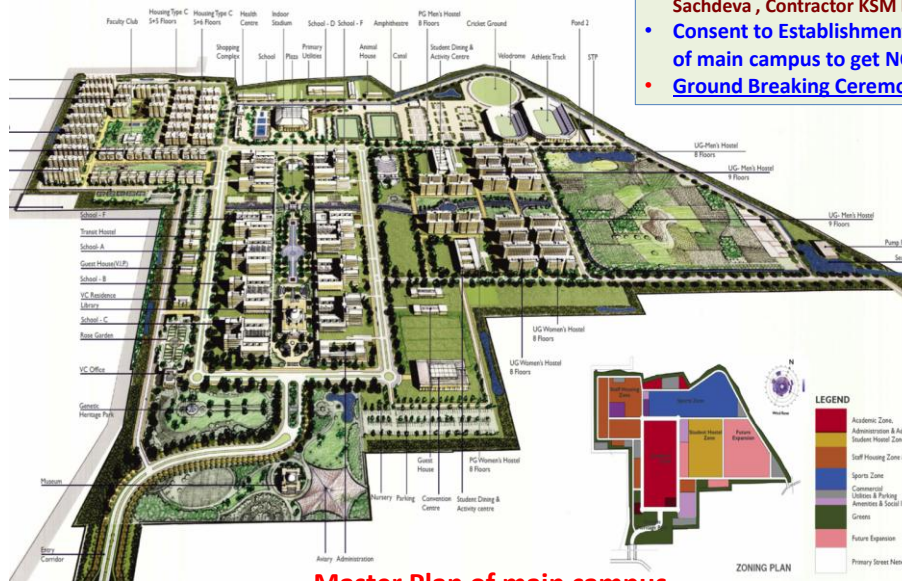
1. Developing this top class university in rather backward region is an important opportunity for CUPB to contribute tangibly and with responsibility and courage.
2. Being in the Cancer belt, CUPB's Environment Science and Technology, Life Sciences and Pharmaceutical Sciences Faculties have an opportunity to carry out work of direct relevance to current social needs.
3. Since there is no established university in the Malwa region it is great opportunity.

### **Challenges**

1. *Accomplishing Construction of a 500 acre campus:* The development work of CUPB's main Campus, coming up over an area of 500 acres at village Ghuddha just 22 km away from the heart of Bathinda city, is a challenge. This, however has gained momentum. The master plan has been approved by the building advisory committee and subsequently by Punjab Urban Development Authority. The present status is:
  - A 9.5 km long boundary wall has been completed after resolving all issues of ownership and possession of land.
  - Construction for the first phase has started. An expenditure of Rs 136 crores and 78 crores has been approved for Ia and Ib.

- PMC for construction has been given to Engineers India Ltd., Architect Pardeep Sachdeva Development Associates, Contractor KSM Bashir & sons assigned the job.
- Consent to Establishment (CTE) of Phase IA of the campus from PPCB has been obtained.
- Ground Breaking Ceremony was organized on the 17<sup>th</sup> Aug 2015.
- Foundation stone laying ceremony is planned for September 7<sup>th</sup>, 2015.

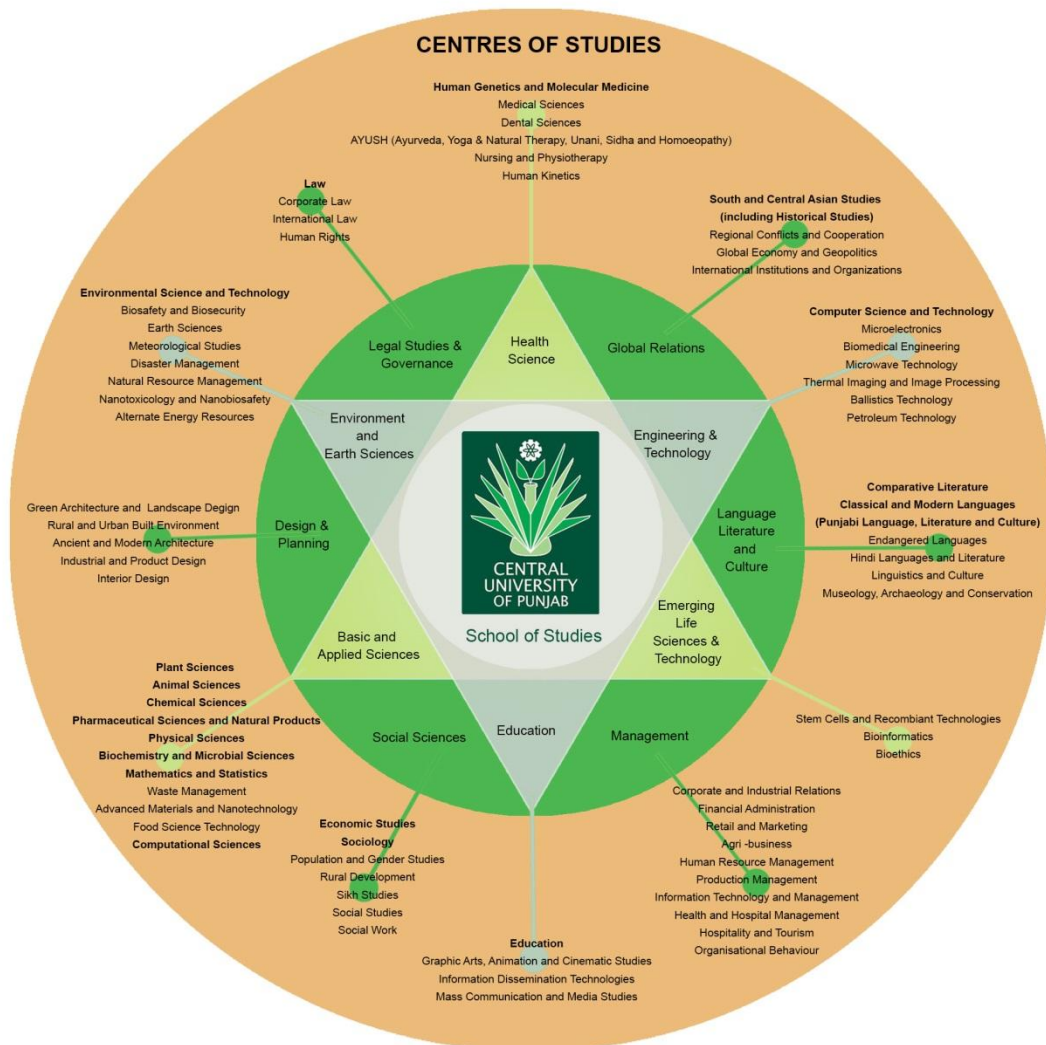
## Main Campus Master Plan



- 9.5 km long boundary wall completed
- PMC for construction to EIL, Architect Pardeep Sachdeva , Contractor KSM Bashir & sons
- Consent to Establishment (CTE) of Phase – 1a of main campus to get NOC from PPCB.
- Ground Breaking Ceremony – 17<sup>th</sup> Aug 2015

Master Plan of main campus

2. *Establishing the 68 Centres of Study:* Academic Expansion Plans are another challenge. The University plans to have 12 Schools and 68 Centre up from 9 Schools and 19 centres as of now. This indeed is a great academic challenge.



3. *The challenge of meeting needs of demanding students:* This vast reservoir of knowledge is disseminated in the true sense of the word to the vibrant student community, ready to take the nation by storm. With spectacular results in the competitive examinations and wholehearted participation in the extracurricular and social outreach programmes, the students have emerged as assiduous and diligent crusaders of change. Making of these well versed individuals, who are seeking to engage usefully with global development processes, is a huge big challenge.

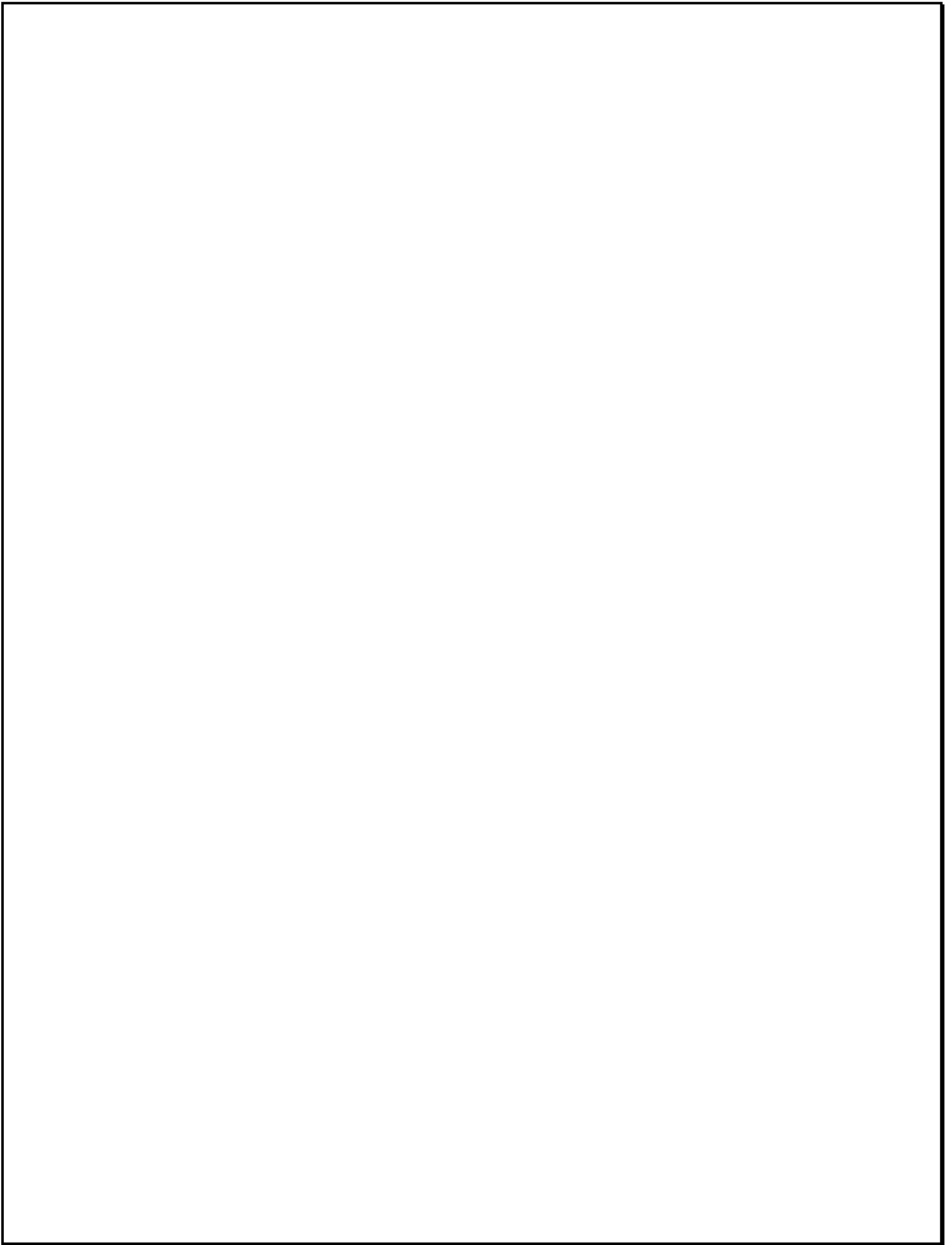
# **Central University of Punjab**

पंजाब केंद्रीय विश्वविद्यालय



**VOLUME-II**

## **Criteria of the University**





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# **CRITERION-I**

# **CURRICULAR ASPECTS**

## **CRITERION-I: CURRICULAR ASPECTS**

### **1.1 Curriculum Design and Development**

#### **1.1.1 How is the institutional vision and mission reflected in the academic programmes of the university?**

The Central University of Punjab has the vision to attain global standards of teaching, learning and research and to act as a catalyst of change by setting bench-marks for academic excellence, interfacing with stake-holders and service to the surrounding communities.

Its mission is to offer a wide range of academic and research facilities for integrated and cross-disciplines and to create a skilled workforce responsive to regional, national and global needs of academia, industry, business, administration and the society.

At Central University of Punjab Bathinda (CUPB), all the academic programmes are designed on pragmatic philosophy of education which makes the teaching-learning processes engaging and motivating. The design and implementation of the academic programmes keeps the focus on societal needs. Thus, the vision and mission of the university is reflected in academic programmes in multiple ways as below:

- The academic programmes in all the Schools have been structured to nurture understanding, discipline and consistency in the young minds. Special emphasis is laid on:
  - i) Coherent curriculum
  - ii) Innovative thoughts and values
  - iii) Hands on practical skills
  - iv) Employability
  - v) Societal concerns
  - vi) Academic flexibility
  - vii) Result oriented teaching
  
- To cross-pollinate with new ideas, new technologies and new world-views and to expand nationally and globally; the CUPB have designed many unique interdisciplinary programmes such as Life Sciences with specialization in Plant Sciences, Animal Sciences, Microbial Sciences, Biochemistry, Molecular Medicine and Human Genetics. Programmes

in Computational Sciences are designed to include Computational Physics, Computational Chemistry and Bioinformatics.

- Programmes like Environmental Science and Technology address the global and national issues, while retaining a constant focus on environmental problems of this region.
- The programmes on Translational Biomedical Research and Pharmaceutical Sciences are designed to meet the regional, national and global needs as per the requirement of academics and industry.
- To strategize to become a global epicentre of knowledge, culture and skills, the university has established a Centre for South and Central Asian Studies and also has programmes in different languages, laws, social sciences and education.
- Programmes in Computer Science and Technology and Cyber Security are important to current social and national needs.

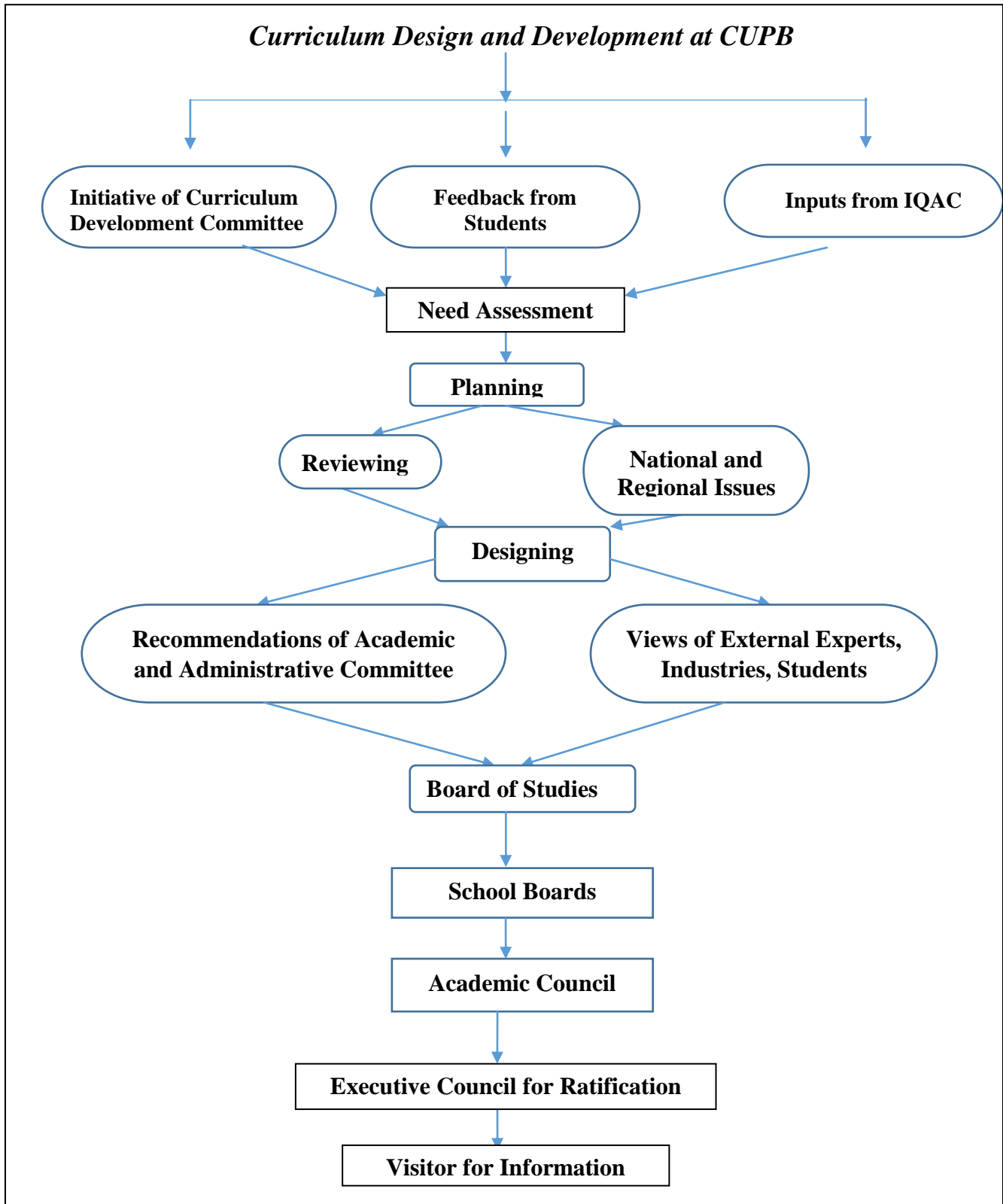
Thus, the institutional vision and mission is amply engrossed in CUPB's academic programmes.

**1.1.2 Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).**

Yes, CUPB follows a systematic process in the design and development of the curriculum. The programmes are designed on the basis of academic, regional, national and international needs and are in line with the guidelines of the relevant regulatory bodies like UGC, CSIR, AICTE, BCI, PCI, NCTE etc.

In addition to the National Model Curriculum of UGC and the syllabus of CSIR-UGC NET; CUPB programmes include local, national and global issues. For example, Biosciences and Environmental Science are mandated to work on human health, eco-stability and environment management with a focus on local issues. Every year, the curriculum is revised to include the latest's in the subject. For instance, the modern research leading to Nobel Prizes in each of the six disciplines (Literature, Economy, Physiology and Medicine, Physics, Chemistry and Peace) are added in the curriculum of the relevant programmes so that the students remain updated. The following process is being followed for designing and developing of curriculum (*Annexure 1.1 and Insert 1.1*):

**Flow Chart of Curriculum design and development process at CUPB**



### *Curriculum Design*

Design of courses of study is prepared by the “Curriculum Development Committee” of Centre constituted for the purpose. The stepwise procedure involved in curriculum design is as follows:

- Need Assessment
- Planning and Designing of Programme/ Course outline by Curriculum Development Committee
- In house meeting and recommendation in the Academic and Administrative Committee of Centre
- Discussions in Board of Studies (*Annexure 1.2*) which has faculty from other related centres, external experts, industry representatives and students. The BoS recommends the changes to be made in the curriculum and ensures updated version in line with global standards and regional relevance.
- School Boards with Dean of the School as Chairperson and external experts, further review the curriculum.
- The Academic Council, a larger academic body of University chaired by the Vice-Chancellor with external experts from relevant fields, approves the curriculum.

### *Curriculum Development*

The curriculum development at CUPB is a multipronged process composed of many steps that include:

- Course-wise feedback from the students at the end of each semester.
- Initiatives in the curriculum development process from within the Centre and School every semester.
- Inputs from University-Industry Council and University-Industry Forum.

- Inputs from the IQAC (Internal Quality Assurance Cell) on the basis of analysed feedback are now introduced.

### **1.1.3 How are the following aspects ensured through curriculum design and development?**

- \* Employability**
- \* Innovation**
- \* Research**

All the three aspects above are extremely important and are kept in mind while designing the programmes. The inputs and suggestions of students and industry are considered to be of paramount importance.

#### *Employability*

University designs the curriculum from the point of view of the employability of the students and response of the employers. A mid-decade review under clause 1.2.7.1 of the Act was carried out during November 2014. For the Academic session 2015-16, many previous courses/programmes have been renamed or changed with altered content, to make these more acceptable to the employers. For example, the following programmes have been renamed/ changed keeping employability in mind:

- M.Sc. Nanophysics changed to M.Sc. Physics (Specialization in Nanophysics)
- M.Sc. Medicinal Chemistry to M.Sc. Chemistry with Specialization in Medicinal Chemistry
- L.L.M. Environmental Law to
  - : LL.M. with Specialization in Environmental Law
  - : LL.M with Specialization in Corporate Law
  - : LL.M with Specialization in Human Rights
- M.A. Development Economics to
  - : M.A. Economics with Specialization in Development Economics
  - : M.A. Economics with Specialization in Macro Economics
  - : M.A. Economics with Specialization in Micro Economics

These above programmes have a wider acceptability with the employers compared to earlier ones. Some other programmes of CUPB like M. Pharm. (Medicinal Chemistry), M.Sc. Chemical Sciences (Medicinal Chemistry) and M.Sc. in Environmental Science and Technology are highly industry oriented and have wide employability.

The following are some of the points synthesised in curriculum to enhance the employability of the students:

- The curriculum has been designed in such a way that the students acquire hands-on-tools/training, updated knowledge, managerial skill, practical exposure and multi-tasking ability in the area of expertise.
- Exposure to different parameters mentioned above, helps the students in getting employability in the varied fields: Industries (like pharmaceuticals, energy technology, computers, etc.) government agencies, banking sector, corporate farming, agro industries, insurance sector, computer applications, corporate offices, professional accounting; management, mass communication, civil services, translation, press and print media, teaching and research.

Thus, CUPB's approach to enhance employability includes appropriate curriculum, right nomenclature, a correct proportion of hands on practical training and theoretical knowledge base high professional abilities, communication skills and computing skills.

#### *Innovation*

- CUPB firmly believes in complete academic freedom to its scholars and faculties in order to stimulate thinking and evolving innovative ideas leading to novel findings. In order to promote innovation, design and development of curriculum, ensures programmes that are multi-disciplinary, as well as, inter-disciplinary. For example in M.Sc. Physics, students study advance courses like nanophysics as well as inter-disciplinary course such as computational methods. Students of M. Sc. in Genetic Diseases and Molecular Medicine are exposed to bioinformatics, drug discovery, regenerative medicine and molecular basis of human diseases.
- The curricula of all the programmes are designed with a focus on practical experience, industrial exposure, research aptitude and contemporary knowledge, thereby, assisting in generating new ideas.



- Seminars, Term papers and Class projects are a mandatory part of CUPB Programmes to develop higher order training skills to innovate.

#### *Research*

- A mandatory course on “Research Methodology” has been designed and introduced for all the students at post graduate and doctorate level. This part of the curriculum exposes them to area of research in the field concerned and orientation to methodology of research. It helps in developing interest and attitude towards research.
- At the postgraduate level, project/ dissertation work/ industrial training and seminar is mandatory. Through this, students of Science and Technology Faculties acquire research experience and also contribute towards research output.
- CUPB has state of the arts facilities in the areas where research programmes have been initiated and practical courses lay strong emphasis on training students to be researchers of tomorrow.

#### **1.1.4 To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform, which has created a national impact?**

- Development and restructuring of curricula at CUPB always fall within the guidelines of the UGC, CSIR, AICTE, BCI, PCI and NCTE. In addition to the National Model Curriculum of UGC, the syllabus of CSIR-UGC NET/ ICAR NET and ICMR NET is kept in mind while designing curriculum.
- Feedback is obtained from outside experts through Board of Studies at the School level to ensure the guidelines of regulating bodies.
- Curriculum restructuring has been done by many Centres to prepare students for important National level competitions.
- Some programmes like Molecular Medicine and Computational Sciences and also the examination reforms are likely to have national impact.

**1.1.5 Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?**

Yes, the university interacts with industry, research bodies and civil society in the curriculum revision process.

- The various centres like Chemical and Pharmaceutical Sciences, Environmental Science and Technology, Human Genetics and Molecular Medicine, Computer science and Technology made efforts to explore the requirements of the following industries: Panacea Biotech, Zydus, Cadila, Biocon, Sun Pharma, Lupin laboratories, Thermax India, Merck speciality, IBM , HP etc.
- Centre for Pharmaceutical Sciences and Natural Products sought feedback from Cipla and Novartis and modified the curriculum of Basics of Drug Design and Drug Action (PMC.513)
- On the advice given by Punjab Pollution Control Board, the Centre for Environmental Sciences and Technology modified Courses of Environmental Pollution (EVS 603), Profiling Environmental Issues (EVS 604), Water Pollution and Control Test (EVS.508) and Air and Noise Pollution and Management (EVS.509).
- CUPB faculty interacts with industry through its advisory bodies like University-Industry Council and University-Industry Forum (*Annexure I.3*). This helps to incorporate their ideas in the curriculum of these following courses:
  - i) Concepts in Molecular Medicine (LMM 510)
  - ii) Cancer Biology (LMM 552)
  - iii) Radiation Biology (LMM 553)
- CUPB has been benefitted through interactions with the stakeholders in updating the curriculum according their requirement, especially in the area of anti-cancer medicine, environmental pollution and climate change.

**1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.**

As per the Act of Parliament for newly established Central Universities, CUPB has no affiliated college.

**1.1.7 Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances (not applicable for unitary universities).**

At present CUPB has no affiliated college.

**1.2 Academic Flexibility**

CUPB follows Academic flexibility at various levels. UGC guidelines on Choice Based Credit System to provide flexibility to students in designing their programmes were accepted by the Academic Council of CUPB in the sixth meeting held on March 5, 2015 and subsequently approved by the Executive Council in its 14<sup>th</sup> meeting held in 16.03.2015 (*Annexure 1.4*). Choice Based Credit System has been implemented from the academic session 2015-16.

CUPB offers flexibility in the following areas:

- Flexibility in terms of selection of elective courses
- Flexibility in taking advance courses
- Flexibility in opting open electives.
- Flexibility to Allow change of streams in related centres, subject to availability of seats.
- Flexibility in schedule of surprise tests and End Semester Exams.
- Flexibility in number of times a student can take online exams within a week for all the courses.
- CUPB has framed a specific policy that provides flexibility to students to transfer the credits while shifting to other institutions or while coming to CUPB from other organizations. (*Insert 1.2*)

### 1.2.1 Furnish the inventory for the following:

i. *Programmes taught on campus:*

CUPB has been introducing new programmes every year. Year-wise details of the programmes of the last four years are shown in **Table 1.1**.

In the academic year 2015-16, the number of programmes offered at CUPB increased from 25 last year to 70 this year. This includes:

Postraduate programmes =	34;	M. Phil programmes =	07
Ph.D. programmes =	15;	Integrated Ph.D. programmes =	07
Certificate course =	01;	Diploma =	01
Short term courses =	07		

The details of the programmes which are offered by CUPB in current academic session are shown in **Table 1.2. (A), 1.2. (B) and 1.2.(C)**.

ii. *Overseas programmes offered on campus*

- At CUPB, lectures of leading experts of different fields are conducted through A-VIEW software, which is indigenously built video conferencing software and provides opportunity to get connected with others in real time.
- The Centre for Environmental Science and Technology coordinated IIRS 13<sup>th</sup> Outreach Programme on 'Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System'(August 4 to November 14, 2014) and 14<sup>th</sup> Outreach Program on "Applications of Remote Sensing and GIS for Natural Resources"( January 27- March 27, 2015). These Programmes were sponsored by National Natural Resources Management System (NNRMS) and organised by Indian Institute of Remote Sensing. 26 participants registered for the course, out of which 21 successfully completed the course. The IIRS 15<sup>th</sup> Outreach Programme on 'Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System' (August 10- November 27, 2015) is going on.

iii. *Programmes available for colleges to choose from:*

CUPB is a Non-affiliating university as per the CUPB Act.

## **Insert 1.2**

### **Policy of CUPB on Students' Mobility: Transfer of students to CUPB from other universities**

The UGC vide Gazette notification dated 24.05.2014 has amended the clause 2.5 of Principal regulations and substituted it with the following:

“Depending upon the academic and physical facilities available in the institution, the university may allow an institution to admit a certain number of students directly to second year of the master’s degree programme, if the student has successfully completed the first year of the same programme in another institution”

This is an important step in the direction of students’ mobility and academic flexibility. It is therefore proposed that the following be approved as a policy matter for CUPB:

1. Students who have completed one year of a master’s degree programme at another Central University, may seek admission to CUPB on the following terms and conditions:
  - The request for transfer to CUPB must be forwarded from the parent university where student has completed the first year.
  - Student must be in “Good Academic” standing at the time of application and will produce a no dues certificate from the parent university before joining CUPB
  - Student will be admitted to the same or very related programme at CUPB, only against the vacant seats
  - The nomenclature of the course, the student has studied at parent university, must match with that of CUPB.
  - The student must have been admitted to the parent university through an entrance test.
  - Students will be allowed to transfer to CUPB only at the beginning of a semester.
  - Since CUPB follows Choice Based Credit System, the course already passed by the student will be excluded from the requirements of the

programme at CUPB and the student will have to complete the remaining course requirements.

- Transferred credits from the other organization will be maximum of 50% of the total credit requirements of the degree
2. The application for transfer of a student, when received duly forwarded by the parent university, will be evaluated by CoC in detail and a proposal prepared for course wise exemption. CoC will list the credit hours that can be treated as equivalent to the courses in CUPB and the credit hours/ courses to be taken by the student to meet the requirements of the programme at CUPB.
  3. The CoCs will make a recommendation to the Dean Academic Affairs who will seek approval of the Vice Chancellor, CUPB for transfer of the student.
  4. For the purpose of fee, hostel and all other rules and regulations, transferred students will be treated at par with CUPB students of the programme in which they are admitted.
  5. The transcript of the student shall include courses taken at both the organization and the calculation of CGPA shall also include all these courses.
  6. When a CUPB student makes an application for transfer to another Central University, the same will be considered subject to the following:
    - The student should have completed at least one year at CUPB
    - He/she should be in good academic standing
  7. The doctorate students from other Universities intending to migrate to CUPB will be accepted after completion of the course work in parent organization. However, the CoCs will determine equivalence and deficiency courses to be taken if required. Similarly, CUPB students will be allowed to migrate after completion of course work. The procedure for migration of Ph.D. students will be the same as for MSc. Students.
  8. The policy of student mobility for B.PEd./B.Ed.-M.Ed. integrated programmes will be same as the policy for Master degree programmes.

**Table-1.1: Programmes taught at CUPB in last four years**

Sr. No.	Name of the Centre	2011-12	2012-13	2013-14	2014-15
1.	Environmental Sciences and Technology	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	-
		M.Sc. (EVST)	M.Sc. (EVST)	M.Sc. (EVST)	M.Sc. (EVST)
		--	--	--	M.Phil.
2.	Comparative Literature	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	--
		--	--	M.A.(Hons) Punjabi & Comparative Literature	M.A.(Hons) Punjabi & Comparative Literature
3.	South and Central Asian Studies	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	-
		-	-	-	M.Phil.
4.	Bio sciences	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	M.Phil.-Ph.D. integrated	-
		M.Sc. Biosciences	M.Sc. Biosciences	M.Sc. Biosciences	M.Sc. Biosciences
		-	-	M.Sc. in Molecular Genetics	M.Sc. in Molecular Genetics
		-	-	-	M.Phil.
5.	Chemical and Pharmaceutical Sciences	M.Pharm.-Ph.D. integrated	-	-	-
		M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)
		M.Sc. Chemical Sciences (Medicinal Chemistry)	M.Sc. Chemical Sciences (Medicinal Chemistry)	M.Sc. Chemical Sciences (Medicinal Chemistry)	M.Sc. Chemical Sciences (Medicinal Chemistry)
6.	Environmental Law	L.L.M-Ph.D. integrated	L.L.M-Ph.D. integrated	L.L.M-Ph.D. integrated	L.L.M-Ph.D. integrated
		-	-	-	L.L.M.(Environment

					al Law)
7.	Computer Science and Technology	-	M.Tech. (Computer Science and Technology)	M.Tech. (Computer Science and Technology)	M.Tech. (Computer Science and Technology)
		-	-	M.Tech. (Cyber Security)	M.Tech. (Cyber Security)
8.	Economic Studies	M.Phil.-Ph.D. integrated-Development Economics	M.Phil.-Ph.D. integrated-Development Economics	M.Phil.-Ph.D. integrated-Development Economics	-
		-	-		M.Phil. in Economics
9.	Physical and Mathematical Sciences	-	-	M.Phil. Physics	M.Phil. Physics
		-	-	M.Sc. Physics (Spl in Nanophysics)	M.Sc. Physics (Spl in Nanophysics)
10	Genetic Diseases and Molecular Medicine	-	-	-	M.Sc. in Genetic Diseases and Molecular Medicine
11	Human Genetics	-	-	-	M.Sc. in Human Genetics

Note: M.Phil-Ph.D. integrated programmes have been replaced with M. Phil. and Ph.D. programmes separately because integrating the two was technically not possible and academically not suitable.



**Table 1.2 (A): Master level Programmes started in academic session 2015-16**

<b>Sr. No.</b>	<b>Name of The Programme</b>	<b>Sr. No.</b>	<b>Name of The Programme</b>
1	LL.M. with specialization in Environment Law / Human Rights Law / Corporate Law	17	M.Sc. Chemistry (Computational Chemistry)
2	M.A. Economics	18	M.Sc. Earth and Geological Sciences
3	M.A. Education	19	M.Sc. Environmental Science and Technology
4	M.A. English (Comparative Literature and Translation)	20	M.Sc. Life Sciences with specialization in Animal Sciences
5	M.A. History	21	M.Sc. Life Sciences with specialization in Biochemistry
6	M.A. Political Science	22	M.Sc. Life Sciences with specialization in Bioinformatics
7	M.A. Punjabi	23	M.Sc. Life Sciences with specialization in Human Genetics
8	M.A. Sociology	24	M.Sc. Life Sciences with specialization in Microbial Sciences
9	M.A./M.Sc. Geography	25	M.Sc. Life Sciences with specialization in Molecular Medicine
10	M.Ed. Education	26	M.Sc. Life Sciences with specialization in Plant Sciences
11	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)	27	M.Sc. Mathematics
12	M.Phil. Comparative Literature	28	M.Sc. Physics
13	M.Phil. Economics	29	M.Sc. Physics (Computational Physics)
14	M.Phil. South and Central Asian Studies	30	M.Sc. Statistics
15	M.Sc. Chemistry with specialization in Medicinal Chemistry	31	M.Tech. Computer Science and Technology
16	M.Sc. Chemistry with specialization in Organic Chemistry / Inorganic Chemistry / Physical Chemistry/	32	M.Tech. Computer Science and Technology (Cyber Security)

**Table 1.2 (B): Ph.D. Programmes started in academic session 2015-16**

<b>Sr. No.</b>	<b>Name of The Centre</b>	<b>Sr. No.</b>	<b>Name of The Centre</b>
1	Centre for Pharmaceutical Sciences and Natural Products	9	Centre for Classical and Modern Languages (Punjabi Language, Literature and Culture; English)
2	Centre for Environmental Sciences and Technology	10	Centre for Chemical Sciences
3	Centre for Law	11	Centre for Animal Sciences
4	Centre for Education	12	Centre for Plant Sciences
5	Centre for Computational Sciences	13	Centre for Biochemistry and Microbial Sciences
6	<b>Centre for Genetic Diseases and Molecular Medicine</b>	14	Centre for Mathematics & Statistics
7	<b>Centre for Human Genetics</b>	15	Centre for Geography and Geology
8	Centre for Physical Sciences		

**Table 1.2 (C): Diploma & Certificate Programmes started in academic session 2015-16**

<b>Sr. No.</b>	<b>Name of The Programme</b>
1	Diploma in Green Farming Technologies
2	Certificate course in Human Rights and Duties
3	Certificate course in Vermicomposting, Apiculture, Mushroom cultivation and Sericulture

**1.2.2 Give details on the following provisions with reference to academic flexibility**

- |    |   |     |
|----|---|-----|
| a. | Core / Elective options:  | Yes |
| b. | Enrichment courses:   | Yes |
| c. | Courses offered in modular form:<br>(Course on Green Farming Technology is a modular course)                                  | Yes |
| d. | Credit accumulation and transfer facility:  | Yes |
| e. | Lateral and vertical mobility within and across programmes, courses and disciplines:<br>(Available only within the Programme) | Yes |

Lateral entry and lateral exit was available in M.Phil-Ph.D. programmes.

At CUPB, core, foundation, elective and open elective/interdisciplinary courses are offered in different programmes in different compositions. The details of which are given in Table-1.3.

**1.2.3 Does the university have an explicit policy and strategy for attracting international students?**

Yes, the university has now laid a well-defined policy and procedure for admission of international students in all its programmes by creating supernumerary seats (Annexure 1.5). CUPB's strategy is to admit international students through embassies or respective High Commissions. Also, for attracting the foreign students, the university has made provisions for scholarships from ICCR/earn-while-learn assistantship and under R & D projects as per the prevailing norms.

Because of reasons such as English as medium of instruction, good infrastructure and meritorious faculty, it is hoped that students from abroad will opt for CUPB programmes after NAAC Accreditation.

**1.2.4 Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.**

CUPB is open to offering courses specifically targeting international students. The School of Education has plans to start two programmes under MHRD's Madan Mohan Malviya Scheme having international mentors. However, a need assessment shall be done by contacting different embassies for offering innovative programmes and through ministry of education of different countries.

**Table-1.3: Elective, Core, Foundation and Interdisciplinary Courses at CUPB**

Sr. No.	Name of the Centre	Name of the Programme	Type of Courses		
			Foundation %	Core %	Elective/ Open Elective(ID) %
1.	Centre for Animal Sciences	M.Sc. Life Sciences with specialization in Animal Sciences	5.5%	80%	14.5%
2.	Centre for Plant Sciences	M.Sc. Life Sciences with specialization in Plant Sciences	5.5%	80%	14.5%
3.	Centre for Biochemistry and Microbial Sciences	M.Sc. Life Sciences with specialization in Microbial Sciences	5.5%	80%	14.5%
4.	Centre for Human Genetics and Molecular Medicine	M.Sc. Life Sciences with specialization in Molecular Medicine	7%	68%	25%
		M.Sc. Life Sciences with specialization in Human Genetics	11%	64%	25%
5.	Centre for Physical Sciences	M.Sc. Physics	10.42%	64.58%	25%
6.	Centre for Chemical Sciences	M.Sc. Chemical Sciences with specialization in Medicinal Chemistry	12.5%	64.58%	22.91%
7.	Centre for Pharmaceutical Sciences and Natural Products	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry)	10.41%	64.58%	25%
		M.Sc. Life	14.8%	66.66%	18.15%

		Sciences with specialization in Biochemistry			
8.	Centre for Computational Sciences	M.Sc. Chemistry (Computational Chemistry)	12.50%	64.58%	22.91%
		M.Sc. Life Sciences with specialization in Bioinformatics	8%	59%	33%
9.	Centre for Computer Science & Technology	M.Tech. Computer Science and Technology	14.70%	58.82%	26.47%
		M.Tech. Computer Science and Technology (Cyber Security)	14.71%	61.71%	23.53%
10.	Centre for Environmental Sciences and Technology	M.Sc. Environment Science and Technology	16.67%	66.67%	16.76%
11.	Centre for Mathematics and Statistics	M.Sc. Mathematics	10.4%	65%	20.6%
		M.Sc. Statistics	8.3%	70.8%	16.7%
12.	Centre for Law	LL.M. with specialization in Environment Law / Human Rights Law / Corporate Law	14.28%	28.57%	57.14%
13.	Centre for Economic Studies	M.A. Economics	15%	60%	25%
14.	Centre for Comparative Literature	M.A. English (Comparative Literature and Translation)	12.5%	62.5%	25%
15.	Centre for South and Central Asian Studies	M.A. Political Science	11.12%	61.12%	27.79%
		M.A. History	11.12%	61.12%	27.79%

16.	Centre for Sociology	M.A. Sociology	16.6%	62.5%	20.8%
17.	Centre for Education and Physical Education	M.A. Education	-	66.60%	33.40%
		M.Ed.	-	69.20%	30.80%
18.	Centre for Geography and Geology	M.Sc. Earth and Geological Sciences	10.4%	66.6%	23%
		M.A. Geography	17%	62%	21%
19.	Centre for Classical and Modern Languages (Punjabi Language, Literature and Culture; English)	M.A. Punjabi	12.5%	62.5%	25%

**1.2.5 Does the university facilitate dual degree and twinning programmes? If yes, give details.**

Yes, the university facilitates dual degree programmes as M.Phil.-Ph.D. integrated programme in various centres, as below:

- M.Phil. and Ph.D. in Bio sciences.
- M.Phil. and Ph.D. in South Asian Studies
- M.Phil. and Ph.D. in Environmental Science and Technology
- M.Phil. and Ph.D. in Comparative Literature
- M.Pharm. and Ph.D. in Chemical and Pharmaceutical Sciences
- LL.M. and Ph.D. in Environmental Law
- M.Phil. and Ph.D. in Development Economics

A proposal for B.Ed-M.Ed. dual degree has been sent to NCTE for approval. CUPB also have the plan to start M.A-M.Sc. dual degree programme in Geography. A policy of Dual degree programmes is approved (*Annexure 1.6*).

**1.2.6 Does the university offer self-financing programmes? If yes, then indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?**

A policy has been put in place for implementation of self-financing courses (*Annexure 1.7*).

**1.2.7 Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.**

The university is not allowed to have any Distance Education programmes as per the Act. However, it has initiated and is registered for the Massive Open Online Courses (MOOC) which will be made available online for a wide usage. MOOC programme are being initiated in accordance with the instructions from MHRD. Thirty faculty members from CUPB have been identified as experts for

developing the MOOC programme in their respective areas. As soon as the courses under the programme become available, the students will be allowed to integrate these courses into their programmes. Three faculty members have training in Moodle and a two-day workshop on it is planned for September 11-12, 2015 for training the faculty.

**1.2.8 Has the university adopted the Choice Based Credit System (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?**

- The Choice Based Credit System (CBCS) has been introduced at Central University of Punjab, Bathinda in all the programmes (without exception). It permits the students to choose the courses of their choice, learn at their own pace, undergo additional courses, and adopt an interdisciplinary approach to learning. The policy is at *Annexure 1.4*.
- CUPB is not entitled to affiliate colleges at the moment.

**1.2.9 What percentage of programmes offered by the university follow:**

- Annual system: 0%
- Semester system: 100% (for all the programs)
- Trimester system: 0%
- Certificate/ Short term courses: 3 months  
(Human Rights, Communication skills, Punjabi Language, vermicomposting, apiculture, Mushroom cultivation, sericulture).

**1.2.10 How does the university promote interdisciplinary programs? Name a few programmes and comment on their outcome.**

- CUPB promotes interdisciplinary programmes by encouraging the students to choose their courses in different centres.
- Advertisements in newspapers, posters and banners in the different part of the country, website display and notice boards of different centres are used to publicize these courses.
- Interdisciplinary programmes enable students to appreciate different disciplines, lead to flexibility in the change of discipline at higher levels and enhance the employability. Students are explained these strengths through extension lectures and presentations by experts. For example,



they are made to understand the importance of learning Computational Physics, Computational Chemistry, Bio-informatics, Environmental Science, Medicinal Chemistry, Chemistry-Natural Products and other interdisciplinary courses such as Earth and Geological Sciences.

### **1.3 Curriculum Enrichment**

#### **1.3.1 How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?**

- The centres review the curriculum frequently and update it in order to maintain social relevance and employability with the aim of achieving the holistic development of students. A major revision of all programmes and courses is planned during September/ October 2015. Currently each Centre is geared up to call meetings of Curriculum Development Committees, Board of Studies and School Boards for upgradation of curriculum for session 2016-2017.
- Updating with the latest development and knowledge for social needs for creation of new knowledge and path for its furtherance.
- A few issues for upgradation are mandatory in some of the disciplines like Physics, Chemistry, Life Sciences, Economics, Pharmaceutical Science and Literature. Information on the work and lives of the latest Nobel Laurets in respective fields are added.
- Feedback from students and industry from employability point of view is an important consideration in each review.
- The feedback from experts which is received in the centre from time to time help to update the curriculum and make it knowledge intensive.
- Details of the curriculum review carried out by different Centres are given in the Table-1.4.

#### **1.3.2 During the last four years, how many new programmes at UG and PG levels were introduced? Give details of interdisciplinary list?**

From the last four years seventeen programmes have been introduced at PG levels which are given in Table-1.5.

**Table-1.4: Curriculum review by different Centres of CUPB**

Name of the Centre	Name of the Programme	Syllabus (First approval)	1 <sup>st</sup> Revision/ Upgrade	2 <sup>nd</sup> Revision/ Upgrade	3 <sup>rd</sup> Revision/ Upgrade
Environment Science & Technology	M.Phil.	Feb, 2010.	July, 2011	Feb, 2013.	November, 2014
	M.Sc.	Jul, 2011.	Aug 2012	Feb, 2013.	Nov., 2014
	Ph.D.	Coursework was approved in Aug 2012	November, 2014	-	-
Biosciences	M.Phil.-Ph.D. Integrated	2011	Aug. 16, 2011	July 17, 2012	-
	M.Sc. Biosciences	2011	July 17, 2012	Nov. 2014 (changed nomenclature)	-
	M.Sc. in Molecular Genetics	June 02, 2014	-	-	-
Comparative Literature	M.Phil.-Ph.D. Integrated	December 2009	July-Aug 2011	July-Aug 2011(Course Work)	-
	M.A. Comparative Literature	June 2012	November 2014 (changed the Nomenclature of programme)	-	-
South and Central Asian Studies	M.Phil.-Ph.D. Integrated	2009-10	November, 2014 (M.Phil. Standalone)	-	-
	M.A. International Studies	2009-10	June 5, 2012	November 2014 (changed the Nomenclature of programme)	-
Economics	M.Phil. Economics	June, 2011	November 2014	-	-
	M. A. Economics	2013	November 2014	-	-
Environmental Law	LL.M. - Ph.D. Integrated	April, 2011	-	-	-
	LL.M. in Environmental Law (one year)	March 2013	Dec.2014 (two year & add more	-	-

			specializations)		
Physical and Mathematical Sciences	M.Sc. Physics (Nanophysics)	August, 2013	July, 2014	November, 2014 M.Sc. Physics (Specialization in Nanophysics)	-
	M.Phil. Physics	August, 2013	July, 2014	November, 2014	-
Human Genetics	M.Sc. Human Genetics	Feb.2014	Nov. 2014	-	-
Genetic Diseases and Molecular Medicine	M.Sc. in GDMM	Feb.2014	Nov. 2014	-	
Bioinformatics	M.Sc. in Bioinformatics	Feb.2014	Nov. 2014	-	-
Computer Science and Technology	M.Tech. (Computer Science and Technology)	July, 2012	Nov. 2014	-	-
Education	M.Ed./M.A. Education	Feb14	Nov. 2014	-	-
Punjabi Language, Literature and Culture	M.A.(Hons) Punjabi and Comparative Literature	July, 2013	Nov.2014 (changed the Nomenclature)	-	-

**Table-1.5: P.G. Programmes introduced in last four years**

<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
M.Sc. in Bio-Sciences	M.Sc. in Environmental Science & Technology	M.A.(Hons) Punjabi & Comparative Literature	M.Sc. in Genetic Diseases and Molecular Medicine	M.Sc. Life Sciences (Plant Sciences, Animal Sciences, Microbial Sciences, Biochemistry, Molecular Medicine)
M.A. Comparative Literature	M.Pharm. Pharmaceutical Sciences (Medicinal Chemistry), M.Sc. Chemical Sciences with specialization in Medicinal Chemistry	M.Sc. Physics (Sp in Nanophysics)	M.Sc. in Human Genetics	M.Sc. Chemistry with specialization in Organic Chemistry / Inorganic Chemistry / Physical Chemistry
-	M.Sc. Chemical Sciences (Medicinal Chemistry)	M.Sc. in Computational Sciences	L.L.M (Environmental Law)	M.Sc. Mathematics
-	M.Tech. (Computer Science and Technology)	-	M.A. Punjabi	M.Sc. Statistics
-	M.Tech. (Cyber Security)	-		M.Sc. Earth and Geological Sciences
-	M.A. in International Studies	-		M. A. Education M.Ed
-	-	-	-	LL.M. with specialization in Environment Law / Human Rights Law / Corporate Law
-	-	-	-	M.A./M.Sc.

				Geography
-	-	-	-	M.A. Political Science/ History/ Sociology/Hindi/Philosophy/Music (Vocal)/Music (Instrumental)/Fine Arts/Theatre

- List of interdisciplinary programmes

Name of the Centre	Name of Programmes	Interdisciplinary
Physical and Mathematical Sciences	M.Sc. Physics (Sp in Nanophysics)	Statistics and Computer Applications Computational Methods
Biosciences	M.Sc. in Biosciences	Computer Application, Chemistry, Botany, Zoology, Microbiology and Biotechnology
South Asian Studies	M.A. in International Studies	History, Political Science and Geography
Human Genetics and Molecular Medicine	M. Sc. in Human Genitics; M.Sc. in Molecular Medicine	Genetics, human diseases and molecular biology
Environmental Law	LL.M.	Law, Environment
Computational Sciences	M.Sc. Chemistry (Computational Chemistry), M.Sc. Physics (Computational Physics)	Chemistry, Bioinformatics, Physics
Centre for Pharmaceutical Sciences and Natural Products	M.Sc. Medicinal Chemistry	Chemistry, Medicine, Natural Products

### **1.3.3 What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision?**

Curriculum design and revision is a continuous process and the centres focus on achieving academic excellence by modifying the syllabus to suit the global and regional needs/trends. Rigorous review of existing programs and brainstorming with the help of external experts is the primary means. Minor alterations like addition of latest topics are done once every year. In November 2014, nearly all courses (90%) were revised for the session 2015-16 and again a major revision is planned during 2015 for the session 2016-17 using the strategies as given in curriculum design and development.

### **1.3.4 What are the value-added courses offered by the university and how does the university ensure that all students have access to them?**

CUPB has started short term value added courses of direct relevance to current social needs. These courses are:

- Short term course in soft skills and communication development
- Introductory Punjabi Language Course
- Vermicomposting
- Apiculture
- Mushroom cultivation
- Sericulture
- Certificate course in Human Rights and Duties
- Diploma in Green Farming Technology

These courses are offered every semester. Classes for these courses are held in the evening (after working hours) and can be taken up by the students in addition to their course work. At present all these courses are offered free of cost.

- *Short term course communication and soft skills development:* In today's global scenario, it becomes imperative that the students have a good command of the languages for communicative, professional and academic purposes. With an aim of improving the reading, writing and speaking skills of students of the university, Communication and Soft Skills Development classes are held in the Language Lab in the evening every week day. Courseware includes English grammar, academic and technical writing and additionally students are groomed for facing interviews, group discussions, etc. This course is very popular with the

students. In the various batches (Nov. 2011, June 2013, Dec. 2013 and Feb. 2015) 62 students have improved their English and communication skills through this course and 25 are currently registered.

- *Certificate Course in Human Rights and Duties* has been designed to disseminate the human rights awareness in the society. CUPB started a certificate course in Human Rights and Duties under the UGC scheme (Human Rights Education) in February, 2015. The duration of this programme is three months and frequency is two courses per annum. Maximum seats in this programme are 30 and there is no age limit to join this programme. For being eligible, a candidate should have passed graduation in any discipline from a recognized University. Admission in the course is based on the marks obtained in graduation level examination plus performance in the personal interview. The main objective of this course to provide the participant not only with subject knowledge, but also to make them morally, ethically, intellectually powerful and sensitize through various extension activities. The programme is sketched in such a manner that it will generate new positive thoughts, stimulate debate on social issues and at the same time sensitize them on human rights. The course received a good response within and outside the university with 70 applications against 30 seats for the first batch.
- *Vermicomposting, Apiculture, Mushroom cultivation and Sericulture:* These four courses together form a certificate programme in vocational training. The course module includes pamphlets, lecture notes, power point presentations, practical training, field visits, visits to nearby locations for practical training and project reports. Fifty five students have been registered for the year 2015.
- University has plans to start more certificate courses in the future. These could include certificate courses in Photography, Musical instruments, languages, web design and computer applications, Accountancy, Museum curatorship and library management systems.
- Competitive Examination Cell provides coaching and guidance for IAS/NET/CSIR free of cost to enhance the employability of students.

### **1.3.5 Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?**

CUPB offers skill-oriented programmes relevant to regional needs with the objective to train specialized manpower.

#### *Diploma in Green Farming Technologies*

CUPB proposed and successfully completed for obtaining a grant of Rs. 65.96 lakh for the two years to start a programme under the “UGC scheme for Community Colleges” from the session 2015. Under the scheme 40 students have been admitted for a diploma in “Green Farming Technologies”. University had received 107 applications.

The aim of the programme is to provide entrepreneurial orientation along with required certifiable skills based on National Occupational Standards (NOSs). The Curricula and system of certification of the diploma course will align with the National Occupational Standards and National Skills Qualification Framework (NSQF) of Govt. of India. The programme admits students with 10+2 or equivalent qualification in any stream. The course is open to students of any age and a scholarship of Rs. 1000/- per month is provided to all eligible students. After completing the one year diploma course, the students will be eligible for advanced diploma or B. Voc. Course.

### **1.3.6 Higher Order Skill Development Programmes**

#### *B. VOC. Programme*

CUPB has submitted proposal to UGC for the following B.VOC. Programmes:

- B.VOC. in Food Processing Technology
- B.VOC. in Theatre and Stage Craft
- B.VOC. in Medical Technology and Health Sciences

The value added courses (mentioned in 1.3.4) already being offered to our students are also Skill Development Programmes.



## **1.4 Feedback System**

### **1.4.1 Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?**

- Yes, the students' feedback is obtained after completion of their course through feedback form (*Annexure 1.5*). It is mandatory for all students to give the feedback for every course of the programme.
- This feedback form is used for each course and for every teacher, teaching that course. The feedback by the students is considered while revising the curriculum for subsequent years.
- A programme is being prepared to permit a student to submit the feedback related syllabi and curriculum anytime and any number of times online.

### **1.4.2 Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.**

- The Board of Studies of each centre, which approves the curricula and the syllabi has experts of national and international repute.
- The feedback of the national faculty on the curriculum is obtained through the mail or online discussions. The national personalities are also involved in the process of obtaining national and global feedback for curriculum development process when they visit university campus.
- When international faculty visit the centres, the suggestions are sought for the improvement of syllabi. The Centre for Plant Sciences recently had its programme, course structure and outline of courses reviewed by Prof R. Chibbar from University of Saskatchewan. The inputs from eminent, national faculty make the curriculum comprehensive of global development and germane to societal need.

### **1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.**

At present University has no affiliated institution.

#### **1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?**

- Quality is sustained through academic audits. The syllabi are revised by academic experts serving as members of the Board of Studies who scrutinise the content specifically at the departmental level. Faculty members of all disciplines attend workshops, seminars and conferences organised at the state, national and international levels. This enables them to be abreast with the most recent developments in their disciplines. This, in turn, helps them to introduce advancements in the curriculum. Further, in-house meetings of Curriculum Development Committee in each centre bring out development in their respective disciplines.
- Some of the quality sustenance and enhancement measures followed at CUPB are:
  - (a) Providing academic resources and human resources.
  - (b) Academic audit of curriculum, by Universities Academic Audit and Monitoring Unit.
  - (c) Revising curriculum after feedback from students, teachers and other stakeholders.
  - (d) Time to time revision/amendment/ restructuring based on requirement, of industries and corporate sector obtained through University-Industry Forum and Council
  - (e) Following the regulatory norms prescribed by relevant authoritative bodies like UGC, ICAR, AICTE, BCI, MCI and NCTE etc. in the process of curriculum development.
  - (f) Involving national faculties and experts in the process.
  - (g) Establishment of Internal Quality Assurance Cell (IQAC) for Development and application of quality benchmarks/parameters for various academic activities.
  - (h) Experts from outside

- Another important quality sustenance measure followed by the University to ensure effective development of curricula is Training to faculty for curriculum development. Many faculty members have attended orientation courses and refresher programmes organised by different universities and academic institutions. The details are given in *Table-1.6*.

**Table 1.6: Orientation and refresher programmes attended by CUPB Faculty**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation &amp; Centre</b>	<b>Type of Course</b>	<b>From</b>	<b>To</b>	<b>Place</b>
1.	Er. Surinder Singh Khurana	Assistant Professor, Centre for Computer Sciences and Technology	Orientation course	19-06-2014	16-07-2014	UGC-ASC, Guru Jambheshwar University of Science and Tech., Hisar
2.	Dr. Zameerpal Kaur	Assistant Professor, Centre for Comparative Literature	Orientation course	23-06-2014	20-07-2014	UGC-ASC, North-Eastern Hill University Shillong
3.	Dr. Alpna Saini	Assistant Professor, Centre for Comparative Literature	Refresher Course	17-11-2014	06-12-2014	ASC Punjabi University Patiala
4.	Dr. Sunil Mittal	Assistant Professor, Centre for EST	Orientation course	01-12-2014	27-12-2014	ASC Punjabi University Patiala
5.	Dr. Jai Prakash	Assistant Professor, Centre for Physical and Mathematical Sciences	Special Winter School	03-12-2014	03-12-2014	UGC-ASC, Aligarh Muslim University
6.	Dr. Felix Bast	Assistant Professor, Centre for Biosciences	Orientation course	08-12-2014	02-01-2015	ASC-University of Delhi
7.	Dr. Sandeep Kaur	Assistant Professor, Centre for Economic Studies	Orientation course	11-12-2014	07-01-2015	ASC- Guru Nanak Dev University Amritsar
8.	Dr. Mahesh Kulharia	Assistant Professor, Centre for	Special Winter School	15-12-2014	03-01-2015	Academic Staff College, University of

		Bioinformatics				Rajasthan
9.	Dr. Achchhe Lal Sharma	Assistant Professor, Centre for Physical and Mathematical Sciences	Orientation course	01-01-2015	28-01-2015	UGC-ASC, University of Lucknow
10.	Dr. Sanjeev Kumar	Assistant Professor, Centre for Biosciences	Orientation course	08-01-2015	04-02-2015	UGC-ASC, University of Hyderabad
11.	Dr. Vinod Kumar	Assistant Professor, Centre for Chemical and Pharmaceutical Sciences	Orientation course	08-01-2015	04-02-2015	UGC-ASC, University of Hyderabad
12.	Dr. Rajinder Kumar	Assistant Professor, Centre for Comparative Literature	Orientation course	12-01-2015	07-02-2015	Academic Staff College, University of Rajasthan
13.	Dr. Kamlesh Yadav	Assistant Professor, Centre for Physical and Mathematical Sciences	Orientation course	12-01-2015	07-02-2015	Academic Staff College, University of Rajasthan
14.	Dr. Puneet Pathak	Assistant Professor, Centre for Environmental Law	Orientation course	12-01-2015	07-02-2015	Academic Staff College, University of Rajasthan
15.	Dr. Raj Kumar	Assistant Professor, Centre for Chemical and Pharmaceutical Sciences	Orientation course	10-02-2015	09-03-2015	Panjab University Chandigarh
16.	Dr. Sunil Mittal	Assistant Professor,	Refresher course	15-02-2015	07-03-2015	ASC Punjabi University

		Centre for EST				Patiala
17.	Dr. Nishtha Kaushiki	Assistant Professor, Centre for South and Central Asian Studies	Orientation Course	06-04-2015	01-05-2015	Academic Staff College, JNU New Delhi
18.	Dr. Sanjeev Kumar	Assistant Professor, Centre for Biosciences	Refresher course	12-05-2015	02-06-2015	UGC-ASC, University of Hyderabad
19.	Dr.Kousik Giri	Assistant Professor, Centre for Computational Sciences	Orientation Course	18-05-2015	13-06-2015	HRDC, University of Rajasthan, Jaipur
20.	Dr. Shamshir Singh Dhillon	Assistant Professor, Centre for Education	Orientation Course	17-05-2015	14-06-2015	UGC-HRDC, Guru Jambheshwar University of Sciences and Tech., Hissar
21.	Dr.Yogalakshmi K N	Assistant Professor, Centre for EST	Orientation Course	14-05-2015	13-06-2015	UGC-Academic Staff College, University of Madras
22.	Dr. Kiran K. Singh	Assistant Professor, Centre for Geography and Geology	Orientation Course	03-06-2015	30-06-2015	BHU, Varanasi
23.	Dr. Sandeep Kaur	Assistant Professor, Centre for Economics Studies	Refresher course	09-06-2015	29-06-2015	UGC-HRDC, Guru Nanak Dev University,
24.	Dr. Deepak Kumar	Assistant Professor, Centre for Environmental	Special Summer School	10-06-2015	30-06-2015	UGC-HRDC, Guru Nanak Dev University,

		Law				Amritsar
25.	Dr. Surinder Singh Khurana	Assistant Professor, Centre for Computer Science and Technology	Special Summer School	10-06-2015	30-06-2015	UGC-HRDC, Guru Nanak Dev University, Amritsar
26.	Dr. Preeti Khetarpal	Assistant Professor, Centre for HGMM	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
27.	Dr. Sandeep Singh	Assistant Professor, Centre for HGMM	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
28.	Dr. Harish Chander	Assistant Professor, Centre for HGMM	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
29.	Dr. Vikas Jaitak	Assistant Professor, Pharmaceutical Sciences and Natural Product	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
30.	Dr. Naresh Singla	Assistant Professor, Centre for Economics	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
31.	Dr. Bawa Singh	Assistant Professor, Centre for South and Central Asia	Orientation Course	15-06-2015	11-7-2015	UGC-HRDC, Punjabi University, Patiala
32.	Dr. Zameerpal Kaur	Assistant Professor, Centre for Comparative Literature	Refresher Course	27-06-2015	17-07-2015	UGC-HRDC, Punjab University, Chandigarh
33.	Dr. Rajinder Kumar	Assistant Professor,	Refresher Course	06-07-2015	25-07-2015	UGC-HRDC, University of

		Centre for Comparative Literature				Rajasthan
34.	Dr. Amandeep Singh	Assistant Professor, Centre for Comparative Literature	Orientation Course	29-07-2015	25-08-2015	UGC-HRDC, Panjab University Chandigarh
35.	Dr. Pankaj Bhardwaj	Assistant Professor,	Orientation Course	29-07-2015	25-08-2015	UGC-HRDC, Panjab University Chandigarh



**CUPB's Policy for Curriculum Development as approved by Academic Council**

**1.0 PROCESS OF CURRICULUM DEVELOPMENT**

**1.1 DESIGN**

All preliminary work should be carried out to ensure that the curriculum is relevant, appropriate and workable. The curriculum is to be conceptualized and attention paid to arrangement of the varied components. It should focus on the goals, objectives, subject matter, learning experiences and evaluation in consultation with stakeholders.

**1.1.1 Need assessment**

While assessing the need to design and develop curriculum, following parameters are to be kept in mind:

**1.1.1.1 Vision and mission of CUPB**

While developing the curriculum, the vision and mission of CUPB should be taken into consideration for attaining excellence in teaching, learning and research. It should aim at achieving regional, national and global needs in tune with the requirements of academics, industry, business and administration.

**1.1.1.2 Needs of the learner**

As the needs of the learners change with time and development in technology, thus, curriculum for CUPB programmes should be framed keeping in mind the needs of the learner.

**1.1.1.3 Changing policies**

The policies of governing bodies, state governments and central government change with time, which should be considered while framing the curriculum.

**1.1.1.4 Societal need**

There is always social change occurring in the society which has an impact on societal needs. The curriculum should help in satisfying the social and employability needs of its citizens.

#### 1.1.1.5 Regulatory authorities and stakeholders

The needs of regulatory authorities like, BCI, PCI, NCTE, AICTE, UGC etc. and stakeholders of the concerned programme and others must be explored before framing the curriculum. The existing curriculum framework at national level should also be explored.

#### 1.1.2 Interaction

The following groups are supposed to interact before the development of curriculum:

- Faculty
- Students
- Members of Alumni
- Industry
- Experts (external and internal)
- Stakeholders
- Policy makers

### 1.2 DEVELOPMENT

This stage involves the development of the curriculum which includes planning, developing content, finalising the curriculum and its implementation

#### 1.2.1 Planning

Each Centre of CUPB should form a curriculum development committee consisting of following members:

- COCs as Chairperson
- Teachers of different courses
- Two student toppers of the concerned programmes
- Member from industry
- Representative from Alumni association

#### 1.2.2 Content development

It involves developing the content of the curriculum and includes the following;

- Objectives of the Programme/ Expected outcome after undergoing the courses.
- Calculation of credits for the programme
- Scheme of the programme

- Selection of the content for each course
- Transaction mode (teaching strategies to be adopted while transaction)
- Criteria for evaluation
- Instructions to paper setters
- Suggested Readings
- Webliography

**1.2.3 Discussion and revision through workshops**

In house workshops including all the members of the curriculum team will discuss each and every point in the curriculum. The final draft should be prepared in consultation with the experts.

**1.2.4 Approval by Board of Studies**

The developed curriculum should be discussed in the duly constituted Board of Studies with external experts for recommending to the Academic Council.

**1.2.5 Approval by Academic Council**

The curriculum recommended by the Board of Studies should be submitted to duly constituted Academic Council for its approval.

**1.2.6 Procuring resources before implementation**

All the required infrastructure, human resources, books, journals, labs, resources & tools etc. should be procured before implementing the course.

**1.2.7 Periodic Assessment and Improvement**

**1.2.7.1 Regular improvement :**

The same procedure as of development is required to be adopted for regular improvement/revision of the curriculum every year

**1.2.7.2 Mid-Decadal Assessment :**

After every 5 years the performance of the students and the feedbacks should be subjected to thorough analysis keeping in mind the objectives, relevance, changed scenario, changed policies, if any, industrial or employer's demand.

The curriculum developed should be uploaded on the university website.

**Constitution of Board of Studies of various centres.**

The following is the composition of Board of Studies in different centres:

**A. Centre for Chemical Sciences**

1. Dr. Rakesh Kumar, Assistant Professor and Officiating In-Charge
2. Dr. Krishna Kanta Halder, Assistant Professor
3. Dr. Rajendra S. Dhayal, Assistant Professor
4. Dr. J. Nagendra Babu, Assistant Professor
5. Professor P. Ramarao, Dean Academic affairs
6. Dr. Raj Kumar, Assistant Professor, Centre for Pharmaceutical Sciences and Natural Products
7. Dr. Kousik Giri, Assistant Professor, Centre for Computational Sciences
8. Er. Meenakshi Mittal, Assistant Professor, Centre for Computer Science and Technology.
9. Dr. Puneeta Pandey, Assistant Professor, Centre for Environmental Science and Technology

**External Experts**

10. Professor T. R. Bhardwaj, Ex-Chairman, UIPS, Panjab University, Chandigarh
11. Prof. Ashok Kumar Malik, Department of Chemistry, Punjabi University, Patiala
12. Dr. Brahma Pujala, Senior Research Scientist, Integral BioSciences
13. Mr. Vijay Verma, Person Incharge (Quality Control), Microlabs, Mohali.

**B. Centre for Pharmaceutical Sciences & Natural Products**

1. Dr. Raj Kumar, Assistant Professor and Officiating In-Charge
2. Professor P. Ramarao, Dean Academic affairs
3. Dr. Vinod Kumar, Assistant Professor
4. Dr. Vikas Jaitak, Assistant Professor
5. Dr. Pradeep Kumar, Assistant Professor
6. Dr. Rakesh Kumar, Assistant Professor, Centre for Chemical Sciences
7. Dr. Sandeep Singh, Assistant Professor, Centre for GDMM.
8. Er. Meenakshi Mittal, Assistant Professor, Centre for Computer Science and Technology.

**Co-opted Members**

9. Mr. Ramit Singla, Ph.D. student, the Centre for Pharmaceutical Sciences and Natural Products

**External Experts**

10. Professor T. R. Bhardwaj, Ex-Chairman, UIPS, Panjab University, Chandigarh,
11. Dr. Brahma Pujala, Senior Research Scientist, Integral BioSciences

**C. Centre for Animal Sciences**

1. Dr. Anil K. Mantha, OIC & Assistant Professor, Chairperson (Ex-officio)
2. Dr. Jyoti Prakash, Assistant Professor (Convener)
3. Dr. Krishna Chaitanya, Assistant Professor
4. Dr. Ajay Kumar, Assistant Professor
5. Dr. Sanjeev Kumar, Assistant Professor, Center for Plant Sciences
6. Dr. Sandeep Singh, Assistant Professor, Center for Genetic Diseases and Molecular Medicine

**External Experts**

7. Dr. Sailesh Gochhait, Application Support Specialist, Life Technologies, New Delhi
8. Prof. Shyamal K. Goswami, School of Life Sciences, JNU, New Delhi

**Co-opted Members**

9. Mr. Shashi Shekhar Anand, Former Student of M.Sc. Biosciences, Center for Biosciences

**D. Centre for Plant Sciences**

1. Prof. A. K. Dhawan, Professor Plant Sciences (Chairperson)
2. Prof. R. G. Saini, Invited Professor
3. Dr. Sanjeev Kumar, Assistant Professor
4. Dr. Felix Bast, Assistant Professor
5. Dr. Pankaj Bhardwaj, Assistant Professor
6. Dr. Yogalashmi K.N., Assistant Professor, Centre for Environmental Science & Technology

**External Experts**

7. Prof. Harsh Nayyar, Chairman, Department of Botany, Panjab University Chandigarh
8. Prof. S.K. Sharma, Former Vice-Chancellor CSK HPKV Palampur, Prof. Emeritus, IHBT- Palampur.
9. Prof. Sudeshna Mazumdar – Leighton, Department of Botany, Delhi University, Delhi

**E. Centre for Biochemistry & Microbial Sciences**

1. Prof. R.G.Saini, Professor and Coordinator of the Centre (Chairperson)
2. Dr. Aklank Jain, Assistant Professor (Convenor)
3. Dr. Shashank Kumar, Assistant Professor

4. Prof. A. K. Dhawan, Professor Plant Sciences
5. Dr. Anil K. Mantha, OIC & Assistant Professor Animal Sciences
6. Dr. Yogalakshmi K.N., Assistant Professor, Centre for Environmental Science & Technology
7. Dr. Monisha Dhiman, Assistant Professor, Centre for Human Genetics & MM, School of Health Sciences
8. Dr. Anjana Munshi, Associate Professor, Centre for Human Genetics & MM, School of Health Sciences

**External Experts**

9. Dr. S. S. Marwaha, CEO, Punjab Biotechnology Incubator, Mohali
10. Dr. Ajit Kaur, Senior Scientist, Punjab Biotechnology Incubator, Mohali
11. Dr. Anil K. Gupta, Former Professor and Head, Department of Biochemistry, Punjab Agricultural University, Ludhiana.
12. Dr. Raj Kumar, Associate Professor, Baba Farid University of Health Sciences, Faridkot.

***F. Centre for Computational Sciences***

1. Prof. P. Rama Rao, Dean Academic Affairs (Chairperson)
2. Prof. A. K. Dhawan, Professor and CoC, Centre for Plant Sciences
3. Prof. Desh Deepak Singh, CoC for Genetic Diseases and Molecular Medicine
4. Dr. Mahesh Kulharia, Assistant Professor
5. Dr. Purshotam Sharma, DST, Inspire Faculty
6. Er. Meenakshi, Assistant Professor, Centre for Computer Science and Technology
7. Er. Surinder Singh Khurana, Assistant Professor, Centre for Computer Science and Technology
8. Dr. Jai Prakash, Assistant Professor
9. Dr. Raj Kumar, Assistant Professor and OIC, Centre for Pharmaceutical Sciences & Natural Products
10. Dr. Kousik Giri, Assistant Professor (Convener)

**External Experts**

11. Dr. Manoj Kumar, Deptt. Of Pharmaceutical Sciences, Punjab University, Chandigarh

***G. Centre for Physical Sciences***

1. Dr. Achche Lal Sharma, Coordinator, Centre for Physical Sciences.
2. Prof. A. K. Jain, Dean, School of Engineering and Technology
3. Dr. Kamlesh Yadav, Assistant Professor, Centre for Physical Sciences.
4. Dr. Jai Prakash, Assistant Professor, Centre for Physical Sciences.
5. Dr. Ashok Kumar, Assistant Professor, Centre for Physical Sciences.

6. Dr. Kousik Giri, Assistant Professor, Centre for Computational Sciences
7. Dr. J. Nagendra Babu, Assistant Professor, Centre for Chemical Sciences
8. Prof. A. L. Verma, Director, Amity Institute of Applied Sciences, Amity University, Noida
9. Prof. Ashavani Kumar, Head of the Department, Department of Physics, NIT Kurukshetra
10. Professor P. K. Ahluwalia, Himachal Pradesh University, Shimla

**External Experts**

11. Mr Subhash Agarwal President Sales and Marketing Labindia Analytical Instruments Pvt. Ltd Mumbai

**Co-opted Members**

12. Mr. Hardeep Singh

**H. Centre for Mathematics & Statistics**

1. Dr. Sachin Kumar, Chairperson, Coordinator of the centre
2. Dr. Akhlad Iqbal, Assistant Professor

**External Experts**

3. Dr. S. K. Tomar, Professor, Department of Mathematics, Panjab University, Chandigarh
4. Dr. S. S. Bhatia, Professor, School of Mathematics, Thapar University, Patiala.
5. Dr. Kanchan K. Jain, Professor, Department of Statistics, Panjab University, Chandigarh

**I. Centre for Environmental Science & Technology**

1. Prof. R.C. Sharma, CoC and Dean
2. Dr. Sunil Mittal, Assistant Professor
3. Dr. Dhanya M.S., Assistant Professor
4. Dr. Yogalakshmi K.N., Assistant Professor
5. Dr. Puneeta Pandey, Assistant Professor (Convener)
6. Er. Parminder Singh Sidhu (Student Alumni)
7. Ms. Upma Vaid (Ph.D. Research Scholar)

**External Experts**

8. Er. Onkar Singh Viridi, Metero Enviro Engineer, Mohali (Industry)

**J. Centre for Geography and Geology**

**Geography**

1. Dr. Kiran K Singh, OIC of the centre
2. Dr. Jitendra Kumar Pattanaik, Assistant Professor
3. Dr. L.T. Sasang Guite, Assistant Professor

4. Prof. R. C. Sharma, Assistant Professor, Centre for Environmental Science & Technology
5. Prof. A. K. Dhawan, Professor and CoC, Centre for Plant Sciences
6. Dr. Alpna Saini, Associate Professor, Centre for Classical and Modern Languages
7. Dr. Anil Mantha, Assistant Professor

#### **External Experts**

8. Prof. Surya Kant, Professor (Retired and Re-employed), Department of Geography, Panjab University, Chandigarh (India).
9. Prof. KNP Raju, Department of Geography, Banaras Hindu University, Varanasi, UP
10. Dr. R.B. Singh, Department of Geography, Delhi School of Economics, University of Delhi, Delhi
11. Prof. Ravinder Kaur, Department of Geography, Panjab University, Chandigarh
12. Prof. Milap Punia, Centre for the Study of Regional Development, School of Social Sciences, JNU, New Delhi
13. Dr. S.P. Kushwaha, Scientist/Engineer- G, Group Director Earth Resources and System Studies Group and Dean (Academics),
14. Mr. B. D. Bharath, Scientist/Engineer- SE, Indian Institute of Remote Sensing, Dehradun

#### **Co-opted Members**

15. Mohd. Hussain Naik
16. Ms. Gaurav Kumar

#### **Geology**

1. Dr. Kiran K Singh, OIC and Assistant Professor
2. Dr. Jitendra Kumar Pattanaik, Assistant Professor
3. Dr. L.T. Sasang Guite, Assistant Professor
4. Dr. R.C. Sharma, Professor and Dean, School of Environment & Earth Sciences
5. Prof. A. K. Dhawan, Professor and CoC, Centre for Plant Sciences
6. Dr. Alpna Saini, Associate Professor and CoC, Centre for Classical and Modern Languages
7. Dr. Bawa Singh, Assistant Professor and OIC, Centre for South and Central Asian Studies

#### **External Experts**

8. Mr. Ashok Raina, Chief chemist, Geochemistry Division, KDMIPE, Oil and Natural Gas Corporation Limited 9, Kaulagarh Road, Dehradun

#### **Co-opted Members**

9. Mohd. Hussain Naik
10. Ms. Amandeep Kaur



***K. Centre for Human Genetics and Molecular Medicine***

1. Dr. Anjana Munshi, CoC and Chairperson
2. Dr. Preeti Khetarpal, Assistant Professor
3. Dr. Sabyasachi Senapati, Assistant Professor
4. Dr. Sandeep, Assistant Professor
5. Dr. Monisha Dhiman, Assistant Professor
6. Dr. Harish Chander, Assistant Professor
7. Dr. Mahesh Kulharia, Assistant Professor, Member, Centre for Computational Sciences
8. Dr. Raj Kumar, Assistant Professor, Centre for Pharmaceutical Sciences and Natural Products
9. Dr. Jyoti Prakash, Assistant Professor, Centre for Animal Sciences, School of Basic and Applied Sciences

**External Experts**

10. Prof. A.J.S Bhanwer, Department of Human Genetics, G.N.D.U, Amritsar.
11. Prof. S.M.S Chahal, Department of Human Biology, Punjabi University, Patiala
12. Prof Rakesh Tayagi, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi
13. Sunil Vats, Application Specilaist, Abbott Molecular, Life Sciences Division
14. Dss Imagetech Pvt Ltd, A-5 Mohan Co-op Indl. Est. Mathura Road, New Delhi
15. Sailesh Gochhait, Ph.D., Field Application Support Manager (North and East zone, India), Life Science Solutions, Thermo Fisher Scientific, 372, Udyog Vihar, Phase II, Gurgaon, Haryana

**Co-opted Members**

16. Mr. Gaurav Kalra, Ph.D. Student (Human Genetics)
17. Ms Praveen Sharma, Ph.D. Student (Molecular Medicine)
18. Mr. Abhilash, M.Sc. Student (Human Genetics)
19. Mr Rajinder Kumar , M.Sc. Student (Molecular Medicine)

***L. Centre for Comparative Literature***

1. Dr. Zameerpal Kaur, Coc and Assistant Professor
2. Dr. Rajinder Kumar, Assistant Professor
3. Dr. Amandeep Singh, Assistant Professor
4. Dr. Alpna Saini , Associate Professor and COC, Centre for Classical and Modern Languages
5. Dr. Satvinderpal Kaur, Associate Professor, Centre for Education
6. Dr. Naresh Singla, Assistant Professor, Centre for Economic Studies

7. Dr. Bawa Singh, Assistant Professor, Centre for South and Central Asian Studies
8. Dr. Vinod Arya, Assistant Professor Centre for Sociology

### **External Experts**

9. Prof. Rana Nayar, Professor, Deptt. of English and Culture Studies, Panjab University Chandigarh.
10. Prof. Pushpinder Sayal, Professor, Deptt. of English and Culture Studies, Panjab University Chandigarh.
11. Prof. Akshay Kumar, Professor, Deptt. of English and Culture Studies, Panjab University Chandigarh.
12. Prof. Harish Narang, Former Professor, Centre for English Studies, JNU, New Delhi.
13. Prof. Parminder Singh, Former Professor, Deptt. of English , GNDU, Amritsar.
14. Prof. Jaya Chakravarty, Deptt. of English, University of Rajasthan, Jaipur.
15. Prof. Prakash Chandra Pattanaik, Deptt. of Moderan Indian Languages and Literary Studies, University of Delhi, New Delhi.
16. Dr. M. Balakumar, Asst. Director Administration, Central Institute of Indian Languages, Manasagangothri, Hunsur Road, Mysore – 570006, Karnataka (India)
17. Mr. Harish Khare, Editor in Chief, Tribune Trust, Chandigarh
18. Dr. B.B. Sharma, Principal, DAV College, Jalandhar
19. Dr. Labh Singh Kheeva, Principal, University College, Ghuda

### **Co-opted Members**

20. Ms. Manpreet Kaur, M.Phil.
21. Ms. Disha, M.Phil
22. Ms. Vandana Bathla, M.Phil
23. Ms. Kiranpal Kaur, M.Phil

### ***M. Centre for Classical and Modern Languages***

1. Dr. Alpna Saini, CoC and Associate Professor
2. Dr. Ramanpreet Kaur, Assistant Professor
3. Dr. Dinesh Babu P., Assistant Professor
4. Dr. Zameerpal Kaur, Assistant Professor
5. Dr. Rajinder Kumar, Assistant Professor
6. Dr. Amandeep Singh, Assistant Professor
7. Dr. Kiran K. Singh, Assistant Professor, Centre for South and Central Asian Studies
8. Dr. Jubilee Padmanabhan, Assistant Professor, Centre for Education

9. Dr. Bawa Singh, Assistant Professor, Centre for South and Central Asian Studies
10. Dr. Naresh Singla, Assistant Professor, Centre for Economic Studies

**External Experts**

11. Prof. Amritpal Kaur, Department of Punjabi, Punjabi University, Patiala
12. Dr. Jagbir Singh, Former Professor, Department of Punjabi, Delhi University
13. Dr. Harsimran Randhawa, Department of Punjabi, Kurukshetra University
14. Dr. Jaspal Kaur Kang, Prof. and Head, Guru Nanak Sikh Studies Chandigarh
15. Prof. Sohinder Bir Singh, School of Punjabi Studies, Guru nanak Dev University Amritsar
16. Prof. Yog Raj, Department of Punjabi, Panjab University Chandigarh
17. Dr. Vineeta, Punjabi Poetess
18. Dr. Baldev Dhaliwal, Punjabi short story writer
19. Dr. Atamjit, Punjabi playwright
20. Dr. Swarajbir, Punjabi playwright

**Co-opted Members**

21. Mr. Mandeep Singh (Student)
22. Ms. Rajpal Kaur (Student)

***N. Centre for Computer Science and Technology***

1. Dr. A.K. Jain, CoC and Professor
2. Er. Meenakshi, Assistant Professor
3. Er. Sukhreet Singh, Assistant Professor
4. Er. S.S. Khurana, Assistant Professor, Convener

**External Experts**

5. Dr. Rama Krishna Challa, Associate Professor & Head NITTTR, Chandigarh
6. Dr. A. K. Verma, Associate Professor, Thapar University, Patiala
7. Dr. Sukhwinder Singh, Assistant Professor, CSE, PU, SSG Regional Centre, Hoshiarpur

***O. Centre for South & Central Asian Studies***

1. Dr. Bawa Singh, Assistant Professor and Coordinator of the Centre
2. Dr. Nishtha Kaushiki, Assistant Professor
3. Professor (Dr) S.K. Bawa, Professor, Centre for Education
4. Dr. Jubilee Padmanabhan, Assistant Professor, Centre for Education
5. Dr. Deepak Chauhan, Assistant Professor, Centre for Law,
6. Dr. Sandeep Kaur, Assistant Professor, Centre for Economic Studies,

**External Experts**

7. Professor (Dr) Rakesh Dutta, Department of Defence and National Security Studies, Panjab University, Chandigarh
8. Dr. Satish K. Kapoor, D.A.V. University, Jalandhar
9. Professor (Dr.) Jagrup Singh Sekhon, Department of Political Science, Guru Nanak Dev University, Amritsar
10. Professor (Dr.) Savita Pande, South Asian Studies Division, School of International Studies, JNU, Delhi
11. Professor (Dr) Kulwant Kaur, Department of Political Science, University of Jammu, Jammu

**Co-opted Members**

12. Mr. Kovid Kumar, Ph.D. Research Scholar
13. Mr. Hilal Ramzan, Ph.D. Research Scholar

***P. Centre for Economic Studies***

1. Dr. Pabitra Kumar Mishra, Associate Professor and Coordinator of the Centre (Chairperson)
2. Dr. Sandeep Kaur Bhatia, Assistant Professor
3. Dr. Naresh Kumar Singla, Assistant Professor
4. Dr. Sesadeba Pany, Assistant Professor, Center for Education
5. Dr. Bawa Singh, Assistant Professor, Centre for South and Central Asian Studies

**External Experts**

6. Prof. P.K.Chaubey, Professor of Economics, Indian Institute of Public Administration, Indraprastha Estate, Ring Road, Mahatma Gandhi Marg, New Delhi
7. Prof.Sukhwinder Singh, Centre for Research in Economic Change, Punjabi University, Patiala
8. Dr.S.P.Padhi, Associate Professor, Department of Economics, Punjab University, Chandigarh -160014
9. Shri Raman Batta, President, Bathinda Chamber of Commerce and Industries, Mansa Road, Bathinda

**Co-opted Members**

10. Mr.Bishwajeet Prakash, M.Phil-Ph.D Integrated Student, Centre for Economic Studies

***Q. Centre for Law***

1. Dr. Tarun Arora, Associate Professor and CoC (Chairperson)
2. Prof. Ashok Dhawan, Professor and CoC, Centre for Plant Sciences
3. Dr. Alpna Saini, Associate Professor and CoC, Centre for Classical and Modern Languages
4. Dr. Puneet Pathak, Assistant Professor

5. Dr. Deepak Kumar, Assistant Professor
6. Dr. Sunil Mittal, Assistant Professor, Centre for Environmental Science and Technology

**External Experts**

7. Prof. Nishtha Jaswal, Professor and Chairperson, Department of Law, Punjabi University, Patiala
8. Prof. GIS Sandhu, Professor, Rajiv Gandhi National University of Law, Patiala
9. Prof. Manjit Singh Nijjar, Professor, Department of Law, Punjabi University of Law, Patiala
10. Prof. Rattan Singh, Professor, Department of Law, Panjab University, Chandigarh

**R. Centre for Education**

1. Prof. S K Bawa, CoC and Professor (Chairperson)
2. Dr. Satvinderpal Kaur, Associate Professor
3. Dr. Shamshir Singh, Assistant Professor
4. Dr. Shireesh Pal, Assistant Professor
5. Dr. Alpana sainsi, Associate Professor, Centre for Comparative Literature
6. Dr. Ramanpreet, Assistant Professor, Centre for Comparative Literature
7. Dr. Nishtha Kaushiki, Assistant Professor, Centre for South and Central Asian Studies
8. Dr. P. K. Mishra, Associate Professor, Centre for Economics Studies

**External Experts**

9. Dr. Nityananda Pradhan, Professor of Education, North East Regional Institute of Education (NERIE) NCERT, Shillong, Meghalaya
10. Prof. Ramesh Babu, Professor of Education, Regional Institute of Education (NCERT)
11. Syamla Hills, Bhopal
12. Prof. C.B. Sharma, Professor in Education (IGNOU), Chairman, National Institute of Open Schooling (NIOS), Noida
13. Prof. S.P. Malhotra, Former Professor in Education, Chief Consultant, MHRD, New Delhi
14. Prof. Raj Gupta, Professor in Education, Panjab University, Chandigarh
15. Prof. Anita Rastogi, Prof. in Education, Jamia Milia Islamia, New Delhi
16. Mrs S K Bhullar, Principal RB DAV Senior Secondary Schools, Bathinda
17. Dr. Rashmi Vij, Principal DAV Police Senior Secondary School, Jalandhar
18. Dr. S R Sharma Dean Faculty, Pb. Univ, Principal Guru Teg Bahadur College of Education, Giddarbaha.
19. Dr. Amit Kauts, Principal MGN College of Education, Jalandhar

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)  
नगर परिसर, मानसा मार्ग, बठिंडा-151001  
ईमेल: registrar@cup.ac.in  
वेबसाइट: www.cup.ac.in  
दूरभाष: +91-164-2864106



## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
City Campus, Mansa Road, Bathinda-151001  
Email: registrar@cup.ac.in  
Website: www.cup.ac.in  
Telefax: +91-164-2864106

Ref No: CUPB/CC/15/EC-15/28

Dated:05-8-2015

### Notification No 28

In pursuance to Item No. EC:15:15:22 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:17) is hereby conveyed to the establishment of university Industry Forum & Council as per details given below:

- i. Chairperson: Vice-Chancellor CUPB
- ii. Prof. A. K. Dhawan, Professor
- iii. Prof. P. Ramarao, Dean Academic Affairs
- iv. Prof. A. K. Jain, Professor (Convener)
- v. Members:

The following are the members of University-Industry Forum for the present:

S.No.	Name of the Person	Organization	Contact No./E-mail
1.	Mr. B.S. Anand Director	Jupiter Aqua lines	9815919223
2.	Mr. Upkar Singh Ahuja Joint Secretary	Chamber of Industrial & Commercial Undertakings, Ludhiana	9815800622
3.	Mr. Dilip Sharma Head	PHDCCI, Punjab	9915796327
5.	Ms. Suman Preet Singh	CII, Chandigarh	9814868859
6.	Mr. J. K. Dudani Mr. Puneet kaura	Samtel HAL Display System Limited, Greater Noida.	011-42424055/ jkdudani@samtelgroup.com puneet.kaura@samtelgroup.com
8.	Mr. Hyun Chil Hong	Samsung India Electronics Ltd, Block B, Sector 81, Noida, Uttar Pradesh 201305	1800 3000 8282, 1800 266 8282

9.	Mr. R.K. Harna Director Technical	Nitin Life Sciences Ltd. Paonta Sahib, Himachal Pradesh	rhh@nitinlifesciences.com 09896238762
10.	Dr. Arvind Kapoor CEO	Vegetable Division Rasi Seeds Ltd.	09810894125 arvindkapoor@rasiseeds.com
<b>Centre for Chemical and Pharmaceutical Sciences</b>			
9.	Dr. L. Wadhwa R & D manager	Ind-Swift Laboratories, Chandigarh	
10.	Mr. Mohanji Saxena R & D manager	Daburm AyurVet, Sahibabad	
11.	Dr. Manu Chaudhary Joint Manager Director	Venus Remedies, Baddi	
<b>Centre for Computer Science and Technology</b>			
12.	Mr. Anil Munjal Associate General Manager	Godrej & Boyce Mfg. Co. Ltd., Mohali	
<b>Centre for Environmental Science and Technology</b>			
13.	Wg. Cdr. I.S. Sachdeva Managing Director	BDS Décor & Prefab, Chandigarh	
<b>Centre for Biosciences</b>			
14.	Dr. S.S. Marwaha Chief Executive Officer	Punjab Biotechnology Park, Ltd. Biotechnology Incubator, Mohali	
15.	M/s Anil Enviro	C-203, Industrial Focal Point, Patiala (Pb) 147001	Er Anil Singla, 09814643041, anil@evapotech.com
16.	M/s Kartik Technologies of India	C-5, Model Town Patiala (Pb) 147001	Mr Kartik Singla, 09814461030 , ktiinventions@gmail.com
17.	M/s Green Plant Energy Pvt. Ltd.	Registered office, Vill. Birpind, Tehsil Nakodar, Distt. Jalandhar SCO 42, First floor, Sector 41-D, Chandigarh.	Er. N. S. Thethi, 09988518359, thethins@yahoo.co.in
18.	M/s Lehra Fuel-tech Pvt. Ltd.	Ludhiana-Malerkotla Road, Opposite BP Petrol Pump, V.P.O. Jagera(PB) 141117	S. Harbans Singh, 9915200437, info@lehafuel.com
19.	M/s VishivKarma Solar Energy Corporation	G.T. Road Phillor (Punjab) Managing Partner	Mr. Vijaya Dhiman, 09814081435, viscoenergy@gmail.com
20.	M/s Universal Biomass Energy Pvt. Ltd.	Channu (Punjab)	Mr. Swapan Datta(CEO), 9501111800, ceo@unibioenergy.com
21.	M/s Viaton Energy Pvt. Ltd.	Vill. Khokhar Khurd, Distt. & The. Mansa (Punjab)	Mr. Tejpal, 08437025103

22.	M/s Electro Tech	E-61, Industrial Area, Phase VIII, Mohali (PB)	Mr. Rajiv Goswami(CEO), rgelectrotech@gmail.com
23.	M/s Punjab Biomass Power Ltd.	Village Swai Singh Wala, Tehsil & Distt. Patiala (PB)	Mr. Grewal(CEO), 08558806675
24.	M/s Bhajan Agriculture & Engg. Works	Near Ajaib Singh Aartia Complex,G.T. Raod, Doraha-141421,Ludhiana (PB)	Mr. D.S. Dhiman, 08043047625, info@bhajanagro.com

The university realizes the importance of corporate resources and of industry connect in its functioning, in the present global scenario. It would therefore, attempt to establish a strong link with industries relevant to its domain areas. UGC has also emphasized the same often.

### **UNIVERSITY-INDUSTRY FORUM AND COUNCIL OF CUPB**

In view of the above, two bodies have been created as detailed below:

- (a) *A University-Industry Forum* in which 50 to 100 important industries will be enrolled as members. The number may exceed with the approval of Vice Chancellor, CUPB.
- (b) *The University-Industry Council* which will consist of five industries selected from the forum members for a closer interaction.

University-Industry Forum and Council will serve the Policy Advisory Body's role for CUPB.

### **COMPOSITION**

The Forum and Council will consists of representatives of Micro, Small, Medium and Large Industries in different domains of CUPB and the members of CUPB Faculty.

- (a) The University-Industry Forum will consists of fifty or more industries in the subject areas related to CUPB in the following manner:
  - Industries to be included in the Forum will be proposed by CUPB Faculty, through Dean Academic Affairs and approved by the Vice Chancellor, CUPB.
  - CoCs of all the relevant departments will be the members
  - A senior faculty member will be nominated by the Vice-Chancellor as coordinator of the Forum.
  - The tenure of the University-Industry Forum will be 3 years.



The Vice Chancellor CUPB may also nominate Officers from the Department of Industries/ Pollution Control Boards and other Govt. Bodies as members of Industries Forum or Council

### **FUNCTIONS**

Industry Forum and Council will be the policy advisory bodies of CUPB in the matters related to Teaching, Research, Consultancy, Skill Development, Entrepreneurship Development and Students placements etc.

### **PERIODICITY OF MEETINGS**

The Forum will meet once a year and the Council will meet twice a year. The coordinator of the Forum and Council will compile the minutes for approval of the Vice-Chancellor and circulate.

The names of industries to be included as members of the Forum and the Council will be approved by the Vice-Chancellor, CUPB and **Academic Council apprised of it.**

This is issued with the approval of the Competent Authority.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)

नगर परिसर, मानसा मार्ग, बठिंडा-151001

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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)

City Campus, Mansa Road, Bathinda-151001

Email: registrar@cup.ac.in

Website: www.cup.ac.in

Telefax: +91-164-2864106

Ref. No: CUPB/CC/15/EC-15/29

Dated: 05-8-2015

### NOTIFICATION NO 29

In pursuance to Item No. EC:15:15:45 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:40) is hereby conveyed for implementation Choice Based Credit System based on the guidelines of UGC as enclosed with the notification.

Competent Authority approved the constitution of the Choice Based Credit System Committee comprising of members as detailed hereunder:

1. Prof. P.Ramarao, Dean Academic Affairs - **Chairperson**
2. Prof. A.Dhawan, Invited Professor
3. Prof. R.G. Saini, Invited Professor - **Convener**

This is issued with the approval of the Competent Authority.

## Choice Based Credit System

The guidelines of UGC on Choice Based Credit System were adopted for implementation at CUPB by the Academic Council in its 6<sup>th</sup> meeting held on 05.03.2015 and subsequently approved by the Executive Council in its 14<sup>th</sup> meeting held on 16.03.2015. Different Centers of CUPB have been asked to prepare their courses for implementation of Choice Based Credit system in Academic Session 2015-16.

In order to implement the CBCS, the following procedure will be followed:

1. Each Centre shall prepare a list of Core courses, Elective Courses and Foundation courses.
  - (a) *Core Courses* include those courses which have to be compulsorily studied by a student as a core requirement to complete the programme in the chosen discipline of study. These shall form 50 to 65% of the total credit requirement of the programme.
  - (b) *An elective course* is a course which can be chosen from a pool of courses. It may be:
    - Supportive to the discipline of study
    - Providing an expanded scope
    - Enabling an exposure to some other discipline/domain
    - Nurturing student's proficiency/ skill

An elective are generally interdisciplinary i.e. from another Centre, but may be from the same discipline of study. Elective courses may be between 25 to 35% of the total programme requirements.

- (c) The Foundation Courses are the courses that lead to Knowledge enhancement. They are mandatory for all disciplines in a School (e.g. Research methodology, Statistics etc.). These will be 10-15% of the programme requirements.

However, sometimes students admitted to a programme may have deficiencies in their preparedness to pursue a programme, because of the differences in courses studied by the student in previous organization. Such students shall be given additional

“Deficiency Foundation courses” to make up the deficiency. These courses will be over and above the normal requirements of the programme.

2. The CoCs will assign experienced faculty members as “Programme Advisors” for each programme of the department. These advisors shall meet the students to guide them in preparing the courses for successful completion of the requirements of the programme. It will be the responsibility of programme advisors to ensure that students are guided properly, so that by the time of completion of the programme they are not left with small deficiencies in the requirements of the programme. As far as possible, the Programme Advisors shall give their advice in writing or through e-mail.
3. When a student is in the last semester, he/she shall approach the the Academic Audit and Monitoring unit for audit of the degree. This unit shall certify that the student has completed all requirements of the programme for award of the degree.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)

नगर परिसर, मानसा मार्ग, बठिंडा-151001

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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)

City Campus, Mansa Road, Bathinda-151001

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Website: www.cup.ac.in

Telefax: +91-164-2864106

Ref. No: CUPB/CC/15/Notification/20

Dated: 04/08/2015

### NOTIFICATION-20

Approval of the Competent Authority is hereby conveyed for the constitution of Committee for admission of International Students in Central University of Punjab, comprising of the members as detailed hereunder, as per the policy approved by the Executive Council in its 15<sup>th</sup> meeting (Copy of the Policy enclosed for reference).

1. Prof. P. Ramarao, Dean Academic Affairs - **Chairperson**
2. Dr. Pankaj Khare, Registrar
3. Prof. R. C. Sharma, Dean Students Welfare
4. Prof. S. K. Bawa, Coordinator of International Education Division - **Convener**

## POLICY FOR ADMISSION OF INTERNATIONAL STUDENTS

### (A) INTERNATIONAL STUDENTS

International Students will include the following:

- **Foreign Nationals:** Candidates holding citizenship of any foreign country.
- **Persons of Indian Origin (PIO):** A person who or whose any of ancestors was an Indian national and who is presently holding another country's citizenship/ nationality i.e. he /she is holding foreign passport.
- **Non Resident Indians (NRI):** An Indian citizen who is residing outside India and holds an Indian Passport.

Only those Non-Resident Indian students who have studied and passed the qualifying examinations from schools or colleges in foreign countries will be included as international students. Dependants of NRIs studying in India will not be considered as international students.

### (B) ADMISSION PROCEDURE

International students will be admitted directly against the supernumerary seats, without appearing in the Entrance Test.

These students shall be admitted to various Degree Programmes under the following categories:

- *Direct Applicants (Full Time Programme):* International students, who wish to join under Self-financed category, are required to submit their application to Admissions Office CUPB. The institute's decision after scrutinizing the applications will be communicated to the respective student. Authorized copies will be marked to the Embassy/ Visa Offices as required by the student.  
However, in case of students from restricted countries i.e. Pakistan, Afghanistan, China, Bangladesh & Sri Lanka, the application MUST be forwarded through their respective Embassy.
- *ICCR Cultural Exchange Fellowship Programmes (Govt. of India):* Candidates desirous of admission under this Fellowship Programme are required to apply through the Indian High Commission/Embassy as the case may be, in their respective countries. Application to ICCR should be forwarded to CUPB for consideration. In case the applicant is found suitable, admission offer letter will be sent to him/her through Indian Council for Cultural Relations (ICCR), New Delhi. Candidates are not eligible for getting any financial assistance from CUPB.
- *Embassy sponsored candidates:* Candidates sponsored by the High Commissions/ Embassies of Foreign countries.

International students seeking admission to CUPB in any one of the aforesaid categories will have to satisfy the minimum eligibility criteria for admission to the programmes as prescribed by the University.

### **OTHER REQUIREMENTS FOR ADMISSION OF INTERNATIONAL STUDENTS**

- a) All international students will require a 'Student VISA' endorsed to this institution for joining CUPB courses. No other endorsement is acceptable. The visa should be valid for the prescribed duration of the course.
- b) Any statutory clearances from MHRD, Govt. of India, if required, shall be applicable.

### **EQUIVALENCE OF FOREIGN DEGREES FOR ELIGIBILITY QUALIFICATIONS IN CUPB**

The qualifications required for admission to different Courses in CUPB will be included in admission brochure. Only those Students who have qualified from foreign universities recognized as equivalent by the 'Association of Indian Universities' (AIU) are eligible for admission. When required, a reference will be made to AIU to check the equivalence. Degrees obtained from Universities approved by the Department of Education/ other statutory bodies of concerned country will also be acceptable. If necessary, the Board of Studies of the concerned department in CUPB may be asked to determine Equivalence of Foreign degrees.

### **ELIGIBILITY:**

- a) **For Masters Programmes**  
A Bachelor's Degree in relevant discipline. Subject requirements for admission to a programme will be the same as for Indian nationals seeking admission to CUPB in that programme.
- b) **For Ph.D. Programmes**  
Master's degree in relevant discipline with proven academic/research aptitude. Detailed programme wise requirements are same as Indian nationals.

*Requirements common for both Masters and Ph.D. programme:*

- Being a national level university, the medium of instruction at CUPB is English. Applicants, who have obtained a valid IELTS or TOEFL score, will get preference.

- Those without a valid IELTS or TOEFL score, shall have to pass CUPB English Proficiency Test (CEPT) after joining the University. A student deficient in English will be asked to study language courses.
- A valid GRE/GMAT (for candidate applying to Food Business Management and Entrepreneurship Development department) score is not mandatory for admission. However, students with a valid GRE/GMAT score/grade will get preference.
- Applicants have to submit a brief essay of 300 words (approximately) stating the reason/s why she/he seeks admission to CUPB and the purpose of study.

## **FEES**

International students will pay fees as applicable and announced in the admission brochure. For the current year fees for international students shall be as below:

Masters programmes in Humanities:	US\$ 1000 per annum
Masters programmes in Sciences:	US\$ 1200 per annum
Ph.D. programmes:	US\$ 1400 per annum

- Hostel accommodation furnished with basic facilities is included in the above fee.
- However, International students may seek additional facilities on payment basis.
- There will be 10% cumulative increase in fee every year.
- Students from SAARC countries will be charged fees same as for Indian students.

## **STEPWISE PROCEDURE FOR ADMISSION OF INTERNATIONAL STUDENTS**

The procedure for admission to a programme at CUP will be as given below. Students may submit their *curriculum vitae* directly to the university or through ICCR or through the embassy as the case may be.

### **Step 1:**

- Interested International students must read the admission brochure carefully to check the eligibility
- International students should submit their *curriculum vitae* (as per attached format clearly indicating their academic achievements along with self-signed copies of the documents to the Admissions office, CUPB by post or by email.



- A brief essay of 300 words (approximately) stating the reason/s why she/he seeks admission to CUPB and the purpose of study should form a part of CV.
- Photocopies of the following documents are required along with the application on a prescribed format:
  - Proof of date of birth.
  - Certificate and Mark-sheet of qualifying examination. (Mark-Sheet/Degrees in a language other than English should be got translated into English)
  - Copy of passport for foreign citizens or Dual citizenship card for PIO or NRI status certificate
  - Softcopies of passport size photograph. (JPG format)
  - Two letters of Recommendation to be enclosed in sealed covers.
- **Application Timelines:** Applications of foreign students for the academic year beginning July/August will be accepted beginning January 1 of the year. Applications will be reviewed as received and hence should be made well in time, so that the student is able to obtain the VISA and NOC before the start of the academic session.

**Step 2:**

The Admission Cell after checking the eligibility criteria and other relevant information will inform the applicant by email, if found eligible. Now, the applicant will make payment of non-refundable advance amount equivalent to US\$ 100. The application will then be reviewed and if found suitable a 'Provisional Admission Offer Letter' will be issued to enable the student to obtain the VISA.

**Step 3:**

Submit the 'Provisional Admission Offer Letter' to the Indian Embassy of the respective country for obtaining the 'VISA'.

**Step 4:**

Report at CUPB on the notified date for orientation. Bring all above mentioned documents in original and get them verified by the Admission Cell. The original certificates will be returned to the students immediately after making an endorsement to this effect.

**Step 5:**

Students are required to undergo the medical fitness examination (at CUPB) and get the medical fitness certificate. Government of India rules for international

students entering India on 'Student VISA' for testing for HIV shall apply. They are also required to produce HIV test report to the Doctor. All international students will be required to obtain medical insurance.

**Step 6:**

Admission of International/PIO/NRI students will be confirmed after verification of original certificates, medical fitness test and payment of required fees. Even after the admission, at any stage if it is noted that the qualifying Degree/Certificate is not recognized by AIU, the admission of the candidate will be cancelled. Withdrawal of admissions/ refund of fees cases will be dealt as per the guidelines of CUPB.

**Step 7:**

Within a week of arrival in India, students are required to register their names with the police in the 'Foreigner Regional Registration Office (FRRO) and submit a proof of such registration to the Admission Cell.

**DISCIPLINE**

The International Students will abide by all the rules of the University and code of conduct as applicable to Indian students undergoing the same course. Anti-social and anti- national activities, misbehaviour, violence and unethical activities involving international students will be dealt in accordance with state and central laws that are in force. CUPB will not take any responsibility for any criminal or non-criminal acts committed inside or outside the campus by the international students.

**SCHOLARSHIP**

Foreign Students admitted under direct applicant category (refer description at Admission Procedure under this section) are eligible to get 'merit' scholarship/'earn-while-learn' assistantship as per the prevailing norms.

**ADVISORY COMMITTEE FOR INTERNATIONAL ADMISSION**

The following will form advisory committee for international admissions:

- Dean Academic Affairs
- Registrar
- Dean Students Welfare
- Dean of International Education Division

### Feedback Performa for Students

Dear students,

Teaching and learning is a continuous process in which teacher and student develops a bond. Teachers keep getting new students year after year and with the passage of time gains rich experience. In order to improve her/his competence in teaching and/ or research she/he needs your honest feedback about her/him. You are requested to help in this regards without any apprehension or fear. In case you want to hide your identity you may.in case you are honest and fearless you are advised to write your name/Roll No. It is a promise that your identity will never be exposed.

**Name of the course :**

**Class:**

**Name of the teacher :**

**Name of the student (optional):**

Sr. No.	Dimension	RATINGS (Level of encouragement of discussion or seeking questions)				
		1	2	3	4	5
	<b>TEACHING</b>					
1	Teaches with confidence					
2	Use of teaching aids					
3	Pace of delivery of content					
4	Interaction with students					
5	Quality of the content					
6	Explanation skill					
7	Clarity and loudness of voice					
8	Language proficiency					
9	Application of the concept taught					
10.	Completion of the course					
	<b>CLASSROOM MANAGEMENT</b>					
11	Discipline					
12	Withitness					
13	Behavior with the students					
14	Punctuality and regularity					
	<b>EVALUATION</b>					
15	Biases					
16	Continuous regularity in evaluation					
17	Level of comprehensiveness					
18	Satisfaction					
	<b>CURRICULUM</b>					

19	Innovative					
20	Comprehensive					
21	Challenging					
22	Fulfills the needs of society					
23	Job oriented					
24	Needs modification					
25	Meets national standards					
26	Meets international standards					

Tick mark on the rating scale as per your observation, 1 denotes lowest and 5 the highest level.

S. No.	Dimension	Yes	Sometimes	Never
1	Seeks gifts/money in exchange of guidance/help.			
2	I was invited by the teacher at his/her residence for personal favours?			
3.	I was harassed/exploited by the teacher.			
4.	I was compelled to stay in the department after working hours for no work.			

- You clude your opinion on infrastructure, administration, hostel, mess, wardens, non-teaching staff, security staff and even about Dean, Registrar and the Vice Chancellor. Your inputs are really valuable for the growth of the university. Our endeavor is that you should always feel proud of your university. Anything you want to share or suggest to the university please feel free to do so.

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Signature  
(In case of hard copy)

## CUPB Policy on Dual Degree

### Integrated Dual degree programs at CUPB:

- (a) CUPB had started a vertically integrated dual degree program of M Phil-PhD, M Pharm-PhD in the University from 2009. The courses offered under this program were:

M Pharm-PhD integrated program in Pharmaceutical Sciences  
M Phil-PhD integrated program in Biosciences  
M Phil-PhD integrated program in Comparative Literature  
M Phil-PhD integrated program in Development Economics  
M Phil-PhD integrated program in Environmental Science & Technology  
M Phil-PhD integrated program in South and Central Asian studies

However admissions for these programs are not being done presently because of practical and technical problem involved.

- (b) The University has planned following certificate courses:

- Computer Literacy Programme
- Self-Defence
- Laboratory Assistant
- Accounts Assistant using Tally
- Soft Skills/ Spoken English/Communication Skill
- Laboratory Technician
- Certificate Course in Library Orientation: Introduction to Information Literacy
- Certificate Course on Natural History, Curation including herbarium maintenance
- Short hand and typing
- Current Affairs

These courses can be taken up by the students in addition to their course work if desired.

### UGC Guidelines:

UGC guidelines on dual degree state:

1. That Integrated / dual degree programs to be introduced with caution and judiciously and without compromise on program length and papers.
2. For an integrated / dual program with an option for interim exit, the duration of the two programs must not be less than the sum of individual programs.

**Vertical dual degree Programme  
PG-Doctoral**

Based on the above it is proposed:

- (i) To encourage integrated programs in various disciplines: Different Centres may be encouraged to plan integrated programmes and prepare detailed proposals for approval by the Board of Studies of the Centre and Academic Council. These may include M.Sc.- Ph.D. for all Centres and M. Phil-Ph.D. for humanities

**Horizontal dual Degree Programme  
RG-PG in related field**

- (ii) Also horizontally, students shall be allowed to do M.Sc. degree in two subjects, but they will have to complete the requirements for the degree in both the subjects.

For example, a student doing a degree in the subject “A” can do another degree in subject “B”. However, if the courses done for obtaining first degree in subject “A” satisfy the requirements of subject “B” also, then these shall be exempted.

For Example

MSc.-Life Sciences specialization Plant Science

4 Semester Programme

A student can also opt for specialization in Animal Sciences with one additional year i.e. in a span of 3 years she/he can have two related degrees. M.Sc. Life Sciences – Plant Science and Animal Science.

M.Sc. Life Sciences

Specialization: Plant Science

Semester 1	Common for specialization in Plant Science, Animal Science, Life Science Micro/Biology
Semester 2	
Semester 3	Specialization

Semester 4      Sp+Seminar+CSIR-UGC NET

For Dual Degree

Semester 5      Zoology

Semester 5

Microbiology

Semester 6

Semester 6

It is expected that the students shall have to do Core courses of both the subjects “A” and “B”, but some of the Elective and Foundation courses done for the degree in subject “A” shall also satisfy the requirements of subject “B”. Such courses will be exempted and there will be no need to repeat these.

**Policy for Self Financing Centres**

The system of higher education in India is predominately publicly funded. At this Juncture where the country is competing to establish its position in terms of poverty alleviation, literacy status, human develop etc. it is expected that the higher education institutions shall support themselves by mobilizing resources through various means such as attractive courses, heightened fees, alumni support etc. for its own survival and relevance.

The word “tuition” means instruction and “tuition fee” refers to the cost of instruction. The salaries of teachers are counted among the cost of instruction. Besides teachers’ salary, there are other recurring expenditures associated with the cost of instruction such as library, laboratory, equipment, teaching-learning material etc.

In addition to the cost of instruction as above, there are non-instruction expenses related to hostel facilities, transportation services, canteen facilities, sports services, admission processing, examination charges, etc which may be subsidized or a fee may be levied upon students to recover expenses. Non-instruction cost is distinguished from instruction cost and usually “fees” refer to the former category and “tuition fee” is charged for the instruction cost.

There are four types of tuition fee policies:

- (i) Upfront tuition fee policy is the one where tuition is paid upfront and it is the responsibility of the parents to cover some portion of the educational cost of their children;
- (ii) No tuition fee policy is based on the assumption that primarily, it is the responsibility of the state to pay for all instructional costs;
- (iii) Deferred tuition fee policy assumes that tuition fee is deferred for payment in the future. Family of the student does not have to pay the tuition fee in the present. State may pay for the tuition fee in the present or banks advance loans in the present, equivalent to the tuition fee. In the future it is the responsibility of students to repay, the tuition fee out of the income earned, to the state in the form of tax or to repay the loan to the banks;
- (iv) Dual track tuition fee policy is applicable where there is resistance to tuition fee. Under the policy, a certain number of free (or low) tuition university places are awarded by the government to meritorious students and other places are available to low scoring students on a



tuition fee paying basis.

India follows a low tuition fee policy to be paid upfront in most government and aided institutions. In private institutions, on the other hand, there is tuition fee on full cost basis to be recovered upfront from the present family income of the student. Deferred tuition fee approach hardly exists. Dual track tuition policy is available in engineering education. For CUPB, we have upfront tuition fee system. But with every passing year the formal help from the government is reducing and expenditure increasing. Gap in income and expenditure is widening every year. After competitive examination at the central or state level, a student securing better percentage of marks gets entry at relatively lower tuition.

The promotion of Self-financing courses depends on the initiatives taken by the colleges/ departments. UGC has been supporting the self-financing courses in terms of supplying curriculum design and funding support for books, libraries and equipment. There has been a variety of courses that have been launched by the universities in the last ten years. Overall response to the courses has been quite good. Institutions that have such large courses are also able to generate internal resources. However, the pattern of self-financing courses across universities and colleges has been quite uneven and irregular. The course fees are not standardized.

### **Objective**

The main objective of this document is to provide policy guidelines for introduction of self-financed courses at the Central University of Punjab, Bathinda

### **Policy Guidelines**

1. The Self Financing certificate/degree courses that have high demand from the students, and at the same time have market value are to be encouraged.
2. The recurring cost such as teachers/instructor salary/honorarium, consumables in the laboratories, teaching learning material etc. for running the Self Financing courses as far as possible will be met from the fee paid by the students.
3. Fee structure for these courses will be different from the regular courses. Each course will have different fee structure.
4. Infrastructure facilities such as laboratory, equipment and library, computer Centre etc. for running Self-Financing courses will be provided by the university.
5. The students admitted in the Self Financing courses will be at par with

the other students admitted in the regular courses. The students will be eligible for the university facilities such as mess/canteen, hostel accommodation as per the availability, transport, computer Centre and library etc.

6. An overhead of 15 % as institutional expenses will be accounted while deciding the fee structure for the students.
7. The course will be started with a minimum strength of 10 students
8. The number of students in any course will be decided in such a way that the revenue generated from the fees is sufficient to meet the recurring cost for running that program. However, the course will be started with a minimum strength of 10 students.
9. The fee structure will be renewed every year.
10. The Teachers/Instructors for the course will be engaged on salary/honorarium basis.
11. Students under the Self Financing schemes will abide by the CUPB rules and regulations.

## **CRITERION-II**

# **TEACHING LEARNING AND EVALUATION**

## **CRITERION II – TEACHING LEARNING AND EVALUATION**

### **2.1.1 How does the university ensure publicity and transparency in the admission process?**

To ensure publicity and transparency in the admission process, the following strategies are adopted:

- (i) Advertisements are given in the leading regional and national newspapers. (94 newspapers), University website, and social media. The faculty visits the local colleges and interacts with students there.
- (ii) Admissions are held through Central Universities Common Entrance Test (CUCET), which further ensures wide publicity and transparency in the process.
- (iii) Results of CUCET are uploaded on the website and admissions to all postgraduate programmes are done solely on the basis of rank in the CUCET.
- (iv) All admission related information beginning from list of applicants, cut off marks, schedule of counselling and list of admitted candidates are uploaded on the website of Central University of Punjab.
- (v) The counselling process is video-graphed and as the counselling proceeds, seats filled/vacant are continuously displayed on the screen at prominent places in CUPB.
- (vi) It is the testimony of a robust admission process that for the academic year 2015-16, CUPB recently admitted nearly 399 students to its 34 postgraduate programmes spread over nine schools with not even one complaint.

**2.1.2 Explain in detail the process of admission put in place by the university. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify).**

Admission to all Master's degree programme in CUPB is done exclusively on the basis of score in Central Universities Common Entrance Test (CUCET), which is conducted by one of the Central Universities. Admissions to Ph.D. programmes have been done through Entrance Test conducted by CUPB, following UGC guidelines.

*Process of Admission*

The Controller of Examinations is the officer-in-charge of Admission Cell in the University and is responsible for notification of the dates of admission, conduct of common entrance tests and centralized counselling for admission into all programmes offered by the university. The details of the process are as below:

*(a) For Master's degree programmes:*

- Every year the University brings out an admission notification for various programmes in leading national and regional dailies. The information is also uploaded on the University website.
- Admissions at Central University of Punjab are made through Central Universities Common Entrance Test (CUCET) conducted jointly by Central Universities.
- After the result of CUCET is declared, candidates are asked to apply for admission to CUPB on the basis of their score in CUCET. The application is online.
- Counselling schedule is announced. All information is made available on the university website and candidates are also informed via email/ SMS.
- Admissions are based solely on the score obtained in CUCET.
- The counselling process is video-graphed and seats filled/vacant are continuously displayed on the screen at prominent places in CUPB

- Final results are displayed on the website for ensuring complete transparency.

(b) *For Ph.D. degree programmes:*

For admissions to Ph.D. programmes, only those candidates who have qualified one of the National level examinations: UGC/ CSIR NET, GPAT, ICMR/ ICAR NET are admitted, with few exceptions as described below:

- The admission is done on the basis of an Entrance test conducted by CUPB. The entrance test carries 75 points, academic career 10 points and interview 15 points.
- However NET-JRF candidates are exempt from this test as per UGC guidelines and given 75/75 points, above board. Score of these candidates in the academic career and interview are added.
- NET-LS candidates are given 60//75 points + 1/5th of score in entrance test of 75 points. Score of these candidates in the academic career and interview are added.
- The above procedure ensures that all NET-JRF and NET-LS candidates are high in the merit list.
- CUPB has instituted 21 University Fellowships, which have mostly gone to NET-LS candidates who remain high in the cumulative score of 100 because of the above policy.
- Fellows and Associates working in externally funded projects at CUPB are encouraged to compete for Ph.D. admission, but not given any special weightage.

Thus, the Ph.D. students admitted to CUPB are NET-JRF or NET/LS getting CUPB fellowship or Research Fellows of the CUPB externally funded projects. Those without any financial assistance are not admitted.

**2.1.3 Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.**

Not applicable for a Central University.

**2.1.4 Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?**

The admission process is reviewed by the “Admissions Committee” very frequently to ensure that it is fair, transparent and also helps in admitting the best possible students. Innovative ideas are incorporated to refine the admission process and to make the mechanism student-friendly.

The analysis of the admission process and overall student profile is provided in the annual report and is also put up to Executive Council.

With the aim to improve the quality of admitted students each year, the university reviews student profile critically. Such an analysis helps in:

- (i) Knowing the trend of admissions in the programmes.
- (ii) Knowing the focus area from where the students are participating.
- (iii) The areas where awareness about university is still to be given through various strategies
- (iv) To analyse the level of merit of students admitted.

Analysis of admission data, helped in redesigning of some programmes and discontinuation of some others. The analysis of regional trends helped in identifying parts of the country and parts of Punjab from where CUPB has less number of students.

*Admission Committee*

All admission related decisions are taken by a committee after thorough discussions and consideration. During admission period the committee meets frequently. For the year 2015-16, the following members constituted the committee:

1. Prof. P. Ramarao, Professor, Centre for Chemical and Pharmaceutical Sciences
2. Prof. R.G. Saini, Invited Professor, Centre for Animal Sciences
3. Prof. A.K. Jain, Professor, Centre for Computer Science and Technology.
4. Dr. A.K. Dhawan, Professor, Centre for Plant Sciences
5. Prof. S. K. Bawa, Professor, Centre for Education
6. Dr. Anjana Munshi, Associate Professor, Centre for Human Genetics and Molecular Medicine.
7. Dr. Jagdeep Singh, Controller of Examinations
8. Dr. Pankaj Khare, Registrar

### **2.1.5 What are the strategies adopted to increase/improve access for students belonging to the following categories:**

#### *SC/ST*

The University has established a “SC/ST and minorities cell” and also adopted UGC guidelines for SC/ST candidates (*Annexure 2.1*) 15% of the seats in the academic programmes offered by the University are reserved for students belonging to Scheduled Castes and 7.5% for students belonging to Scheduled Tribes. Further, the minimum eligibility requirement is relaxed by 5% for students belonging to these categories.

The university SC/ST Cell guides students to get scholarships from the various schemes of Government. Apart from the financial assistance offered by the university, CUPB has put in place mechanisms to ensure easy educational loan from the banks, which will empower the SC & ST students.

#### *OBC*

27% of the seats in the academic programmes offered by the University are reserved for students belonging to other backward classes. Further, the minimum eligibility requirement is reduced by 5% for students belonging to these categories.

#### *Women*

As per the Government norms women students are treated in equal priority. However, the university policies proactively encourage women candidates to compete and seek admission. CUPB is a gender equal, women safe campus.

#### *Persons with varied disabilities*

As per the Government norms, seats are reserved for physically challenged students.

#### *Economically weaker sections*

CUPB has a policy for financial assistances to students. Accordingly grants and financial assistance are provided to the meritorious students coming from economically weaker sections. (*Annexure 2.2*).

The university encourages the students to take up part time jobs at the university under the “Earn While You Learn” scheme and has also made arrangements with the local banks for educational loans.



*Outstanding achievers in sports and other extracurricular activities*

University encourages sports and other extracurricular activities among its students and for this purpose sports meet is held annually. To attract outstanding achievers in sports, CUPB plans to introduce B.P.Ed programme from academic year 2016-17.

**2.1.6 Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.**

*Table 2.1* shows the year wise analysis conducted by the University for the Calculation of demand ratio for various courses for the period 2011-2016.

The year wise analysis shows that the demand for the computer science and basic science programmes even without fellowship is very high as compared to the humanities programmes.

**Table-2.1: Year wise analysis of demand ratio for various courses for the period 2011-2016**

<b>Programme</b>	<b>2011-2012</b> No. of applications received (Ratio of No. of Application: No. of seats)	<b>2012-2013</b> No. of applications received (Ratio of No. of Application: No. of seats)	<b>2013-2014</b> No. of applications received (Ratio of No. of Application: No. of seats)	<b>2014-2015</b> No. of applications received (Ratio of No. of Application: No. of seats)	<b>2015-2016</b> No. of applications received (Ratio of No. of Application: No. of seats)
M.Phil.-Ph.D. Biosciences <sup>#</sup>	103 (1:7)	219 (1:15)	362 (1:18)	104 (1:5)	NA
M.Phil.-Ph.D. Environmental Science and Technology <sup>#</sup>	37 (1:2)	129 (1:9)	220 (1:11)	26 (1:1)	NA
M.Pharm.-Ph.D. Pharmaceutical Sciences (Medicinal Chemistry)	80 (1:8)	32 (1:3)	70 (1:4)	56 (1:3)	89 (1:5)
M.Phil.-Ph.D. South and Central Asian Studies	31 (1:2)	54 (1:4)	113 (1:5)	75 (1:3)	105 (1:7)
M.Phil.-Ph.D. Comparative Literature	35(1:2)	55 (1:4)	87 (1:3)	96 (1:4)	124 (1:6)
M.Phil.-Ph.D. Development Economics	29 (1:2)	43 (1:3)	136 (1:5)	71 (1:3)	170 (1:11)
LLM.Environmental Law	29 (1:3)	-	47 (1:5)	19 (1:2)	71 (1:5)
M.Sc. in Biosciences <sup>#</sup>	26 (1:3)	63 (1:3)	126 (1:5)	64 (1:3)	NA
M.Sc. Animal Sciences*	9(1: 0.4)	45 (1:2)	92 (1:4)	29 (1:1)	412 (1:27)
M.Sc. Plant Sciences*	10 (1:1)	-	44 (1:2)	30 (1:1)	319 (1:21)
M.Sc. Biochemistry*	-	240 (1:12)	852 (1:28)	134 (1:6)	435 (1:29)
M.Sc. Microbial Sciences*	-	-	09 (1:1)	26 (1:3)	384 (1:26)
M.Sc. in Environmental Science and Technology	-	-	-	19 (1:2)	316 (1:21)

M.Sc. Earth and Geological Sciences*	-	-	-	22 (1:2)	78 (1:5.2)
M.Sc. in Chemical Sciences	-	-	-	34 (1:3)	506 (1:33)
M. Tech.in Computer Science and Technology	-	-	-	103 (1:6)	267 (1:11)
M.Sc. in Molecular Genetics <sup>#</sup>	-	-	-	11 (1:1)	NA
M.Sc. in Genetic Diseases and Molecular Medicine	-	-	-	36 (1:4)	333 (1:22)
MSc. in Human Genetics	-	-	-	4 (1:0.4)	449 (1:29)
M.Phil. Physics <sup>#</sup>	-	-	-	3 (1:03)	NA
M.Tech. in Cyber Security	-	-	-	10 (1:04)	257 (1:17)
M.Pharm. (Pharmacognosy and Phytochemistry)	-	-	-	3 (1:0.12)	62 (1:3)
M.Sc.inPhysics (Nanophysics)	-	-	-	9 (1:0.36)	658 (1:43)
M.Sc.in Mathematics*	-	-	-	3 (1:0.12)	462 (1:30)
M.Sc.in Statistics*	-	-	-	6 (1:0.25)	158 (1:11)
M.Sc. in Bioinformatics	-	-	-	63 (1:2)	150 (1:10)
M.Sc. in Computational Sciences					110 (1:7)
M.A. in Comparative Literature					112 (1:7)
M.A. (Hons.) Punjabi and Comparative Literature					11(1:0.7)
M.A. in Development Economics					167 (1:11)
M.A. in Education					49 (1:3)
M.A. in International Studies <sup>#</sup>					NA
M.A. in History*					53 (1:4)

M.A. in Sociology*					55 (1:4)
M.A. in Political Science*					97 (1:6)
M.A. in Geography*					90 (1:6)
M.A. in Philosophy*					19 (1:1)
M.A. in Hindi*					5 (1:0.3)
M.Sc. in Sports Science*					19 (1:1)
M.A. Music (Instrumental)*					4 (1:0.26)
M.A. Music (Vocal)*					3 (1:0.2)
M.A. Fine Arts*					5 (1:0.3)
M.A. Theatre*					21 (1:2)
PG Diploma Translational Biomedical Research					19 (1:0.4)
PG Diploma Museology, Archaeology and Conservation*					9 (1:0.6)
M.Ed.					94 (1:2)

#Programme discontinued from current academic session

\*Programme new started from current academic session

**2.1.7 Were any programmes discontinued / staggered by the university in the last four years? If yes, please specify the reasons.**

M. Phil.-Ph.D. Integrated Programmes have been restructured and divided into two separate phases of M. Phil. only and Ph. D. Indeed, due to a limited number of seats in Ph.D. it was difficult to accommodate all M. Phil students in Ph.D. Moreover, the university has started direct admission to Ph. D from the current academic session.

Some programmes have been redefined for the year 2015-16. For example M.Sc. Biosciences programme has now been refined and admissions carried out in four different specializations: Plant Sciences, Animal Sciences, Microbial Sciences and Biochemistry.

M.Sc. Molecular Genetics programme offered by Centre for Biosciences has been discontinued from the 2015-16 academic session because of the poor response in student admission.

LL.M-Ph.D. intergrated programme was also discontinued due to the poor response in the student admission. The one year LLM. programme is now a two year programme as per the UGC guidelines.

In year 2014, M.A. South and Central Asian Studies was discontinued due to low admissions, instead focus was to attract students in M.Phil.-Ph.D. integrated programme in South and Central Asian Studies.

## **2.2 Catering to Diverse Needs of Students**

The Central University of Punjab is a Mini India with students coming from almost all states with diverse culture and languages. The students admitted in CUPB represent 25 major states of India and majority of them come from Punjab, Uttar Pradesh, Chandigarh, Himachal Pradesh and Jammu and Kashmir as given in *Table 2.2*.

Students' needs and abilities are different due to divergence in background, abilities and interests. CUPB believes that every student should have equal opportunities to be educated regardless of their personal, cultural and language backgrounds and socio-economic limitations. Therefore, teachers take learner diversity into consideration and all efforts are made to satisfy the needs of the students from diverse backgrounds including less privileged communities.

**Table-2.2: The diversity of the Students at CUPB admitted from 2009-2015**

<b>S. No.</b>	<b>State</b>	<b>No. of students</b>	<b>S. No.</b>	<b>State</b>	<b>No. of students</b>
1.	Andhra Pradesh	<b>04</b>	14.	Maharashtra	<b>05</b>
2.	Assam	<b>07</b>	15.	Manipur	<b>01</b>
3.	Bihar	<b>33</b>	16.	Nagaland	<b>01</b>
4.	Chandigarh	<b>50</b>	17.	New Delhi	<b>31</b>
5.	Chhattisgarh	<b>02</b>	18.	Odisha	<b>19</b>
6.	Gujarat	<b>01</b>	19.	Puducherry	<b>05</b>
7.	Haryana	<b>66</b>	20.	Punjab	<b>374</b>
8.	Himachal Pradesh	<b>59</b>	21.	Rajasthan	<b>80</b>
9.	Jammu and Kashmir	<b>95</b>	22.	Tamil Nadu	<b>02</b>
10.	Jharkhand	<b>10</b>	23.	Uttar Pradesh	<b>94</b>
11.	Kerala	<b>15</b>	24.	Uttarakhand	<b>08</b>
12.	Karnataka	<b>01</b>	25.	West Bengal	<b>15</b>
13.	Madhya Pradesh	<b>21</b>			

**2.2.1 Does the university organize orientation / induction programme for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.**

An orientation programme is held at the university level and then each centre holds a separate orientation programme for its newly admitted students.

- At the university level one day programme is lead by the Vice-Chancellor himself. The Deans, Registrar, Centre Coordinators, faculty members, the toppers of the university who have excelled in their respective programmes and office bearers of the student council are introduced to the new entrants through slides containing their CV.
- The fresher's are made aware of the university life, values and ethics to be followed, attendance and punctuality and the academic system of the university. Also, mentor-mentee system is explained and mentors announced for each student. Policies on sexual harassment, grievance redressal and ragging are explained.
- Thereafter, the Induction programmes are held in respective Centres led by the Centre Coordinators. Students are briefed about the details of the programme they have got enrolled in, the code of conduct, the rules and regulations of the university, pattern of examinations and the facilities available. They are made aware of the opportunities at CUPB, academic success strategies, scope of their programme and possible career opportunities
- The students are also taken on a tour of the university, laboratories, library, computer centre, museum, health centre, etc. before the commencement of the teaching programme.
- Senior students are involved at every step of orientation. The senior professors and teaching staff of each centre act as experts in providing guidance and counselling during the initial days to the freshers, take their feedback and act on this.

**2.2.2 Does the university have a mechanism through which the “differential requirements of the student population” are analysed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?**

The university has a “Students Counselling Cell” (*Annexure 2.3*) and “SC/ST/OBC and minorities Cell”. These two cells identify and address the needs of different groups of students admitted in the university.

- The orientation programme conducted at each new session before the commencement of the teaching programme helps in understanding and assessing the knowledge base and skills of the students.
- In the initial interactions with the students the faculty members take special care to understand the levels of the students and impart support to the students from less privileged groups. For example, students who are weak in English are identified, divided into batches and special remedial English classes are arranged for them.
- For language inhibitions initial help through the Mentor from the same state are provided.

**2.2.3 Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department wise/ faculty-wise?**

Yes, the university offer bridge courses in the M.A./ M.Sc. Geography programme.

The University realizes its objective of catering to the diverse needs of students from less privileged communities, rural backgrounds as also the high performers. Apart from the English Remedial classes, the following efforts are made:

- *Remedial courses in Communication and Soft Skill Development*

The Centre for Comparative Literature offers short and long term need based courses in English to the students. These courses help the students to acquire the required proficiency in communication skills. These classes commence, as soon as, the semester starts and are scheduled in the evening.

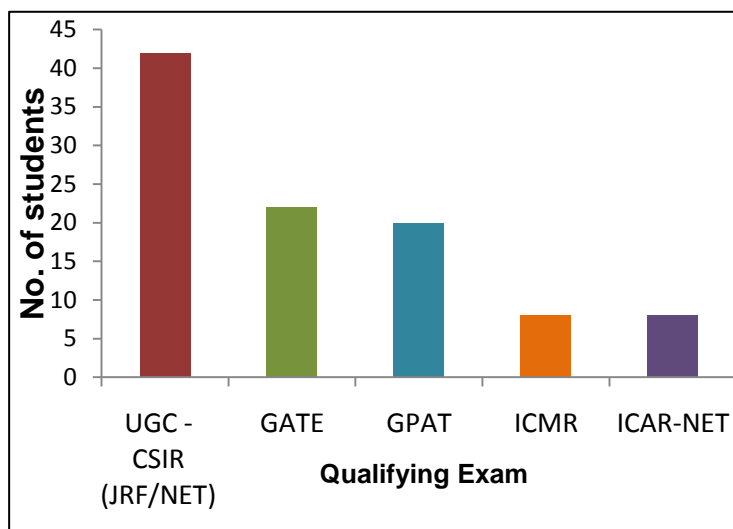


- *Competitive Examination Cell*

The objective of the cell is to prepare the students to face different competitive examinations and help them acquire the requisite knowledge to excel in these competitions. The cell conducts coaching classes for exams like UGC/CSIR-NET, ICMR, DBT, GATE, GPAT, Civil services examination, etc. Classes are held in the evening, so that the regular class schedule of the university is not disturbed. This cell contributes particularly to the needs of the weaker sections i.e. socially and educationally backward communities of the students. CUPB assesses the academic growth through the results of different competitive examinations in which our students participate.

The Competitive Examination Cell (*Annexure 2.4*) supports the students and its outcome is as given below:

- (a) UGC - CSIR (JRF/NET): 42
- (b) GPAT: 25
- (c) GATE: 35
- (d) ICMR: 06
- (e) ICAR-NET: 05



The details of students who qualified various examinations are provided at *Annexure 2.5*.

- *Punjabi Language classes*

This course is offered to the interested students during evening hours on specific days which are generally decided as per the time-table during the semester. The Central University of Punjab has diverse

student community coming from each and every part of the country. To make these students independent and socially aware, the Punjabi language is taught.

- The university has started short term value added courses of direct relevance to current social needs. These courses are:
  - Certificate course in Vermicomposting
  - Certificate course in Apiculture
  - Certificate course in Mushroom cultivation
  - Certificate course in Sericulture.
  - Certificate course in Human Rights

In addition CUPB runs short term courses like Computer course for senior citizen and Japanese Language Course.

**2.2.4 Has the university conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?**

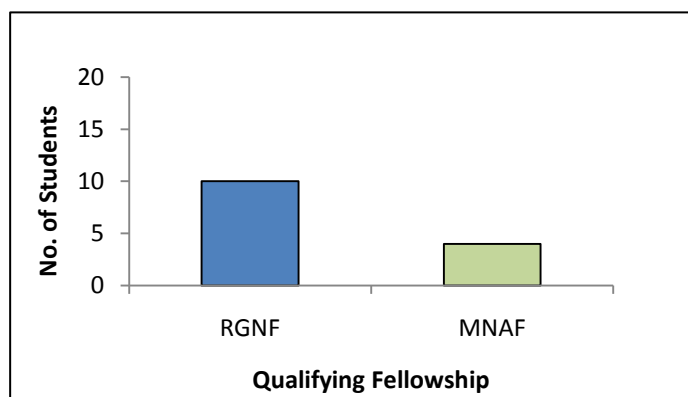
The Mentor appointed for each student, irrespective of the class/ section of society are expected to maintain the record of the academic growth of the students.

In the faculty meetings of DAA, teachers share their experiences about students and remedial measures if needed for students or on any other issue is addressed. CUPB identifies the need of the students and provides assistance based on the category of students having one or more of the following special needs:

- Improvement in English.
- Special coaching in different programmes.
- Remedial classes and tutorials for slow learners.
- Financial requirements for academic growth.

The economically disadvantaged students are encouraged to apply for national level scholarships such as Rajiv Gandhi National Fellowship (RGNF) for Scheduled Caste and Scheduled Tribes, funded by Ministry of Social Justice & Empowerment and Ministry of Tribal Affairs. Students are also encouraged to apply for fellowship under Maulana Azad National Fellowship (MANF) for Minority Students Scheme. These schemes provide a financial aid to these students.

The university does not let any student suffer for the reasons of economic hardships and offers financial aid programs through scholarships and interest free loans. Moreover, CUPB help them through Earn While You Learn Scheme wherein the students get paid for working at various places at the university campus after their classes and during weekends. CUPB also helps the students in facilitating loan process to meet their financial needs.



#### **2.2.5 How does the university identify and respond to the learning needs of advanced learners?**

- The choice based credit system takes care of the advanced learners who can opt for higher levels of courses.
- Students can also opt for inter-disciplinary courses, specialized elective courses of their choice and interest.
- Learning needs of the students are assessed by getting constant feedback from the learners and also individual needs of the students are assessed by the research guides.
- Bright students are encouraged to participate in additional seminars and symposia conducted by other institutions and are motivated to publish technical papers in reputed journals.
- Special coaching for competitive examinations like UGC-NET /SET / GATE / ICAR fellowships are given for advanced learners.

To encourage the advance learners the working hours of the library, reading room has been increased upto 10:00 pm. and reading rooms remain open through the night. The students are provided with non-stop power supply and fully air conditioned class rooms.

### **2.3**



## Teaching-Learning Process

### 2.3.1 How does the university plan and organize the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

#### *(i) Academic Calendar*

Academic calendar of the university is prepared by the Admission Committee under the Chairmanship of Dean Academic Affairs where in all the university activities are planned and scheduled. This calendar is uploaded in the university website.

- An academic year consists of two semesters. The odd semester runs in the months of August to December and the even semester runs during the months of January to May. One semester normally has 18 weeks and each week has 24-28 hours of instructions spread over 5 days of the week.
- Academic Calendar of every centre is prepared by the Academic and Administrative Committee of the respective centre where coordinator of the centre is Chairperson. Each centre plans their own calendar regarding continuous assessment, practical classes etc. The Calendar of the Centres also includes activities such as organization of Seminars/ workshops/ Invited lectures etc.
- The Academic time table for each programme is collected and the schedule of lectures and detailed syllabus for every subject is defined precisely while developing curriculum and displayed on website.
- The schedule of seminars conducted and other orientation programmes organized are well planned to fit in time frame.

#### *(ii) Teaching plan*

- The allotment of courses and allocation of teachers for specific academic programmes are well defined by each centre before commencement of semester.
- Each programme offers various courses identified by their unique course code which are distributed throughout the semester. The courses are distributed as course work,

practical/laboratory work, tutorials, term papers, seminars; report writing and viva-voice and credit are assigned accordingly.

*(iii) Evaluation blue print*

- Continuous Internal assessment: Two surprise tests of 25%, two preannounced tests of 50% and end semester evaluation of 25%.
- External assessment

**2.3.2 Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?**

Yes, student's manual is uploaded on the university website and also details of various programmes, courses and course outline with relevant reference books and suggested readings are uploaded on website.

Before the session starts the teachers get ready with new books (textbooks and reference books), update themselves with the current and latest lectures material.

Course schedules are prepared by every faculty member for the courses they are teaching. This system is very effective in covering the syllabus within the time frame prescribed for a semester. The academic calendar and time table given prior to the commencement of the academic session ensures effectiveness of the process. Feedback from the students ensures effectiveness of the process.

**2.3.3 Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.**

CUPB and its faculty take teaching as the highest priority. Till date the university has not faced any problem in completing the curriculum within the stipulated time frame. The time table is strictly followed. In some unavoidable circumstances if the classes are disturbed then the faculty compensate for the loss by taking additional classes.

**2.3.4 How is learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contribute to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.**

The learning is made student centric by making students participate in teaching-learning process through interactive discussions in the class and engaging the students in class with various activities in which students are the main participatory individuals. The teaching techniques like quiz, seminars, home assignments, term papers, etc. augment the student-centric learning process.

List of participatory learning activities adopted in general are:

- Students asked to prepare MCQs, assignments and term papers on specific topics using reference books, journals and Internet facility offered in the library and computer centre.
- The students are asked to evaluate the surprise tests to make learning more student centric.
- Assignments on specific topics for self-study.
- Seminar with use of multimedia, Project report, Survey, field study.
- Regular announced and surprise tests/Quiz
- Journal clubs to enhance the student's knowledge and update them with recent research.
- Term papers to promote Team Learning
- E-learning, Blogs, Emails groups help students participation

### **2.3.5 What is the university's policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?**

The university permits and encourages faculty to invite experts and people of eminence from different fields to deliver lectures. The university has already appointed several visiting professors of eminence who share their expertise with faculty and students.

Besides, every centre has the provision of inviting experts as and when required. In the last four years more than 83 experts from different fields and areas were invited.

The Centres also organize seminars, workshops etc. time to time which offer a platform to invite experts /people of eminence to deliver lectures and share their experiences. Eminent scientists, consultants, guests from industry are also invited to deliver guest lectures by the concerned faculties/centres. (*Table 2.3*)

### **2.3.6 Does the university formally encourage blended learning by using e-learning resources?**

The university has a computer centre which has more than 511 computers with internet connection to which students have free access. Most of the centres are having subject specific databases, interactive learning software and e-learning resources for the benefit of the student and the faculty. Students are also exposed to open source reference materials and online educative resources. They are encouraged to consult their teachers on learning whenever required. Besides, the university has plans to start programmes through blended learning mode.



**Table 2.3: List of Invited Experts**

<b>Sr.No.</b>	<b>Name of Experts</b>	<b>Date of Lecture</b>
1.	Kulvinder Singh Saini	June 24, 2010
2.	Dr. P. S. Ahuja	June 25, 2010
3.	Dr. A.K. Saxena	May 3, 2011.
4.	Mr. P.C. Hota, IAS (Retd.),	May 28, 2011.
5.	Dr. Daljit Singh	July 17, 2011
6.	Dr. M.S. Bakshi	August 5, 2011
7.	Prof. A. K. Dhawan	April 27, 2011
8.	Prof. Naresh Kochhar	November 18, 2011
9.	Prof. Mool Chand Sharma	November 24, 2011
10.	Prof. Dr. Harish Puri	December 9, 2011
11.	Prof. Dr. A.K. Saluja	December 9, 2011
12.	Dr. Devinder Singh Sandhu	December 13, 2011
13.	Prof. Dr. Jagbir Singh	February 10, 2012
14.	Dr. U.S. Tondon	March 5, 2012.
15.	Prof. Anwar Alam	April 17, 2012
16.	Dr. A. Banerjee	April 20, 2012
17.	Dr. Gurwattan Singh Miranpuri	April 25, 2012
18.	Prof. S. S. Gill	May 08, 2012
19.	Dr. A. Bhardwaj	Sept 24, 2012
20.	Prof. C. P. Kaushik	Sept 26, 2012
21.	Dr. Babu Ram	November 27, 2012
22.	Prof. A.K. Singal	December 21, 2012
23.	Dr. S. Sharma	Jan 10, 2013
24.	Dr. R.K. Tuli	March 28, 2013
25.	Dr. Deeksha Bali	April 12, 2013
26.	Prof. Moin Uddin	May 13, 2013
27.	Prof. S.K. Salwan	May 13, 2013
28.	Prof. A.P. Pathak	May 17, 2013
29.	Dr. S. S. Bir	May 22, 2013
30.	Prof. D. S. Brar	May 22, 2013
31.	Prof. Pushpinder Jai Rup	May 22, 2013
32.	Prof. P. K. Joshi	May 22, 2013
33.	Dr. B.M. Gandhi	May 29, 2013
34.	Prof. Bismillah A.	June 28, 2013
35.	Prof. A. Tikoo	December 05, 2013
36.	Prof. P. T. Chande	September 16, 2013
37.	Prof. Pandey Sashibhushan Sheetanshu	September 16, 2013
38.	Padma Bhushan Sardar Anjum	September 16, 2013
39.	Prof. M. N. Rai	September 16, 2013
40.	Prof. Prithipal Singh Kapur	November 1, 2013

41.	Prof. M. S. Kang	November 1, 2013
42.	Prof. Ranjit Singh Ghuman	November 1, 2013
43.	Dr. Satnam Singh Ladhar	November 1, 2013
44.	Sh. Ajmer Singh Aulakh	April 23, 2013
45.	Sh. Tony Batish	April 23, 2013
46.	Prof. Harbhajan Singh Bhatia	May 7, 2013
47.	Prof. Sukhdev Singh	May 7, 2013
48.	Dr. Swarajbir	September 27, 2013
49.	Dr. Navsharan Kaur	September 27, 2013
50.	Chancellor Prof. S. S. Johl	October 25, 2013
51.	Padma Bhushan Sh. Gurdial Singh	October 25, 2013
52.	Sh. N. S. Ratan	October 25, 2013
53.	Prof. Sukhdev Singh Sirsa	October 25, 2013
54.	Prof. Harbhajan Singh Bhatia	October 25, 2013
55.	Dr. Harshinder Kaur	October 25, 2013
56.	Dr. Jagmail Singh Bhathuan	November 25, 2013
57.	Prof. J. S. Grewal	November 25, 2013
58.	Major Adarsh Pal Singh	November 25, 2013
59.	Prof. Chaman Lal	January 10, 2014
60.	Prof. J. S. Hundal	January 17, 2014
61.	Prof. R. K. Tuli	January 17, 2014 & November 15, 2014
62.	Prof. A K Malhotra	February 4, 2014
63.	Dr. J. S. Sekhon	February 4, 2014
64.	Dr. Neeta Kang	February 4, 2014
65.	Dr. Rajesh Vashishta	February 4, 2014
66.	Dr. Manjit Singh Bal	February 4, 2014
67.	Shri Avinash Chander	February 28, 2014
68.	Prof. S. K. Salwan	February 28, 2014
69.	Prof. Asit K. Chakraborti	April 4, 2014
70.	Dr. Inder Pal Singh	March 28, 2014
71.	Dr. Prabhjot Parmar	May 27, 2014
72.	Prof. Ram Sharan Joshi	September 15, 2014
73.	Prof. Rohini Aggarwal	September 29, 2014
74.	Sh. Bal Anand	September 4, 2014
75.	Prof. M. Shamsheer Ali	October 21, 2014
76.	Prof. S. C. Sharma	November 13, 2014
77.	Prof. Gurmail Singh	November 24, 2014
78.	Dr. Veer Singh	November 26, 2014
79.	Dr. Anand Bachhawat	December 5, 2014
80.	Prof. Rakesh Tyagi	December 5, 2014
81.	Dr. M.K. Mahajan	December 5, 2014
82.	Dr. Suman Dhar	December 5, 2014
83.	Dr. Javed N Agrewala	December 5, 2014

84.	Dr KK Bhutani	January 22, 2015
85.	Dr. S. S. Marwaha	January 22, 2015
86.	Dr. Amarjit Kaur Kotfata	February 11, 2015
87.	Major General (Retd.) R. K. Kaushal	February 11, 2015
88.	Prof. V. K. Garg	February 11, 2015
89.	Prof. S. C. Sharma	February 19, 2015
90.	Prof. Narpinder Singh	February 23, 2015
91.	Prof. Ashok Dhawan	February 26, 2015
92.	Dr. Raj Bahadur	February 27, 2015
93.	Prof. Sardara Singh Johl	February 28, 2015
94.	Prof Rajesh Gill	March 5, 2015
95.	Prof. S. K. Sharma	March 19, 2015
96.	Dr. D.P. Bhatt	March 27, 2015
97.	Dr. Pralok Gupta	April 10, 2015
98.	Prof. V.K. Jain	April 22, 2015
99.	Prof. S.S. Dhillon	April 22, 2015
100.	Prof. Arbind Jha	April 26, 2015
101.	Dr. Gayatri Singhal	April 27, 2015
102.	Dr. Mark Mcdowall	April 30, 2015
103.	Prof. Daisy R. Batish	May 22, 2015
104.	Prof. Jagbir Singh	May 22, 2015
105.	Prof. Gurmail Singh	May 22, 2015
106.	Dr. Jayanti Dutta	June 10, 2015
107.	Prof Rabindra N Chibbar	June 12, 2015

### **2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?**

- The university has a modern computer centre with latest configuration workstations (Dell®) each featuring all recent processors. The computer centre has 511 computers, 10 high end work stations, 12 Blade Server with capacity for 16 blades each having with 16 GB RAM, two lease lines of 40 Mbps and 100 Mbps 22 laptops and 22 different kinds of software.
- Each faculty member has a desktop while in addition each centre has been issued a Lap-top.
- The university has Wi-Fi enabled with 12 Blade Servers and 10 high-end workstations for non-stop internet access.
- The University library is fully automated with Library Management Software which functions from cataloging to security protocols.
- The e-journals are made available to the students from the main library access available through passwords. The university library has 8900 e-journals (<http://cup.ac.in/library.php>)
- Utilization of latest technologies, data bases such as Web of Science, SciFinder Evaluation, Manuparta, and The Institute for Studies in Industrial Development etc. and facilities like language lab, and other e-learning resources for effective teaching.

### **2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?**

#### *Open Source*

Massive Open Online Courses (MOOC) programme as per guidelines from MHRD is being started. The University has identified expertise in different areas of various disciplines who will be preparing the modules for the programme. Thirty faculty members from different disciplines of the University have been identified as experts for developing the MOOC programme in their respective areas.

University has Inspire Teacher's Network and Expert Teacher's Group who intend to work together to improve the teaching quality.

### **2.3.9 What steps have the university taken to convert traditional classrooms into 24x7 learning places?**

- Library working hours (on working days, on holidays, before examination, during examination, during vacation) :

8 am to 10:00 p.m. all working days; Reading rooms open through the night.

9 am to 5.30 pm on Saturday, Sunday and Gazetted holidays

- The assignments and practical work included in the curriculum ensures that the students adhere to the habit of learning in 24 x 7 modes. Home assignments and practical work includes writing of term papers, preparing seminar reports, power point presentations
- Internet with Wi-Fi facility is available in the hostels and reading rooms.
- Well-equipped Computer centre, remains open till 6:30 pm.
- Reading hall for students equipped with PC's & net facility remains open till 11:00 pm.
- The students are continuously engaged in assessment work like terms papers, assignments, and seminars so that it's not only the class room teaching but a continuous learning.
- Students, teachers, mentors are connected to each other with social media so that the queries, discussion and learning continues even any the regular class schedules.

### **2.3.10 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.**

- Yes. In accordance with the provisions of Choice Based Credit system "Programme Advisors" are decided for each programme run by a Centre. They coordinate and advise students on all academic matters and take care of overall monitoring of student's academic programme. (*Insert 2.1*)
- For every 8 to 10 students one mentor is assigned to provide academic, personal and psycho social guidance. The mentor remains

the same throughout the programme of the student from orientation to Graduation. (*Insert 2.2*)

- Apart from the Programme Advisors and Mentors, students have Research Guides, hostel wardens and chief warden who are accessible round the clock.

## Insert 2.1

### **Programme Advisors of the Programmes in different Centres.**

The following names of faculty members are proposed for Programme Advisor of different programmes in different centres.

#### **Centre for Chemical Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
M.Sc.	Dr. J. Nagendra Babu, Assistant Professor
Ph.D.	Dr. Rakesh Kumar, Assistant Professor

#### **Centre for Pharmaceutical Sciences & Natural Products**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
M.Pharm. (Medicinal Chemistry)	Dr. Raj Kumar, Assistant Professor
M.Pharm. (Pharmacognosy and Phytochemistry)	Dr. Pradeep Kumar, Assistant Professor
Ph.D. (Pharmaceutical Sciences)	Dr. Vinod Kumar, Assistant Professor
M.Sc. (Medicinal Chemistry)	Dr. Vikas Jaitak, Assistant Professor

#### **Center for Animal Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
Ph.D.	Dr. Jyoti Prakash, Assistant Professor
M.Sc.	Dr. Krishna Chaitanya, Assistant Professor

#### **Centre for Plant Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
Ph.D.	Dr. Felix Bast, Assistant Professor
M.Sc.	Dr. Pankaj Bhardwaj, Assistant Professor

#### **Centre for Biochemistry & Microbial Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
M. Sc.	Dr. Shashank Kumar, Assistant Professor
Ph.D.	Dr. Aklank Jain, Assistant Professor

#### **Centre for Computational Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
M. Sc.	Dr. Mahesh Kulharia, Assistant Professor
Ph.D.	Dr. Purshotam Sharma, Assistant Professor

#### **Centre for Physical Sciences**

<b>Name of the Programme</b>	<b>Name of Programme advisors</b>
------------------------------	-----------------------------------

M.Sc.	Dr. Kamlesh Yadav, Assistant Professor
Ph. D.	Dr. Jai Prakash, Assistant Professor

### Centre for Mathematics & Statistics

Name of the Programme	Name of Programme advisors
Ph.D	Dr. Sachin Kumar, Assistant Professor
M.Sc. Mathematics	Dr. Akhlat Iqbal, Assistant Professor
M.Sc Statistics	Dr. Harmanpreet Singh Kapoor Assistant Professor (Contractual)

### Centre for Environmental Science & Technology

Name of the Programme	Name of Programme advisors
M.Sc.	Prof. R.C. Sharma, Professor
M.Phil.	Prof. R.C. Sharma, Professor
Ph.D.	Prof. R.C. Sharma, Professor

### Centre for Geography & Geology

Name of the Programme	Name of Programme advisors
M.A./M.Sc. Geography	Dr. L.T. Sasang Guite, Assistant Professor
M.Sc. Geology	Dr. Jitendra Kumar Pattanaik, Assistant Professor
Ph.D. Geography	Dr. Kiran K Singh, Assistant Professor

### Centre for Human Genetics and Molecular Medicine

Name of the Programme	Name of the Programme Advisor
Ph.D. in Human Genetics	Dr. Anjana Munshi, Associate Professor
Ph.D. in Molecular Medicine	Dr. Harish Chander, Assistant Professor
M.Sc. in Human Genetics	Dr. Preeti Khetarpal, Assistant Professor
M.Sc. in Molecular Medicine	Dr. Monisha Dhiman, Assistant Professor

### Centre for Comparative Literature

Name of the Programme	Name of the Programme Advisor
M.A. English (Comparative Literature and Translation studies)	Dr. Amandeep Singh, Assistant Professor
M.Phil-PhD Integrated and M.Phil (Comparative Literature)	Dr. Rajinder Kumar, Assistant Professor



### Centre for Classical and Modern Languages

Name of the Programme	Name of the Programme Advisor
M.A. Punjabi	Dr. Ramanpreet Kaur, Assistant Professor
PhD Punjabi	Dr. Ramanpreet Kaur, Assistant Professor

### Centre for Computer Science and Technology

Name of the Programme	Name of the Programme Advisor
M. Tech. Computer Science & Technology	Er. Meenakshi, Assistant Professor
M. Tech. Computer Science & Technology (Cyber Security)	Er. Surinder S. Khurana, Assistant Professor

### Centre for South & Central Asian Studies

Name of the Programme	Name of the Programme Advisor
Ph. D.	Dr Bawa Singh, Assistant Professor
M Phil.	Dr. Bawa Singh, Assistant Professor
M. A. (Pol Sc.).	Dr. Nishtha Kaushiki, Assistant Professor

### Centre for Economic Studies

Name of the Programme	Name of the Programme Advisor
Ph.D.	Dr.Pabitra Kumar Mishra, Associate Professor
M.Phil.	Dr.Sandeep Kaur Bhatia, Assistant Professor
M.A.	Dr.Naresh Kumar Singla, Assistant Professor

### Centre for Law

Name of the Programme	Name of the Programme Advisor
LL.M.	Dr. Puneet Pathak, Assistant Professor
Ph.D.	Dr. Puneet Pathak, Assistant Professor

### Centre for Education

Name of the Programme	Name of the Programme Advisor
Ph.D.	Dr. Satvinderpal Kaur, Associate Professor
M.Ed.	Dr. Shamshir Singh Dhillon, Assistant Professor
MA (Education)	Dr. Shireesh Pal Singh, Assistant Professor

**2.3.11 Were any innovative teaching approaches/methods/practices adopted/ put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?**

Constant innovations in teaching are matter of pride for CUPB faculty and many innovative teaching approaches/methods are practiced in the university.

Teleconferencing and video-lecturing are used in various Centres. One fine example of this is in Centre for Environmental Science and Technology. The Faculty of the Centre coordinated the 13<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> Outreach Program on "*Applications of Remote Sensing and GIS for Natural Resources*" between August 2014-November 2015 (August 4- November 14, 2014, January 27-March 27, 2015 and August 10- November 27, 2015). The program is broadcasted live using A-VIEW software from the Indian Institute of Remote Sensing (IIRS), Dehradun. This Programme was sponsored by National Natural Resources Management System (NNRMS) and was organised by Indian Institute of Remote Sensing, Indian Space Research Organisation and Department of Space, Government of India. In the first two sessions total 55 participants registered for the course, out of which 39 successfully completed the course. Several other methods are used in CUPB:

- (i) Digital technologies like LCD projectors are used to provide a real time animation and present the concept in a most attractive and lively way.
- (ii) Internet based discussions are encouraged by directing the students to present a relatively new advancement in the subject concerned.
- (iii) Video based teaching engages the students in the class.
- (iv) Brain storming on various social, scientific issues and problems by way of panel discussions
- (v) Tutoring by senior students in mentor groups.
- (vi) Journal clubs.
- (vii) Seminars
- (viii) Poster presentation on their research topics
- (ix) Innovators Club exhibition

- (x) Participation in other national levels competitions like Mock Parliament and debate competitions organised by FICCI.
- (xi) International Commemorative days are celebrated which imparts wholistic awareness and development.

These practices have helped the students to bring out the hidden talents, better understand the subject, augment inclination towards subject and enhance active learning process. The activity oriented teaching methodology adopted by a teacher is considered as important criteria to assess. CUPB gives best teacher award each year, based on students feed back and best student awards based on overall performance of the student.

### **2.3.12 How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?**

CUPB realises its responsibilities of promoting scientific temper and creativity and promotes this through multiple approaches.

- University permits and sponsors several of the research students to participate in Seminars, Workshops, Trainings, Conferences etc., in their field so as to stimulate creativity among them in the university and outside.
- University also sponsors / organizes such events in the University campus, so that students are exposed to expert views of national and global experts, which would trigger creativity in their young minds.
- University freely allows and encourages students to take up research projects which would again culminate creative outputs.
- To exhibit the talent and inculcate scientific temper, the students are given opportunity to develop scientific models/exhibits to the public through Science day programs, innovator's day, science exhibition, etc.
- For the overall personality development various competitions are debates, declamation, quiz and elocution are organized.
- Class projects, freedom to interact with faculty and experts and encouraging team spirit through group projects are other ways to achieve these targets.
- Apart from the academic activities, for overall personality development the students visited the Pushpa Gujral Science City,

Kapurthala and Biodiversity train, Bathinda. The Visual Arts club of the University screen social movies and documentaries for general awareness.

**2.3.13 Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been (percentage of total) made mandatory?**

Yes the project work/ dissertation is an essential component of the programmes offered by the university. 100% programmes have made it mandatory. A summary of students projects is provided in *Table 2.4* and details are in *Annexure 2.5*.

**Table 2.4 : Details of the students project completed**

Academic Year	M.Phil.	M.Pharm.	LL. M.	M.Tech.	M.Sc.	Total
2011-12	26	NIL	NIL	NIL	NIL	26
2012-13	34	8	4	NIL	11	57
2013-14	50	8	9	17	13	97
2014-15	33	0	3	0	2	38
Total	153	16	16	17	26	228

**2.3.14 Does the university have a well-qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?**

Yes, the university takes pride in its exceptionally qualified and committed faculty which easily meets the requirements of curriculum. As a general practice of appointment at CUPB, an Assistant Professor is appointed only if he/she has both Ph.D. and NET and is from a reputed National/ International laboratory. Generally, some experience of foreign universities is also expected. These unwritten guidelines are always followed except in engineering disciplines where some faculty members are M Tech. from reputed institutes like IIT. The faculty members have a large number of publications, patents and research projects.

Whenever, there is a short fall, new recruitments are made and visiting faculties are invited for specialised topics to enhance the knowledge of the students.

**2.3.15 How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?**

- The facilities provided to prepare computer aided teaching materials are many, like, Computer lab, Language Lab, audio visual aids, micro phones, LCD projectors, high resolution cameras, and high end digital document camera and LCDs.
- All the faculty members are provided with a personal computer, a departmental laptop with internet connection and the facility to take print-outs through the networked printer in the computer lab.
- All the classrooms have projector screens to enable teaching through power point presentations.
- The university has the intranet facility (<http://172.16.0.7>) where besides other academic, administrative information; lectures could also be loaded, so that students have an access to them whenever required.

**2.3.16 Does the university have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?**

Feedbacks are received from students regularly at the end of each semester for all the subjects. The feedback is analysed. The names of the students are kept confidential but the concerned faculty is counselled by the authority for improvement. These feedbacks are helpful in rectifying the short comings of the faculty by subject themselves to in-service training, and to go for refresher / summer / winter programmes of specialization required organized outside the University.

**2.4 Teacher Quality**

**2.4.1 How does the university plan and manage its human resources to meet the changing requirements of the curriculum?**

Dean (Academic), Deans of Schools and CoCs ensure that plans are in place to meet changing needs of curriculum. Steps are taken to induct new faculty and where ever possible enhance the skill levels of the existing faculty.

- The faculty is motivated to attend the orientation and refresher courses as per UGC guidelines. About 60% of the faculty has

already attended the orientation programmes offered by various Academic Staff colleges.

- The faculty is permitted to attend national and International seminars to get knowledge on recent developments in the research and curriculum.
- The faculty is advised to attend training on lab oriented programmes.
- The authority ensures and provides the support to the faculty to update themselves and meet the changing requirement of the curriculum.
- Workshops are organised on use of application of high end equipments in collaboration with manufactures.

#### **2.4.2 Furnish the details of the faculty:**

Details of the faculty are given in *Table-2.5*.

**Table-2.5 : Details of the faculty at CUPB**

<b>Sr. No.</b>	<b>Professors</b>	
1.	Prof. P. Ramarao, PhD	Centre for Pharmaceutical Sciences and Natural Products
2.	Prof. R.G. Saini, PhD	Centre for Biochemistry and Microbial Sciences
3.	Prof. A. K. Jain, PhD	Centre for Environmental Science and Technology
4.	Prof. R.C. Sharma, PhD	Centre for Environmental Science and Technology
5.	Prof. A. K. Dhawan, PhD	Centre for Plant Sciences
6.	Prof. S.K. Bawa, PhD	Centre for Education
7.	Prof. P. K. Sharma	Centre for Biochemistry and Microbial Sciences
<b>Associate Professors</b>		
1.	Dr. Anjana Munshi, PhD	Centre for Human Genetics and Molecular Medicine
2.	Dr. Tarun Arora, PhD	Centre for Environmental Law
3.	Dr. Hans Raj Arora, PhD	Centre for Environmental Law
4.	Dr. Satwinder Pal Kaur, PhD	Centre for Education
5.	Dr. Alpna Saini, PhD	Centre for Classical and Modern Languages
6.	Dr. Pabitra Kumar Mishra, PhD	Centre for Economic Studies
7.	Dr. Vinay Kumar Rao, PhD	Centre for South and Central Asian Studies
8.	Dr. Ramakrishna Wusirika	Centre for Plant Sciences
9.	Dr Amandeep Kaur, PhD	Centre for Computer Science and Technology
<b>Assistant Professors</b>		
1.	Dr. Raj Kumar, PhD	Centre for Pharmaceutical Sciences and Natural Products
2.	Dr. Vinod Kumar, PhD	Centre for Pharmaceutical Sciences and Natural Products
3.	Dr. Vikas Jaitak, PhD	Centre for Pharmaceutical Sciences and Natural Products
4.	Dr. Felix Bast, PhD	Centre for Plant Sciences
5.	Dr. Sanjeev Kumar, PhD	Centre for Plant Sciences
6.	Dr. Pankaj Bhardwaj, PhD	Centre for Plant Sciences
7.	Dr. Vinay Kumar	Centre for Plant Sciences
8.	Dr. Anil Kumar Mantha, PhD	Centre for Animal Sciences
9.	Dr. Jyoti Parkash	Centre for Animal Sciences

10.	Dr. Ajay Kumar	Centre for Animal Sciences
11.	Dr. Krishna Chaitanya Rapalli	Centre for Animal Sciences
12.	Dr. Aklank Jain	Centre for Biochemistry and Microbial Sciences
13.	Dr. Shashank Kumar	Centre for Biochemistry and Microbial Sciences
14.	Dr. Somesh Baranwal, Ramalinga Swami Fellow	Centre for Biochemistry and Microbial Sciences
15.	Dr. Rakesh Kumar	Centre for Chemical Sciences
16.	Dr. Krishan Kanta Haldar	Centre for Chemical Sciences
17.	Dr. Rajendra Singh Dhayal	Centre for Chemical Sciences
18.	Dr. J. Nagednra Babu	Centre for Chemical Sciences
19.	Dr. Sunil Mittal, PhD	Centre for Environmental Science and Technology
20.	Dr. Dhanya M.S., PhD	Centre for Environmental Science and Technology
21.	Dr. Yogalakshmi K.N., PhD.	Centre for Environmental Science and Technology
22.	Dr. Puneeta Pandey, PhD	Centre for Environmental Science and Technology
23.	Dr. Preeti Khetarpal, PhD	Centre for Human Genetics and Molecular Medicine
24.	Dr. Sandeep Singh, PhD	Centre for Human Genetics and Molecular Medicine
25.	Dr. Monisha Dhiman, PhD	Centre for Human Genetics and Molecular Medicine
26.	Dr. Harish Chander, PhD	Centre for Human Genetics and Molecular Medicine
27.	Dr. Sabyasachi Senapati	Centre for Human Genetics and Molecular Medicine
28.	Dr. Neeraj Kumar	Centre for Human Genetics and Molecular Medicine
29.	Er. Meenakshi Mittal, M.Tech.	Centre for Computer Science and Technology
30.	Er. Surinder Singh Khurana, M. Tech.	Centre for Computer Science and Technology
31.	Er. Sukhreet Singh, M. Tech.	Centre for Computer Science and Technology
32.	Er. Navjot Sidhu, M. Tech.	Centre for Computer Science and Technology
33.	Dr. Kousik Giri	Centre for Computational Sciences
34.	Dr. Mahesh Kulharia	Centre for Computational Sciences
35.	Dr. Purshotam Sharma,	Centre for Computational Sciences



	DST INSPIRE Faculty	
36.	Dr. Kamlesh Yadav, PhD	Centre for Physical and Mathematical Sciences
37.	Dr. Achchhe Lal Sharma, PhD	Centre for Physical and Mathematical Sciences
38.	Dr. Ashok Kumar, PhD	Centre for Physical and Mathematical Sciences
39.	Dr. Sachin Kumar, PhD	Centre for Mathematics and Statistics
40.	Dr. Anoop Kumar, PhD	Centre for Mathematics and Statistics
41.	Dr. Dr. Harmanpreet Singh Kapoor	Centre for Mathematics and Statistics
42.	Dr. Deepak Kumar, PhD	Centre for Environmental Law
43.	Dr. Puneet Pathak, PhD	Centre for Environmental Law
44.	Dr. Sukhwinder Kaur	Centre for Environmental Law
45.	Dr. Surender Mehra	Centre for Environmental Law
46.	Dr. Zameerpal Kaur , PhD	Centre for Comparative Literature
47.	Dr. Rajinder Kumar, PhD	Centre for Comparative Literature
48.	Dr. Alpna Saini, PhD	Centre for Comparative Literature
49.	Dr. Amandeep Singh, PhD	Centre for Comparative Literature
50.	Dr. Kiran K. Singh, PhD	Centre for Geography and Geology
51.	Dr. Jitendra K Pattanaik, PhD	Centre for Geography and Geology
52.	Dr. L.T. Sasang Guite, PhD	Centre for Geography and Geology
53.	Dr. Bawa Singh, PhD	Centre for South and Central Asian Studies
54.	Dr. Nishtha Kaushiki	Centre for South and Central Asian Studies
55.	Dr. Sudheer Kumar Verma	Centre for South and Central Asian Studies
56.	Dr. Sandeep Kaur , PhD	Centre for Economic Studies
57.	Dr. Naresh K. Singla, PhD	Centre for Economic Studies
58.	Dr. Surinder K. Singla, PhD	Centre for Economic Studies
59.	Dr. Jainendra Kumar Verma	Centre for Economic Studies
60.	Dr. Jajati Keshari Parida	Centre for Economic Studies
61.	Dr. Vinod Arya	Centre for Sociology
62.	Dr. Aditya Ranjan Kapoor	Centre for Sociology
63.	Dr. Ramanpreet Kaur, PhD	Centre for Classical and Modern Languages
64.	Dr. Dinesh Babu P	Centre for Classical and Modern Languages
65.	Dr. Shamshir S Dhillon, PhD	Centre for Education
66.	Dr. Shireesh Pal Singh, PhD	Centre for Education
67.	Dr. J. Padmanabhan, PhD	Centre for Education
68.	Dr. Sesadeba Pany, PhD	Centre for Education
	<b>Research Associate</b>	
1.	Dr. Neetu Purohit, Ph.D	Centre for Comparative Literature

**2.4.3 Does the university encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).**

Central University of Punjab has Faculty from different states of the country. *Table 2.6* shows the details of faculty diversity (Based on location of the university awarding Ph.D. degree)

**Table-2.6: The details of faculty diversity (In Obtaining PhD)**

Faculty / Department	% of faculty from the same university	% of faculty from other universities within the State	% of faculty from universities outside the State	% of faculty from other countries	S C	S T	OB C	% of faculty with Post-Doc /Work Experience at Foreign University
Centre for Chemical Sciences	None	50	50	-	01	-	01	50%
Centre for Pharmaceutical Sciences and Natural Products	None	75	25	-	-	-	01	25%
Centre for Animal Sciences	None	25	75	-	01	-	01	60%
Centre for Plant Sciences	None	40	40	20			01	60%
Centre for Biochemistry and Microbial Sciences	None	25	75	-	01			50%
Centre for Physical Sciences	None	-	100		01		01	66%
Centre for Environmental Science and Technology	None	60	40	-	-	-	01	-
Centre for Human	None	15	85	-	01	-	01	43%

Genetics and Molecular Medicine								
Centre for Computer Science and Technology	None	100	-	-	-	-	-	-
Centre for Computational Sciences	None	-	67	33	-	-	01	66%
Centre for Mathematical Sciences	None	50	50	-	01	-	01	66%
Centre for Legal Studies and Research	None	50	50	-	01	-	01	-
Centre for Comparative Literature	None	75	25	-	-	-	01	25%
Centre for South and Central Asian Studies	None	25	75	-	01	-	01	-
Centre for Economic Studies	None	50	50	-	01	-	01	-
Centre for Punjabi Language, Literature and Culture	None	50	50	-	-	01	01	-
Centre for Sociology	None	-	100		01		01	-
Centre for Geography and Geology	None	-	100			01		-
Centre for Education	None	33	67		-	-	02	25%

**2.4.4 How does the university ensure those qualified faculties are appointed for new programmes / emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last four years?**

All appointments at CUPB are made as per UGC guidelines. All faculties are NET qualified and PhD. except the engineering faculty. Positions are advertised in leading dailies with specific requirements for expertise in the emerging areas of study. (*Table-2.7*). Over half of the faculty is trained abroad in countries like USA, Canada, UK, Italy, France etc.

**Table-2.7: Number of Faculty members in new/emerging areas of study and respective faculty**

<b>Innovative/Emerging Areas</b>	<b>No. of Faculty</b>
Computational Sciences	2
Bioinformatics	1
Molecular Medicine	3
Nanotechnology	4
Cyber security	5
Punjabi Language, Literature and Culture	1

**2.4.5 How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the university?**

The university has elaborated list of Visiting/Adjunct/Honorary Professors. The details are given in *Table-2.8*.

**Table-2.8 : Details of the Visiting/Adjunct/Honorary Professors**

<b>S.No.</b>	<b>Name and Affiliation</b>
1.	Dr. Ravindra N. Chibbar, Prof. and Canada Research Chair in Molecular, Biology fir Crop Quality, University of Saskatchewan
2.	Prof. R. Gadagkar, FNA, FNASc, FTWAS, President Indian National Science Academy, JC Bose National Fellow, Centre for Ecological Sciences, Banagalore-560 012
3.	Prof. K. N. Pathak, FNA, FNASc, FASc, Former Vice-Chancellor, Professor Emeritus (Life Long) & UGC Emeritus Fellow, Department of Physics, Panjab University, Chandigarh-160 014
4.	Dr. K. K. Bhasin, FNASc, Former Professor, Department of Chemistry, Panjab University, Chandigarh-160 014
5.	Dr. Debashis Banerji, Advisor Bioscience, Baba Amte Centre for People's Empowerment Samaj Pragati Sahayog, Bagli, Distt-Dewas
6.	Prof. R. S. Tripathi, FNA, FNASc, Amarawati, 10/58, Sector-10, Indira Nagar, Lucknow-220 016 (U.P.)
7.	Prof. Ashok Sahni, FNA, FNASc, FASc, FTWAS, F-28, Sector 38A, Chandigarh-160 014
8.	Prof. IBS Passi, FNA, FNASc, FASc, FTWAS, 381, Sector 38A, Chandigarh- 160 014 (Adjunct Professor)
9.	Prof. Veer Singh, Former Vice-Chancellor National Law University Hyderabad, Director, Academics, Chandigarh Judicial academy, HIG Independent, House No. 5567, Sector 38 (West), Chandigarh-160 014.

**2.4.6 What policies/systems are in place to academically recharge and rejuvenate teachers? (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)?**

Faculty members of CUPB are encouraged to undergo trainings as also orientation and refresher courses as per UGC norms. Also, efforts are made to promote faculty development by permitting teachers to avail study leave for higher studies, duty leave for attending national/international conference/seminars, etc. and professional leave for attending the orientation and refresher courses and to participate in Faculty Improvement Programme and Faculty Exchange Programme conducted by National / International bodies/institutions.

The newly joined faculty are given research seed money which helps them to initiate their research programmes and generate preliminary data for submitting major grant proposals.

Various policies have been framed which provide an impetus to the faculty to work towards individual as well as university's development, like:

- (a) Policy for Research Awards and Incentives for state and national level recognition in research. (*Annexure 2.6*)
- (b) Policy for Research Seed Money (*Annexure 2.7*)

CUPB is planning to collaborate with KMUTT University of Bangkok to hold an international conference at Pataya in January 2016.

**2.4.7 How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?**

The list of faculty members who have received awards is as given below:

*National Awards:*

- DST-INSPIRE Faculty Award: 3
- DST Young Scientist award: 5
- Young Scientist Award" by Punjab Academy of Sciences at Punjab Science Congress: 1
- Indian National Science Academy Fellow (FNA): 1
- Indian Academy of Sciences, Bangalore Fellow (FASc.):1
- Fellow of Punjab Academy of Sciences, 2015 (FPAS):1
- J C Bose National Fellow: 1

- Awardee of UGC special honorarium of Rs 15000 pm till the age of 65 for being Fellow of academies: 1
- Dr. DS Kothari Post-Doctoral fellowship: 3
- Best Educationist Award: 1
- Prof. V.P. Sharma award for contribution in education: 1
- Sudarshan Rakheja Memorial award for best women educationist: 1
- Inspired Teacher's recognition: 1
- Venus International Foundation's Young Faculty Award: 1

*International Awards:*

- Chair/Coordinator, IUFRO (International Union of Forestry Research Organizations, Austria) International Working Party 8.02.04) on Ecology of Alien Invasive Species (2011-2015)
- Chair/Coordinator, IUFRO International WP 4.02.02 on Multipurpose Inventories (2011-15)
- Member Member IUFRO Task Force on *Forests and Biological Invasions* (2015-2020)
- Re-accreditation of highest order from ESA, USA.
- New Investigator International Research Grant, Alzheimer's Association: 1
- One faculty is serving as adjunct faculty at University of Texas Medical Branch.

**2.4.8 How many faculty underwent staff development programmes during the last four years (add any other programme if necessary)?**

About 60% of the present faculty has undergone orientation programmes and refresher courses at various Academic Staff Colleges. Seven faculty members attended refresher courses and another seventeen have attended orientation courses at various places. (**Table. 1.6**).

#### **2.4.9 What percentage of the faculty have been**

- **Invited as resource persons**
- **Participated in the event**
- **Presented papers**
- **Industrial engagement**
- **International experience in teaching**

Many faculties have participated in more than one of the above events. The details are as given below:

- Invited as resource persons: 41%
- Participated in the event: 60%
- Presented papers: 70%
- Industrial engagement: 4%
- International experience in teaching: 10%

#### **2.4.10 How often does the university organize academic development programmes (e.g.: curriculum development, teaching-learning methods, examination reforms, content/ knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?**

University encourages the faculty to attend various academic staff college trainings, workshops, conferences and other faculty development programmes (FDPs). Faculty members are also encouraged to organize similar programmes in the university. Centre for Education has recently received two grants to conduct seminars on teaching methods.

Centre for Human Genetics and Molecular Medicine has received a grant from DBT to organise a two weeks workshop.

The university has organised expert lectures on teaching learning methods

#### **2.4.11 Does the university have a mechanism to encourage**

**\* Mobility of faculty between universities for teaching?**

**\* Faculty exchange programmes with national and international bodies?**

**If yes, how have these schemes helped in enriching the quality of the faculty?**

The university allows the faculty to go to other universities for exchanging their knowledge, ideas and research findings.

## **2.5**



## **2.6 Evaluation Process and Reforms**

### **2.5.1 How does the university ensure that all the stakeholders are aware of the evaluation processes that are operative?**

- (i) Handbook containing information about the courses, their distribution and method of evaluation and pass criteria is put on CUPB website.
- (ii) The students are detailed about the evaluation procedure in beginning of the session during orientation programme and in the classes. The students are evaluated through continuous evaluation. The answers sheets are shown to the students after each examination.
- (iii) The evaluation criteria is mentioned in the curriculum also which is uploaded in the website of the concerned school.

### **2.5.2 What are the important examination reforms initiated by the university and to what extent have they been implemented in the university departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system**

- (i) The university has started the choice based credit system as given by UGC and it has also adopted 10- point grading system.
- (ii) Beginning from Academic session 2015-16, CUPB has changed the examination pattern to predominantly objective type questions and online quiz. Question banks have been prepared for each course.

### **2.5.3 What is the average time taken by the University for Declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the university for the publication of examination results (e.g. website, SMS, email, etc.).**

Earlier the university declares the result in two weeks after the final examination. However, with the introduction of objective type end semester examinations in academic session 2015-16, it is expected that the result will be available to the students within 5-7 days of final examination. The results are put up on the departmental notice boards and published in the university websites.

**2.5.4 How does the university ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?**

The university ensures full transparency in the evaluation process. The papers are set by the respective teacher and answer books are also checked by them. The entire process of paper setting and evaluation is very systematic and ensures transparent evaluation. The students are shown the evaluated answer sheets.

All teachers are responsible for the confidentiality of their own paper, printing and distribution

**2.5.5 Does the university have an integrated examination platform for the following processes?**

Yes, the University has an integrated examination platform for the following processes.

*Pre-examination processes:* The University has pre-examination process. The minimum attendance for the student to sit in the examination is 75%. Obtaining 50% marks in the Continuous Internal Assessment (CIA) is compulsory before the final examinations. The eligible students can submit the examination form and fees.

*Examination process:* The examination is conducted by the examination cell under very strict supervision and invigilation.

*Post-examination process:* Result is processed mechanically; the COCs of respective centres send the result to the Controller of examination through the Dean of School. Result is then declared on website immediately. After declaration of result students can download their provisional mark sheet for various purposes. University has Examination Grievance Committee to which students can approach in case of any conflict.

**2.5.6 Has the university introduced any reforms in its Ph.D. evaluation process?**

PhD and M. Phil. Ordinances have been prepared as per UGC and university guidelines 2009. The university is following the PhD evaluation process as prescribed by UGC.

- Ph.D. Programme comprises of course work for 20 credit hours, a detailed thesis and public viva-voce. The Ph.D. thesis has to be a substantial work of original research carried out by the candidate.

- The progress of the work is supervised by the supervisor and time to time progress report is submitted every month and twice a year.
- Once the work proposed in the synopsis is complete the final PhD pre-submission seminar is conducted followed by the submission of the thesis.
- The supervisor submits the panels of six external examiners for the thesis evaluation.
- The Academic Council in its 6<sup>th</sup> meeting held on 05-03-2015 has approved the rules and regulations for Ph.D. degree.

**2.5.7 Has the university created any provision for including the name of the college in the degree certificate?**

Being a Central University this is not applicable.

**2.5.8 What is the mechanism for redressal of grievances with reference to examinations?**

The examinee can give the representation to the Dean Academic Affairs regarding any grievance related to evaluation or result. After scrutiny, the application is forwarded to “Result committee” of the concerned subject. The result is rechecked and conveyed to the student.

If the student is not satisfied, he can file an appeal to “Examination Grievances Redressal Committee”. This committee investigates the issue and recommends necessary action. After due approval the recommendation is implemented. In some instances, where student was not satisfied with this committee also, the Vice-chancellor has called external experts for reevaluation.

CUPB offers immediate and effective redressal to the problems reported by the students and work towards providing a safe and secure atmosphere for the holistic growth of the students.

**2.5.9 What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.**

- The CoE Office is functioning independently with a full time Controller of examinations, one Assistant Registrar and four

supporting staff. The duties and responsibilities are well defined and the work flow is smooth and streamlined.

- This office has the facilities for the central evaluation, computers, database server and printing/photocopying facilities within it which accelerates and streamlines the evaluation and results process. The OMR has been purchased for conducting the online examination.

- 

## **2.6 Student Performance and Learning Outcomes**

### **2.6.1 Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?**

The university articulates its graduate's attributes to knowledgeable, disciplined and honest human beings who would be leaders of tomorrow. Building self-confidence, courage and faithfulness has, therefore, been among the principal objectives of CUPB's activities. The University enforces these principles through class room teaching, hands on experience, extracurricular activities and motivational lectures.

University provides facilities for improving the soft skills of students to improve their leadership qualities.

### **2.6.2 Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?**

In all the curriculum of dealt programmes, the learning outcomes are defined for each course. These are available in the handbook and are also uploaded in the website of each school under each programme curriculum.

### **2.6.3 How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?**

The teaching process is structured through planning of instructions made for each topic mentioned in the curriculum of various courses. Number of lectures to be delivered for each unit is also defined. Lecture schedule is prepared to ensure and facilitate the teaching learning process.

The assessment strategies are also mentioned in details at the beginning of each semester. The details of internal criteria of evaluation and the allocation of marks to each criteria are defined to facilitate the achievement of learning outcome.

**2.6.4 How does the university collect and analyze data on student learning outcomes and use it to overcome the barriers to learning?**

The achievement score of the students is available with the subject and also with the Controller of Examinations. During continuous evaluation and class room interaction, the subject teachers can easily assess the student learning outcome. The mentors keep a record of overall performance of their mentees. The students who are found to be slow in learning are helped by the concerned teacher to overcome the barriers to learning.

The software to be used for the online examination has a provision to analyse the level of the students based on the difficulty levels of the questions.

**2.6.5 What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/future challenges?**

- (i) For students learning the lectures assisted by multimedia
- (ii) Digital resource sharing and online resources are made available for students learning. Lectures through video conferencing and from open access sources enhance student's learning outcome.
- (iii) With the introduction of examination system that is predominantly objective questions based, which will be conducted online or an OMR machine is being installed to make the evaluation process quicker.

**ESTABLISHMENT OF SC/ ST AND MINORITIES CELL.**

The Central University of Punjab is committed to provide an environment that promotes diversity and respects everyone regardless of color, religious belief or cultures. While maintaining diversity of all kinds, it also commits to ensuring protection of everyone including minorities and acting as per the provisions of constitution of India in such matters. In order to create a living and working environment where all students feel safe and respected, there is a need to establish an SC, ST and Minorities Cell with the following objectives:

- To counsel and guide SC, ST and Minority students studying at CUPB on various issues and help them to manage academic and personal demands of a university life effectively.
- To ensure provisions for an environment where all such students feel safe and secure
- To provide prompt counseling for any emotional emergencies arising on account of any events at the campus.
- To provide a mechanism to redress the grievances of SC, ST and minority students, if any
- To ensure protection and reservation as provided in the constitution of India
- To arrange for special opportunities to enhance the career growth of these students such as through Competitive Examinations Cell

The SC/ ST and Minorities Cell will provide comprehensive preventive and proactive services to all such students enrolled for various academic programmes in the university. The goal of the cell would be to enhance the psychological wellbeing of SC/ ST and Minority students at CUPB so they can take full advantage of the educational opportunities at the University.

The composition of the SC/ ST and Minorities Cell will be as follows:

- Prof. A. K. Dhawan
- Dr. Yogalaxmimi, Assistant Professor
- Dr. Dhanaya Subramaniam, Assistant Professor
- Ms. Shweta Arora, Deputy Registrar

The guidelines of UGC will be adapted by CUPB in word and letter. The guidelines have been attached as Annexure.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)  
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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
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Ref No: CUPB/Notification/15/15-EC/15

Dated: 28/07/2015

### NOTIFICATION-15

In pursuance to Item No. EC:15:15:39 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council is hereby conveyed for constitution of the **Students Financial Assistance Fund and Education Loan Facility Committee** comprising of the members as detailed hereunder:

- |  |                    |
|--|--------------------|
| 1. Dean Academic Affairs,                    | <b>Chairperson</b> |
| 2. Prof. R. C. Sharma, Professor             |                    |
| 3. Prof. R. G. Saini, Invited Professor      |                    |
| 4. Registrar                                 |                    |
| 5. Mr. Rajinder Singh Smagh, Liaison Officer | <b>Convener</b>    |

The committee shall recommend the cases of the deserving students for financial Assistance with the objective that no deserving student, as far as possible, is denied opportunity of studying at University merely due to her/his poverty.

The Detailed guidelines of Students Financial Assistance Fund and Education Loan Facility are enclosed for ready refrence.

## **STUDENTS' FINANCIAL ASSISTANCE FUND AND EDUCATION LOAN FACILITY**

1. **Title** – These rules shall be called “The Students’ Financial Assistance Fund”
2. **Definition** – The following terms shall have the meaning as under:  
**Fund** means the Student Welfare Fund.  
**Committee** means the Committee constituted to administer the Fund.  
**Vice Chancellor** means the Vice Chancellor of Central University of Punjab, Bathinda.  
**Student** means the students admitted to pursue any course in Central University of Punjab, Bathinda.
3. **Aims & Objectives** – Students Financial Assistance Fund has been created with the objective that no deserving student, as far as possible, is denied opportunity of studying at University merely due to her/his poverty.
4. **Administration of Fund** – The Fund shall be administered, managed and monitored by a committee which shall include a nominee of student community. The tenure of the Committee shall be two year.
5. **Sources of Income** – The following shall be the income sources of the Fund:
  - The existing amount in the Student Aid Fund will be put in a corpus fund and interest used under this scheme
  - Library fines collected from students/faculty.
  - Student Aid Fund collected from suppliers/contractors.
  - Donations
  - Any others as deemed fit to be included by Vice Chancellor, CUPB
6. **Eligibility for Grant** – The deserving students with weak economical background will be eligible for grant out of fund subject to the as below conditions. However, the amount of grant or loan will depend upon parents income and family size etc.
  - a) The performance in the qualifying examination should be up to the mark.
  - b) The attendance of the student at Central university of Punjab, Bathinda should be at least 75% and also academic performance atleast “good standing”.
  - c) She/he should have completed the previous semester successfully.
  - d) There should be no disciplinary action or proceedings against the student.



7. **Purpose for which grant can be granted** – The students can avail of the grant for:-
- (a) Pursuing studies: payment of tuition fee/ payment of registration fee
  - (b) Medical treatment: in case of serious illness demanding hospitalization.
  - (c) Attending national international meets, conferences, seminars towards payment of registration fees, 2<sup>nd</sup> class Train or Bus travel with in India or in specific cases even travel abroad (partial assistance)
  - (d) Any other with the approval of competent authority.
8. **Quantum of Grant** -The amount of the grant shall be up to Rs.40, 000/- depending upon the nature and seriousness of situation.
9. **Eligibility for Loan** – The most deserving students shall be eligible for interest-free loan out of Fund:-
- a) She/he should not have availed of the facility of grant out of the Fund.
  - b) She/he shall submit the guarantee for availing loan out of fund.
  - c) The other conditions as per Rule 6 (a) to (d) shall also be applicable.
10. **Quantum of loan** – The student shall be eligible for loan up to 75% of the total fees payable to Central University of Punjab, Bathinda for the whole program.
11. **Recovery** – The student who wishes to avail of loan under the Financial Assistance Scheme shall execute an affidavit accompanied by Indemnity Bond duly notarized and registered by Notary Public that he/she shall pay back the loan amount before the award of Degree/ DMC.
12. **Procedure to process grant/loan** – The student shall submit her/his application through her/his supervisor duly recommended by the COC/DAA.
13. **Maintenance of Accounts** – Cash book, Receipt Book maintained by an official designated by the Vice Chancellor for the purpose and posting shall be done every month in respect of receipt and payment. For this purpose, a student who has availed facility should offer the services for maintenance and completion of record.
14. **Detailed Accounts** – Detailed accounts of the fund – receipts and expenditure – shall be published annually and shall be available for perusal in the University Library. Contingent expenditure for the maintenance of fund account shall be met from the Fund.

15. **Audit of Accounts** – Annual accounts shall be audited from the auditors appointed by the committee with the consent of the Vice Chancellor. However, half yearly un-audited accounts shall be put up by the Committee to the Vice Chancellor.
16. **Amendment of Constitution** – The amendment to the Constitution shall be made by committee in consultation with the Vice Chancellor.
17. **Investment of Funds** – The committee shall decide how the best returns from the funds can be realized i.e. on long term deposits or depending upon the situation.
18. **Write off the Non-Recoverable Loan** – Sincere efforts shall be made to recover the amount from the loanee. In case, it becomes impossible to recover the amount after exhausting all the remedies, the Vice Chancellor shall be competent to write off the irrecoverable amount of loan on the recommendations of the committee.
19. **Power of Interpretation** – In case of any dispute regarding interpretation of any clause of the fund, the decision of the committee in consultation with the Vice Chancellor shall be final and binding.

#### **EDUCATION LOAN FACILITY TO STUDENTS**

Central University of Punjab shall make all efforts to ensure that the financial needs of its students are met. For the present it has tied up with four nationalized banks viz Punjab National Bank, Oriental bank of Commerce, Bank of India and State Bank of India for providing Education loan facility to students. All the Banks shall be having stalls in the premises of the University for the Guidance of students and grant of education loan.

## पंजाब केन्द्रीय विश्वविद्यालय

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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
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Ref No: CUPB/Notification/15/15-EC/21

Dated:04/08/2015

### NOTIFICATION-21

In pursuance to Item No. EC:15:15:36 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council is hereby conveyed for constitution of the **Student Counseling Cell** comprising of the members as detailed hereunder:

- |    |   |                    |
|----|---|--------------------|
| 1. | Prof. S.K. Bawa, Professor                  | <b>Chairperson</b> |
| 2. | Dr. Sushil Kumari Gupta, OSD Administration |                    |
| 3. | Dr. Anjana Munshi , Associate Professor     |                    |
| 4. | Dr. Tarun Arora, Associate Professor        |                    |
| 5. | Ms. Shweta Arora, Deputy Registrar          | <b>Convener</b>    |

The objective of the Cell will be:

- To counsel and guide CUPB students on various issues and help them to manage academic and personal demands of a university life effectively.
- To help students of all beliefs and identities who may react to such events with feelings that include anger, hurt, confusion, fear, helplessness, loneliness, and hopelessness.
- To counsel the students requesting a withdrawal from a specific academic programme for non-academic reasons.
- To provide prompt counselling for mental health emergencies arising on account of highly charged events at the campus.

The Student Counseling Cell shall provide comprehensive preventive and clinical services to students enrolled for various academic programmes in the university. The goal of the cell would be to enhance the psychological wellbeing of CUPB students so they can take full advantage of the educational opportunities at the University. Some of the presentations that the Counselling Centre will offer include academic success skill, conflict resolution, dealing with difficult situations, stress management techniques and time management. All student contacts and information obtained in the course of counselling will be confidential.

## ESTABLISHMENT OF COMPETITIVE EXAMINATION CELL

### Introduction

There is an imperative need for the students to develop a competitive spirit and excel in their studies. In addition to the university degree, the students ought to equip themselves with the basic requisite skills for the competitive examinations for better job opportunities. Central University of Punjab started Competitive Examination Cell (CEC) with aim to provide right direction to the talented youth and atmosphere of competition, learning and succeeding. The university's competitive examination cell continuously strives to guide the students in opting their careers. Due to longer research hours and the time crunches felt by the students, the university has arranged coaching classes for the students aspiring to compete for various competitive examinations. Classes are conducted in the evening after lectures to enable as many students as possible to avail of this facility. Teachers from different Centres of the university coach the students.

### Objectives

- To provide intensive subject specific coaching for UGC/CSIR-NET, ICMR, DBT, GATE, GPAT, Civil services examination, etc;
- To build positive state of mind and self-confidence among the students;
- To encourage SC/ST/OBC and women candidates to appear in competitive examinations.

### Target group

Primarily the students of Central University of Punjab, but old students of CUPB and outsiders may be admitted, if seats are available.

- May include old students of CUPB (with tuition fee).
- May include outsiders (with tuition fee)

### Fee

For :

CUPB current students	= Rs 200 per month
CUPB old students	= Rs 500 per month
Others	= Rs 1000 per month

### Honorarium for teaching faculty

The teaching faculty may be paid a token honorarium out of fee collected, after deducting 10% of the fee as establishment charges for CUPB

### Details of Students Projects Completed

#### Academic session 2009-10

#### M.Phil.-Ph.D. Integrated Programme In Biosciences

S.No.	Name/ Registration	Title	Administrative Guide/ Dissertation Coordinator/ Supervisor
1.	<b>Pushendra Singh</b> CUP/MPh- PhD/SBAS/BIO/ 2009-10/02	To study the effects of insulin and metformin on pc-3 cell line.	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Felix Bast
2.	<b>Prateek Sharma</b> CUP/MPh- PhD/SBAS/BIO/ 2009-10/03	Evaluation of breast cancer cell lines (mcf-7 & t47d): influence of insulin and metformin on growth parameters.	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Sanjeev Thakur

#### M.Phil.-Ph.D. Integrated Programme in Environmental Sciences and Technology

S.No.	Name/ Registration	Title	Administrative Guide/ Dissertation Coordinator/ Supervisor
1.	<b>Upma Vaid</b> CUP/MPh- PhD/SEES/EVS/ 2009-10/01	Adsorption studies for the removal of hexavalent chromium using fly ash of 'waste to energy power plant'	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Sunil Mittal
2.	<b>Anamika Das</b> CUP/MPh- PhD/SEES/EVS/ 2009-10/02	Effect natrium fluoride on growth and physiology of <i>oryza sativa l.</i>	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Sunil Mittal
3.	<b>Gajendra Singh Vishwakarama</b> CUP/MPh- PhD/SEES/EVS/ 2009-10/03	Phytotoxic potential of essential oil from leaves of <i>eucalyptus tereticornis</i> against rice ( <i>oryza sativa</i> ) and its weeds, <i>echinochloa crus- galli</i> and <i>cyperus rotundus</i> .	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Sunil Mittal

4.	<b>Manohari Kumari</b> CUP/MPh- PhD/SEES/EVS/ 2009-10/04	To study the effect of bt ( <i>bacillus thuringiensis</i> ) cotton cultivation on soil health	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Sunil Mittal
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**M.Phil.-Ph.D. Integrated Programme in South and Central Asian Studies**

S.No.	Name/ Registration	Title	Administrative Guide/ Dissertation Coordinator/ Supervisor
1.	<b>Gurpreet Kaur</b> CUP/MPh-PhD/SGR/ SCA/ 2009-10/02	Foreign direct investment is South Asia: trends and prospects	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Sandeep Kaur Bhatia

**M.Phil.-Ph.D. Integrated Programme in Comparative Literature**

S.No.	Name/ Registration	Title	Administrative Guide/ Dissertation Coordinator/ Supervisor
1.	<b>Yeshpal</b> CUP/MPh- PhD/SLLC/CPL/ 2009-10/02	A study of UR Anantha Murthy`s novel Samskara in the context of indian philosophy of charvaka	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Zameer Pal Kaur
2.	<b>Kamaljeet Kaur</b> CUP/MPh- PhD/SLLC/CPL/ 2009-10/03	Autobiography as a social critique: a study of Madhopuri`s Changiya Rukh and Valmiki`s Joothan	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Amandeep Singh
3.	<b>Poonam Pahuja</b> CUP/MPh- PhD/SLLC/CPL/ 2009-10/04	The binding vine and the bluest eye: a comparative study from a feminist perspective.	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Zameer Pal Kaur

**Academic session 2010-11**

**M.Phil.-Ph.D. Integrated Programme In Biosciences**

Sr. No.	Name/ Regd. No.	Title of the dissertation	Administrative Guide/ Dissertation
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			<b>Coordinator/ Supervisor</b>
1.	<b>Shweta Thakur</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/01	Histopathological staging in putative prostate cancer tissues and reviewing literature of correlation between prostate specific antigen levels and prostate cancer incidence	Dr. Sanjeev Thakur
2.	<b>Mohd. Jahid</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/02	Cytotoxic activity of <i>sargassum wightii</i> on pc-3 cancer cell-line	Dr. Felix Bast
3.	<b>Seema. S</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/03	Effect of metformin on insulin mediated proliferation of lung cancer cell lines	Dr. Felix Bast
4.	<b>Ravi Parkash Cholia</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/04	To study the dose and time dependent effect of human insulin and metformin on the growth of breast cancer cells	Dr. Sanjeev Thakur
5.	<b>Rajiv Kumar</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/05	Phylogenetic analysis of bacterial diversity of heavy metal affected soil of Bathinda region (South West Punjab)	Dr. Sanjeev Thakur
6.	<b>Abhimanyu Kumar</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/07	To study the effect of insulin on advanced androgen-independent prostate cancer (pc-3) cells	Dr. Sanjeev Thakur
7.	<b>Bibekananda Sarkar</b> CUP/MPh- PhD/SBAS/BIO/ 2010-11/08	Microrna target prediction and comparative mirnomics: study in different cancers- special focus on breast cancer metastasis	Dr. Felix Bast

**M.Phil.-Ph.D. Integrated Programme in Environmental Sciences and Technology**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1.	<b>Gurpreet Kaur</b> CUP/MPh-	Inhibitory effect of essential oil of <i>ocimum sanctum</i> l.	Dr. Sunil Mittal

	PhD/SEES/EVS/ 2010-11/01	against pesticide induced genotoxicity	
2.	<b>Jaskiran Kaur</b> CUP/MPh- PhD/SEES/EVS/ 2010-11/02	Influence of fertilizer industry wastewater on the germination behavior of barley ( <i>hordeum vulgare</i> ) grains	Dr. Yogalakshmi K. N.
3.	<b>Nandini Gautam</b> CUP/MPh- PhD/SEES/EVS /2010-11/04	Exploration of antioxidant and anticancer potential of essential oil of <i>salvia plebeia rbr.</i>	Dr. Sunil Mittal
4.	<b>Leena</b> CUP/MPh- PhD/SEES/ EVS/ 2010-11/06	Studies in the Synthesis and Arsenic Adsorptive Removal Properties of Cellulose Embedded Zero-Valent Iron Nanoparticle.	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. J. N. Babu
5.	<b>Shilpa Nag</b> CUP/MPh- PhD/SEES/EVS/ 2010-11/07	Effect of arsenic on the growth and physiology of <i>triticum aestivum l.</i> seedlings	Dr. Sunil Mittal
6.	<b>Rabindra Kumar</b> CUP/MPh- PhD/SEES/EVS/ 2010-11/08	Studies in the hydrolysis of cellulose using cellulase in imidazolium based ionic liquid	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. J. N. Babu

### M.Phil.-Ph.D. Integrated Programme in Comparative Literature

Sr. No.	Name/ Regd. No.	Title of the dissertation	Administrative Guide/ Dissertation Coordinator/ Supervisor
1.	<b>Barjinder Singh</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/01	Filming of Fiction: A Comparative Study of Bapsi Sidhwa's <i>Ice-Candy-Man</i> and 1947: Earth	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Zameerpal Kaur
2.	<b>Shyamkiran Kaur</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/02	Portrayal of Diaspora in English and Vernacular Fiction: A Study of The Namesake and <u>Hashiye</u>	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Amandeep Singh
3.	<b>Manpreet Kaur</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/03	Orientalising the Postcolonial Nation-State: A Study of The <i>Inheritance of Loss</i> and <i>Half a Life</i>	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator:



			Dr. Zameerpal Kaur
4.	<b>Tania Bansal</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/04	Critiquing Family as an Institution in Difficult Daughters and Unaccustomed Earth	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Rajinder Kumar
5.	<b>Manpreet Kaur</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/06	Theme of Revolt in the Selected Poems of Pash and Lal Singh Dil	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Rajinder Kumar
6.	<b>Amandeep Kaur</b> CUP/MPh- PhD/SLLC/ CPL/ 2010-11/07	Socio-Cultural Concerns in Ajmer Singh Aulakh's <u>Sat Begane</u> and Gurdial Singh's Night of the Half Moon	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Amandeep Singh

#### **M.Phil.-Ph.D. Integrated Programme in South and Central Asian Studies**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1.	<b>Maninderjit Singh</b> CUP/MPh- PhD/SGR/ SCA/2010-11/02	Punjab and the Great Game	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. V. J Varghese
2.	<b>Kovid Kumar</b> CUP/MPh- PhD/SGR/SCA/ 2010-11/03	Human Trafficking in South Asia: A Case Study of Bathinda District, Punjab	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. V. J Varghese
3.	<b>Dinesh Bassi</b> CUP/MPh- PhD/SGR/SCA/ 2010-11/04	Militancy and Media: A case study of Indian Punjab	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. V. J Varghese
4.	<b>Jaspreet Kaur</b> CUP/MPh- PhD/SGR/ SCA/2010-11/05	Indo-Kazakhstan Trade: Trends and Prospects in the post Cold War era	Adm. Guide: Prof. Paramjit Singh Ramana Diss. Coordinator: Dr. Sandeep Kaur Bhatia
5.	<b>Anu Sonia</b> CUP/MPh-	India's relations with Turkmenistan	Adm. Guide: Prof. Paramjit Singh Ramana

	PhD/SGR/ SCA/ 2010-11/06		Diss. Coordinator: Dr. Sandeep Kaur Bhatia
6.	<b>Rajbir Singh</b> CUP/MPh- PhD/SGR/SCA/ 2010-11/07	Violation of Human Rights of Women in South Asia: A Case Study of Punjab 1978-1992	Adm. Guide: Prof. Paramjit Singh Ramana  Diss. Coordinator: Dr. Sandeep Kaur Bhatia

**Academic session 2011-12**

Sr. No.	Name/ Regd. No.	Title of the dissertation	Administrative Guide/ Dissertation Coordinator/ Supervisor
1	<b>Balraj Singh Gill</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/02	Chemical profiling of <i>ganoderma lucidum</i> of bathinda region	Dr. Sanjeev Kumar
2	<b>Satej Bhushan</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/03	DNA Barcoding and Phylogeography of Brown Seaweeds of Coasts of Indian Subcontinent	Dr. Felix Bast
3	<b>Aijaz Ahmad John</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/04	Diversity of Green and Red Macroalgae Distributed in Indian west-coast Using Morphometry and DNA Barcoding.	Dr. Felix Bast
4	<b>Gagan Sharma</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/05	Development and Characterization of UGMS markers for Genetic Diversity Analysis in <i>Rhododendron arboreum</i> .	Adm. Guide: Prof. R.G. Saini Diss. Coordinor: Dr. Pankaj Bhardwaj
5	<b>Navgeet</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/07	Genetic diversity and population analysis of <i>melia azaderach</i> l. by RAPD markers in Bathinda and adjoining regions	Adm. Guide: Prof. R.G. Saini Diss. Coordinor: Dr. Pankaj Bhardwaj

6	<b>Kamal Ahmad</b> CUP/MPh- PhD/SBAS/ BIO/2011- 12/09	Population analysis of <i>Melia azedarach</i> L. by RAPD markers in region of Rajasthan	Adm. Guide: Prof. R.G. Saini Diss. Coordinator: Dr. Pankaj Bhardwaj
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**M.Phil.-Ph.D. Integrated Programme in Biosciences**

**M.Phil.-Ph.D. Integrated Programme in Environmental Sciences and Technology**

Sr. No.	Name/ Regd. No.	Title of the dissertation	Administrative Guide/ Dissertation Coordinator/ Supervisor
1	<b>Disha Mishra</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/01	Evaluation of monocrotophos residues in soils of Bathinda, Punjab and its biodegradation through microbial isolates of contaminated soil	Dr. Dhanya M.S.
2	<b>Rishikesh Singh</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/02	Thermo-chemical decomposition of wheat crop residue in presence of fly-ash and its application for soil amelioration	Adm. Guide: Prof. A.K. Jain Diss. Coordinator: Dr. J.N. Babu
3	<b>Gh. Nabi Najar</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/03	Removal of hexavalent chromium from aqueous solution using cone biomass of ' <i>picea smithiana</i> ' as adsorbent	Dr. Sunil Mittal
4	<b>Archana Kumari Sharma</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/04	Studies in the synthesis and chromium adsorption behaviour of microcrystalline cellulose immobilized zero valent iron nanoparticles (mcc- nzvi)	Adm. Guide: Prof. A.K. Jain Diss. Coordinator: Dr. J.N. Babu
5	<b>Amita Bhatti</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/05	Screening and identification of quorum quenching bacteria from activated sludge of sewage treatment plant	Dr. Yogalakshmi K. N.

6	<b>Annu Sharma</b> CUP/MPh- PhD/SEES/ EVS/2011- 12/10	Cotton seed cake and dairy waste water as substrates for pha producing bacteria	Dr. Dhanya M.S.
7	<b>Jatinder Singh</b> CUP/MPh- PhD/SEES/ EVS/ 2011-12 /11	Isolation of indigenou Butachlor (herbicide) degrading bacteria from the agricultural fields of Punjab	Dr. Yogalakshmi K. N.

**M.Phil.-Ph.D. Integrated Programme in South and Central Asian Studies**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1	<b>Mandakini Halder</b> CUP/MPh- PhD/SGR/ SCA/ 2011-12/01	Women and Land Ownership: A Case Study of Sundarbans in West Bengal	Dr. V.J. Varghese
2	<b>Mohamad Arif Mir</b> CUP/MPh- PhD/SGR/SCA/ 2011-12/02	Nuclearisation in South Asia: The China Factor	Dr. Bawa Singh
3	Waseem Ahmad Dar CUP/MPh- PhD/SGR/SCA/ 2011-12/03	Being National or Non National : Sheikh Abdullah`s autobiography and the History of Kashmir	Dr. V.J. Varghese
4	<b>Swati Raikhy</b> CUP/MPh- PhD/SGR/SCA/ 2011-12/04	Indian ocean: a life - line for South Asia	Dr. Kiran K. Singh
5	<b>Mudasir Mubarik</b> CUP/MPh- PhD/SGR/SCA/ 2011-12/05	Indo-Russian Defence Cooperation, 1991-2011	Adm. Guide: Dr. V. J. Varghese Diss. Coordinator: Dr. Nishtha Kaushiki
6	<b>Mairu</b> CUP/MPh- PhD/SGR/SCA/	Women`s Participation in Politics and Local Governance	Dr. Kiran K. Singh

	2011-12/06		
7	<b>Gurvinder Singh</b> CUP/MPh- PhD/SGR/SCA/ 2 011-12/07	Problem of Land Acquisition: A Case Study of Gobindpura, Distric Mansa (Punjab)	Dr. Sandeep Kaur Bhatia
8	<b>Amandeep Kaur</b> CUP/MPh- PhD/SGR/SCA/ 2011-12/08	India`s Trade with Six EU Countries: Trends and Patterns	Dr. Sandeep Kaur Bhatia

**M.Phil.-Ph.D. Integrated Programme in Comparative Literature**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1	<b>Chitra</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/01	Depiction of Dalit Exploitation and Remonstrations: A Comparative Study of <i>Salaam and Muktiparva</i>	Dr. Rajinder Kumar
2	<b>Vandana Bathla</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/03	Mythico-Patriarchal Construction of a Woman in Githa Hariharan`s <i>The Thousand Faces of Night</i> and Mahasweta Devi`s Stories "Draupadi" and "Breast-giver"	Dr. Alpna Saini
3	<b>Disha</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/04	Historico-Mythical Analysis of Girish Karnad`s Tughlaq and Swarajbir`s Krishna	Dr. Alpna Saini
4	<b>Rajpal Kaur</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/05	Search for Female Self: A Comparative Study of Jasmine and That Long Silence	Dr. Amandeep Singh
5	<b>Sheenam</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/06	critiquing anthropocentrism in amitav ghosh`s <i>the hungry tide</i> and j.m. coetzee`s <i>disgrace</i>	Dr. Amandeep Singh
6	<b>Pardeep Kaur</b> CUP/MPh- PhD/SLLC/	Revisiting History and the Question of Identity: A	Dr. Rajinder Kumar

	CPL/2011-12/07	Comparative Study of <i>The Shadow Lines</i> and <i>Tamas</i>	
7	<b>Khushvinder Kaur Romana</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/09	Struggle for identity: comparative study of cry, <i>the peacock</i> and <i>home</i>	Dr. Zameerpal Kaur
8	<b>Kiranpal Kaur</b> CUP/MPh- PhD/SLLC/ CPL/2011-12/10	Socio-Political Protest: A Comparative Study of Selected Plays ( <i>Har ik Nu Jion da Haq Chahidaye</i> and <i>Savere di Lo</i> ) of Gursharan Singh and Selected Poems of Sant Ram Udasi	Dr. Zameerpal Kaur

**M.Phil.-Ph.D. Integrated Programme in Development Economics**

Sr. No.	Name/ Regd. No.	Title of the dissertation	Administrative Guide/ Dissertation Coordinator/ Supervisor
1	<b>Neha Jindal</b> CUP/MPh- PhD/SSS/ CSS/2011-12/01	Growing Urbanization and Economic Development in India: The Role of Middle Class	Dr. Naresh Singla
2	<b>Bilal Ahmad Naikoo</b> CUP/MPh- PhD/SSS/CSS/20 11-12/02	Monitoring of Mahatma Gandhi National Rural Employment guarantee scheme in Kulgam district of Jammu and Kashmir.	Dr. A.S. Kahlon
3	<b>Munish Kumar</b> CUP/MPh- PhD/SSS/CSS/20 11-12/04	Inter-state Disparities and Income Convergence in India: A Study of Pre and Post Reform	Dr. Naresh Singla
4	<b>Amandeep Kaur</b> CUP/MPh- PhD/SSS/CSS/20 11-12/06	Socio-economic impact of Bt cotton in Bathinda district of Punjab	Dr. A. S. Kahlon

**Academic session 2011-12**

**M.Pharm.-Ph.D. Integrated Programme in Pharmaceutical Sciences**  
**(Medicinal Chemistry)**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1	<b>Arvind Negi</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/01	Imidazole Based Compounds: Synthesis and <i>In Vitro</i> Anticancer Screening	Dr. Raj Kumar
2	<b>Jimi Marin Alex</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/02	Anticancer potential of new <i>n</i> - acetyl pyrazoline derivatives of 1, 3-diaryl/heteroaryl propenes: synthesis and evaluation	Dr. Raj Kumar
3	<b>Ramit Singla</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/03	Phytochemical investigation and Biological Evaluation of Secondary Metabolites from <i>Asparagus racemosus L</i> Through <i>In-vitro</i> and <i>In-silico</i> Approach	Adm. Guide: Prof. P. Ramarao  Diss. Coordinator: Dr. Vikas Jaitak
4	<b>Monika Chauhan</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/04	Synthesis and Evaluation of Novel Heterocyclics as Anticancer Agents	Dr. Raj Kumar
5	<b>Deependra Kumar</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/06	Synthesis and Biochemical Screening of Novel Non- Purine Based Xanthine Oxidase Inhibitors	Dr. Raj Kumar
6	<b>Vinay Kumar Gupta</b> CUP/MPhm- PhD/SBAS/ CPS/ 2011-12/07	<i>In-Vitro</i> Assay Guided Fractionation of Crude Root Extracts of <i>Potentilla</i> <i>atrosanguinea</i> Lodd. and <i>In- Silico</i> Study of Polyphenolic Compounds with MRP-1 and GSTP1-1 receptors in Cancer Chemotherapy	Adm. Guide: Prof. P. Ramarao  Diss. Coordinator: Dr. Vikas Jaitak

7	<b>Prakriti Monga</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/08	Phytochemical investigation, <i>In vitro</i> Anti-mutagenic activity of <i>Potentilla fulgens</i> Lodd. and In-silico Study of Flavonoids with CDK-2, CDK-6 receptors	Adm. Guide: Prof. P. Ramarao  Diss. Coordinator: Dr. Vikas Jaitak
8	<b>Yashika Bhalla</b> CUP/MPhm- PhD/SBAS/ CPS/2011-12/09	Integrated <i>in-vitro</i> antioxidant and <i>in-silico</i> anti-apoptotic study of essential oil components of <i>Aconitum</i> <i>heterophyllum</i> Wall	Adm. Guide: Prof. P. Ramarao  Diss. Coordinator: Dr. Vikas Jaitak

### **LL.M. - Ph.D. Integrated Programme in Environmental Law**

<b>Sr. No.</b>	<b>Name/ Regd. No.</b>	<b>Title of the dissertation</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
	<b>Ramandeep Singh Sidhu</b> CUP/LLM- PhD/SLSG/ CEL/2011-12/02	Impact of Laws, Awareness and Local Participation in Prevention and Control of Crop Residue Burning: A Case Study of Bathinda District	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Deepak Kumar Chauhan
	<b>Jithin V. J.</b> CUP/LLM- PhD/SLSG/ CEL/2011-12/03	Groundwater Conservation: Response of Legal and Policy Framework in India and Agenda of Reforms	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Deepak Kumar Chauhan
	<b>Abhishek Kumar</b> CUP/LLM- PhD/SLSG/ CEL/2011-12/04	A human rights approach to environment protection in india	Adm. Guide: Prof. P. Ramarao Diss. Coordinator: Dr. Puneet Pathak

### **M.Sc. in Biosciences**

<b>S.No</b>	<b>Name Registration Number</b>	<b>Final Title</b>	<b>Administrative Guide/ Dissertation Coordinator/ Supervisor</b>
1	<b>Ashish Kumar Pandey</b> CUP/MSc/SBAS/BI O/2011-12/01	Genotoxicity Detection in Ground Water of Bathinda District of Punjab	Dr. Felix Bast



2	<b>Simranjeet Kaur</b> CUP/MSc/SBAS/BI O/2011-12/02	Preconditioning of Chickpea Seedlings ( <i>Cicer arietinum</i> L.) With Non- Lethal Water Stress to Improve Chilling Tolerance.	Dr. Sanjeev Thakur
4	<b>Sukhbir Kaur</b> CUP/MSc/SBAS/BI O/2011-12/04	Cellular Inflammatory Responses Activated by Pollen Extracts in A549 Human Lung Carcinoma Cells	Dr. Monisha Dhiman
5	<b>Shashi Shekhar Anand</b> CUP/MSc/SBAS/BI O/2011-12/05	Genetic diversity and population structure analysis of <i>rhododendron arboreum l.</i> by rapd markers in western himalyan region	Dr. Pankaj Bhardwaj
6	<b>Nirmaljot Kaur</b> CUP/MSc/SBAS/BI O/2011-12/06	An <i>In Vitro</i> Study of Pollen Extract- Induced Oxidative Stress in A549 Human Lung Carcinoma Cells	Dr. Monisha Dhiman
7	<b>Manbir Kaur</b> CUP/MSc/SBAS/BI O/2011-12/07	An <i>In Vitro</i> Study on Oxidative Stress Induced Superoxide Dismutase (SOD) Activity in Human Glioblastoma (U-87 MG) Cells	Dr. Anil K. Mantha

**List of Students from CUPB who have qualified National Level Competitive Exams**

Centre Name	S. No.	Name of Student	Batch	Achievement
Centre for Biosciences	1.	Shweta Thakur	2010-11	ICMR JRF 2012
	2.	Sarabjeet Kour Sudan	2011-12	DBT JRF 2012
	3.	Aijaz Ahmad John	2011-12	CSIR JRF (June 2012) CSIR NET (Dec.-2012)
	4.	Navgeet	2011-12	CSIR UGC NET (Dec-2012) GATE 2012 & 2013
	5.	Satej Bhushan	2011-12	CSIR UGC NET (Dec. 2012)
	6.	Navrattan Kaur	2012-13	ICMR JRF (2012) GATE-2012 CSIR-NET 2013
	7.	Amandeep	2012-13	DST INSPIRE 2012 GATE 2013
	8.	Rashmi Saini	2012-13	GATE 2012 ICMR-JRF 2013
	9.	Shishir Upadhayay	2012-13	GATE 2012 CSIR-NET 2013 ICMR-JRF 2014 (15 <sup>th</sup> Rank) CSIR-JRF 2014 (61 <sup>st</sup> rank)
	10.	Balraj Singh Gill	2011-12	MANF 2011 GATE 2011 CSIR-NET 2011
	11.	Richa Mehra	2012-13	GATE 2012 CSIR-NET 2013 ICMR-JRF 2014 (37 <sup>th</sup> Rank)
	12.	Renu	2012-13	GATE 2013 ICAR-NET March 2014 ICAR-NET June 2014 CSIR-NET 2014
	13.	Sapna Thakur	2012-13	GATE 2013 ICAR SRF 2012 ICMR-JRF 2013 ICAR-NET June 2014

	14.	Shruti Chaudhary	2012-13	CSIR-UGC-JRF 2013
	15.	Raooof Ahmad Najjar	2012-13	ICAR-NET March 2014
	16.	Pushpendu Kundu	2013-14	ICAR-NET March 2014
	17.	Aasim Majeed	2013-14	CSIR JRF 2014 (54 rank)
	18.	Kunj Bihari Gupta	2013-14	CSIR-NET 2014 ICMR JRF- 2015
	19.	Arindam Adhikary	2012-13	ICAR-NET June 2014
	20.	Rashpal Kumar	2013-14	RGNF 2015
	21.	Sukhchain Kaur	2013-14	RGNF 2015
	22.	Sumandeep Juneja	2013-14	MANF 2015
	23.	Bibekanand Sarkar	2010-11	CSIR-NET, 2012
	24.	Sharanjot Kaur	2014-15	ICMR-JRF, 2015
<b>Environment Sciences &amp; Technology</b>				
	25.	Upma Vaid	2009-10	UGC NET SET (June and Dec. 2012)
	26.	Gajendra Singh Viswakarma	2009-10	UGC NET (June. 2012)
	27.	Anamika Das	2009-10	UGC NET Dec. 2012
	28.	Gurpreet Kaur	2010-11	UGC NET June 2012
	29.	Nandini Gautum	2010-11	UGC NET Dec. 2012
	30.	Amita Bhatti	2011-12	CSIR-UGC NET June 2012 RGNF 2012 GATE 2012
	31.	Navneet Kaur	2011-12	UGC-NET Dec.2012
	32.	Annu Sharma	2011-12	UGC-NET
	33.	Disha Mishra	2011-12	UGC JRF Dec. 2011
	34.	Rishikesh Singh	2011-12	UGC JRF June 2012
	35.	Harmandeep	2012-13	DST Inspire 2012-13
	36.	Gulam Nazar		ICAR-NET 2013
	37.	Amit Kumar		ICAR-NET 2013, UGC-JRF 2013
	38.	Shashi Ranjan		UGC-JRF December, 2013
	39.	Vijay Jaswal	2013-14	ICAR-NET 2014, UGC_NET 2014
	40.	Radhe Shyam Yadav	2013-14	UGC_NET 2014
	41.	Gini Rani	2013-14	UGC-NET, RGNF 2015
	42.	Sangita Singh	2014-15	GATE
	43.	Ranjit Kumar	2015-16	UGC-JRF

	44.	Shilpa Sharma	2012-13	ICMR JRF-2015
<b>South Central Asian Studies</b>	45.	Maninderjit Singh	2010-11	UGC NET (Dec-2012)
	46.	Kovid Kumar	2010-11	UGC-JRF (2011)
	47.	Mohammad Arif	2011-12	UGC NET (June 2012)
	48.	Amandeep Kaur	2012-13	MANF (2012)
	49.	Mohd. Hussain Naik		UGC-NET December, 2013.
	50.	Gaurav Kumar	2012-13	UGC-NET June 2014
	51.	Kuldip Singh Nabha	2013-14	UGC-NET June 2014
	52.	Manpreet Kaur	2012-13	MANF
	53.	Amritpal Singh	2014-15	UGC-NET
	54.	Meenakshi	2014-15	RGNF 2015
	55.	Davinderpal Singh	2015-16	UGC-JRF Dec 2013
	56.	Rajendra Prasad	2015-16	UGC-NET
<b>Comparative Literature</b>	57.	Yeshpal	2009-10	UGC NET June 2012
	58.	Barjinder Singh	2010-11	UGC-JRF(June 2012, Dec-2012)
	59.	Chitra	2011-12	UGC NET Dec. 2013
	60.	Pradeep Kaur	2010-11	UGC NET June 2014
	61.	Vandana Bathla	2011-12	UGC NET Dec. 2012
	62.	Rajpal	2011-12	UGC NET Dec. 2012
	63.	Devendra Gora	2012-13	RGNF 2013
	64.	Rakesh Kumar	2013-14	RGNF 2014
<b>Economics</b>	65.	Mumtaz Ahmed	2012-13	RGNF 2012
	66.	Ramandeep Kaur		UGC-NET 2014
	67.	J Vinish Prakash	2013-14	UGC-NET 2014
	68.	Nadeem	2013-14	UGC-NET 2014
	69.	Mohammad Fayaz	2013-14	UGC-NET 2014
	70.	Noushaad A.P.	2013-14	UGC-NET 2014
	71.	Bishwajeet Pakash	2013-14	UGC-NET 2014
	72.	Harpreet Kaur	2013-14	UGC-NET 2014
	73.	Paramjeet Kaur		RGNF 2015
	74.	Manpreet Kaur		RGNF 2015
	75.	Harmeet Kaur	2014-15	UGC-JRF 2014
<b>Environment Law</b>	76.	Ramandeep	2011-12	UGC NET (Dec. 2012)
	77.	Abhishek	2011-12	UGC NET (Dec. 2012)
	78.	Tripta	2015-16	UGC-NET
<b>Chemical and Pharmaceutic</b>	79.	Arvind Negi	2011-12	GATE2013

<b>al Sciences</b>	80.	Ramit Singla	2011-12	GPAT 2011
	81.	Monika Chouhan	2011-12	GPAT 2011
	82.	Yashika Bhalla	2011-12	GPAT 2011
	83.	Jimi Marin Alex	2011-12	GPAT 2011 MANF
	84.	Prakriti Monga	2011-12	GPAT 2011
	85.	Deependra Kumar	2011-12	GPAT 2011
	86.	Vinay Kumar Gupta	2011-12	GPAT 2011
	87.	Archana Khyap	2013-14	GPAT 2013
	88.	Shevani Sharma	2013-14	GPAT 2013
	89.	Jagpreet Singh	2013-14	GPAT 2013
	90.	Sapna Kumari	2013-14	GPAT 2013
	91.	Bhupender Kumar	2013-14	GPAT 2013
	92.	Vivek Parkash Gupta	2013-14	GPAT 2013
	93.	Pankaj Kumar Singh	2013-14	GPAT 2013
	94.	Jyoti Dandriyal	2014-15	GPAT 2014
	95.	Manavendra Bhatt	2014-15	GPAT 2014
	96.	Harmeet Kaur	2014-15	GPAT 2014
	97.	Gaurav Sharma	2014-15	GPAT 2014
	98.	Gaurav Joshi	2012-13	GPAT 2012
	99.	Ashish Ranjan Dwivedi	2012-13	GPAT 2012
	100.	Sheetal	2012-13	GPAT 2012
	101.	Vijayinder Saini	2012-13	GPAT 2012
	102.	Mayank	2012-13	GPAT 2012
	103.	Gagandeep Kaur	2012-13	GPAT 2012
	<b>Computer Sciences</b>	104.	Deepika Dhiman	2012-13
105.		Khushmeet Singh	2012-13	GATE 2012, 2013
106.		Amandeep Kaur	2012-13	GATE 2012
107.		Ruby Goel	2012-13	GATE 2012
108.		Kanika	2012-13	GATE 2012
109.		Shifali Hans	2012-13	GATE 2012
110.		Mandeep Singh	2012-13	GATE 2012
111.		Amandeep Kaur		GATE-2014
112.		Kanika		GATE-2014
113.		Siddharth Kumar		GATE-2014
114.		Rinku		GATE-2014,
115.		Amita Get	2013-14	GATE-2013, UGC-NET 2014
116.		Dharamveer	2013-14	GATE-2013, UGC-NET 2014
117.		Gaurav Kumar	2013-14	GATE-2013
118.		Pankaj Kumar	2013-14	GATE-2013
119.		Vicky Kumar	2013-14	GATE-2013

	120.	Suchismita Mahato	2013-14	GATE-2012, 2013
	121.	Saurav Kr. Gupta	2013-14	GATE-2013
	122.	Komal Rani	2013-14	GATE-2013
	123.	Rohit Goyal	2013-14	GATE-2013
	124.	Meenu Singh	2013-14	GATE-2013
	125.	Rajshree Purohit	2013-14	GATE-2013
	126.	Rajiv Kumar	2013-14	GATE-2013
	127.	Shrikant Saini	2013-14	GATE-2013
	128.	Shailesh Kumar	2014-15	GATE 2014
	129.	Marut Jindal	2014-15	GATE 2014
	130.	Ankit Padhak	2014-15	GATE 2014
	131.	Gursewek Singh	2014-15	GATE 2014
	132.	Siddharth	2014-15	GATE 2014
	133.	Sukhwinder Singh	2014-15	GATE 2015
	134.	Amita	2014-15	GATE 2014
	135.	Shweta Sharma	2014-15	GATE 2015
	136.	Jaskaran Singh	2014-15	GATE 2015
	137.	Sajja Hari Krishna	2014-15	GATE 2014
<b>Geography and Geology</b>	138.	Amanpreet Singh	2015-16	UGC-JRF 2014
	139.	Virendra	2015-16	UGC-JRF 2013
<b>Centre for Education</b>	140.	Richa Arora	2015-16	UGC-JRF
	141.	Kiranjit Kaur	2015-16	UGC-JRF
	142.	Igona	2015-16	UGC-JRF
	143.	Sushma Kumari	2015-16	UGC-JRF
<b>Centre for Physical Science</b>	144.	Mohd. Sadiq (M.Phil. Physics)	2014-15	UGC-NET
	145.	Anil Arya	2014-15	UGC-NET
<b>Centre for Plant Science</b>	146.	Radheshyam Yadav	2015-16	UGC-NET Dec 2014
<b>Centre for Mathematics and Statistics</b>	147.	Sonu Ram	2015-16	CSIR-JRF
<b>Centre for Genetic Diseases and Molecular Medicine</b>	148.	Karmjot Kaur	2015-16	DBT-JRF
	149.	Parveen Sharma	2015-16	NET
	150.	Prabhat Suman	2015-16	RGNF 2015
<b>Centre for Classical &amp; Modern Languages</b>	151.	Gurpreet Kaur	2015-16	UGC-NET
<b>Centre for computational Science</b>	152.	Preetleen	2015-16	CSIR-JRF

<b>Centre for Human Genetics</b>	153.	Sourav Kalra	2015-16	GPAT
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CSIR = Council of Scientific and Industrial Research

UGC = University Grants Commission

RGNF = Rajiv Gandhi National Fellowship

MANF = Maulana Azad National Fellowship

GATE = Graduate Aptitude Test

GPAT = Graduate Pharmacy Aptitude Test

**List of students placed at various organizations**

<b>S.No.</b>	<b>Name of Student</b>	<b>Centre</b>	<b>Organisation/Institution where employed</b>
1.	Mr. Shokit Amin Poswal	Centre for Biosciences	School Teacher, Department of Education, State of Jammu and Kashmir, Srinagar
2.	Mr. Ashish Kumar Pandey	Centre for Biosciences	Resident Engineer, Confocal Laser Scanning Microscope, Ms. DSS Imagetech, New Delhi, Placed at Imaging facility, CUPB
3.	Mr. Rajiv Kumar	Centre for Biosciences	Scientific Assistant, Forensic Science Laboratory, Punjab Police Academy, Phillaur, Ludhiana.
4.	Deependra Kumar	Centre for Chemical and Pharmaceutical Sciences	Data Analyst Innodata, New Delhi
5.	Vinay Gupta	Centre for Chemical and Pharmaceutical Sciences	Technical Analyst Evalueserve, Gurgaon, New Delhi
6.	Prakriti Monga	Centre for Chemical and Pharmaceutical Sciences	Chemical Analyst Ind Swift, Chandigarh
7.	Nidhi Singh	Centre for Chemical and Pharmaceutical Sciences	PGT teacher, Ghaziabad, UP
8.	Ramandeep Kaur	Centre for Chemical and Pharmaceutical Sciences	Lecturer, Mata Sahib Kaur, college Talwandi Sabo
9.	Ashish Ranjan Dwivedi	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi
10.	Anil Rana	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi
11.	Vijayinder Saini	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi
12.	Gagandeep Kaur	Centre for Chemical and Pharmaceutical Sciences	Data Analyst Parexal (Heron), Chandigarh
13.	Mayank	Centre for Chemical and Pharmaceutical Sciences	Pharmacist, NRHM, Bathinda
14.	Gaurav Joshi	Centre for Chemical and Pharmaceutical Sciences	Project Fellow (UGC Major Project), Central University of Punjab
15.	Khushmeet Singh	Centre for Computer Science and Technology	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab
16.	Mandeep	Centre for Computer	Inspector (Grade 1), Department



	Singh	Science and Technology	of Food Civil Supplies and Consumer Affairs, Govt of Punjab
17.	Amandeep Kaur	Centre for Computer Science and Technology	Junior Research Fellow (JRF) Terminal Ballistics Research Laboratory (TBRL) – Lab of Defence Research & Development Organization (DRDO)
18.	Krishan Singh	Development Economics	Researcher, Planning Commission, Chandigarh
19.	Rajpreet Kaur	Development Economics	Teacher, Govt. Sen. Sec. school, Pathrala, Bathinda
20.	Pushpinder Kaur	Development Economics	Teacher, Govt. Middle School, Mandi Khurd, Bathinda
21.	Disha Bains	Comparative Literature	Assistant Prof in English at K.M.R.D. Jain college, Malerkotla
22.	Manpreet Kaur	Comparative Literature	PGT-English Govt. Adarsh Sen. Sec. School, Bukan Khan Vala, Ferozpur.
23.	Rajbinder Singh	Centre for Enviromental Science and Technology	Setia Paper Mill, Muktsar, Punjab
24.	Kirti Shrama	Centre for Enviromental Science and Technology	Satluj Jal Vidyut Nigam Ltd. Jhabri, Shimla, Himachal Pradesh
25.	Parminder Singh	Centre for Enviromental Science and Technology	ATMA Scheme, Govt. of India
26.	Tarandeep Kaur	Centre for Enviromental Science and Technology	Akal College, Faridkot, Punjab
27.	Rimzim Gill	Centre for Enviromental Science and Technology	Food Inspector, Govt. of Punjab, Muktsar.
28.	Amita Bhatti	Centre for Enviromental Science and Technology	University of Birmingham, UK

**POLICY FOR RESEARCH AWARDS AND INCENTIVES FOR STATE  
AND NATIONAL LEVEL RECOGNITION IN RESEARCH**

The Central University of Punjab is amongst the fastest growing newly established universities of the country. It has attained a distinguished position amongst all the central universities and IITs established in 2008-2009. The University ranks number one in Citation index and h-index as per Scopus. The development and expansion of the university since its inception has been steadfast. Our vision is to be one of the country's finest universities. The University provides a creative atmosphere in which higher studies and research thrive amongst the students and the faculty.

The University has decided to introduce Research Awards for innovative faculty members who produce outstanding research achievements. The purpose of these awards is to promote research at CUPB, create a research atmosphere and give recognition to outstanding performance of individual researchers. Research Award will be conferred in different disciplines in which research is being carried out at CUPB. The award will be given to faculty for their research productivity and impact during the last academic year.

**Eligibility**

All faculty members of CUPB are eligible to receive the award. The Criteria will be:

1. Ability to secure funding to support research, i.e. Research Grants from various Govt. funding agencies to the tune of:
  - a. Grant over 1 crore ( 10 points)
  - b. Grant from 50 lacs to 1 crore (8 points)
  - c. Grant from 30 to 50 lacs (6 points)
  - d. Grants less than 30 lacs (4 points)
2. Number of publications in peer reviewed journals including impact factor
  - a. Impact factor more than 10 ( 10 points)
  - b. Impact between 5-10 (8 points)
  - c. Impact between 3-5 ( 6 points)
  - d. Impact less than 3 (Only for social sciences, humanities and education) (4 points)
3. Patents  
National or International Patent, which has been granted, may be considered as equivalent to publication with impact factor 10.(10 points)

4. Grants from National Agencies obtained for the development and infrastructure building of CUPB will also be considered.

### **The Award**

- Faculty members securing grant of Rs. 1 crore or above (all investigators of the project) will be given a certificate of commendation by the Vice Chancellor and a cash award of Rs. 20,000 to be shared equally by investigators.
- For each paper above impact factor 10 each author will be given a certificate of commendation by the Vice Chancellor and the authors will be given cash award of Rs. 20,000 to be shared equally by all authors.
- If the cumulative impact factor of papers published by a Faculty member exceeds 15 in a calendar year, he/she will be given a commendation certificate and cash award of Rs. 20,000/-
- If a faculty member gets 5 commendation certificates, he/she will be included in the Roll of Honour of the University and honoured at the time of next convocation.
- In addition to above, based on the scoring system as give above for each criteria, “CUPB Outstanding Research Award” will be declared in different disciplines.

Further, those faculty members who get National and International recognition will be given incentives as below:

1. A cash award of Rs. 5,000 for an award at state level.
2. A cash award of Rs. 10,000 for an award at National Level
3. A cash award of Rs. 20,000 for an award at International level.

**Note:** The recognition must be from a Government Agency. The recognition will include awards by national bodies for example S.S Bhatnagar Award; fellowships of National Academies and awards by recognized Professional National Level Societies.

By the end of each academic year the office of the Dean Academic Affairs will notify the faculty members and inform them of the requirements for submission of application in order to be considered for the award. The applicants will have to give a description of his/her research or creative accomplishment during the previous academic year, including the evidence of external peer recognition of the work and financial assistance from various Govt. agencies. The award will be given once each academic year.

## **CRITERION-III**

# **RESEARCH, CONSULTANCY AND EXTENSION**

## CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

### 3.1 Promotion of Research

The Central University of Punjab makes dedicated efforts towards achieving excellence in research. Indeed, research in front line areas of sciences, humanities, languages and law is a core activity of CUPB and notable achievements have been made in research and extension programs during the period 2009 to 2015.

In tune with university's clear vision of nurturing high quality research, every member of the faculty is encouraged to engage in research activities. CUPB provides strong support to the faculty at every stage of planning and executing research projects: writing proposals, obtaining grants, carrying out the work plan, reporting and disseminating the results. Administrative structures and procedures that reflect this philosophy are in place, and changes to these are made to enhance their effectiveness, as and when necessary.

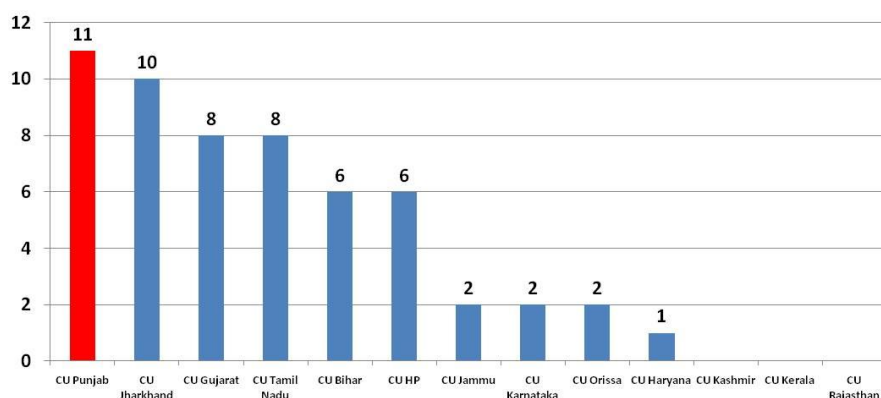
The CUPB's policies clearly emphasize the rewards of high quality research in the recruitments and subsequent promotions. The emphasis on this criterion, along with a culture of respect and encouragement for research achievements by the faculty has made it a core strength of CUPB.

CUPB is on a focused path to emerge as a quality provider of information, skills, technologies, and innovative ideas. It has a globally competitive Faculty with diverse backgrounds and thereby has earned first rank on the basis of Relative h-index, Research paper Citations and Impact points among the newly created Central Universities as shown in *Figure 3.1*.

### Relative *h*-index of New Central Universities

Source: Elsevier Inc., USA  
[www.scopus.com](http://www.scopus.com)

As on: 31.08.2015

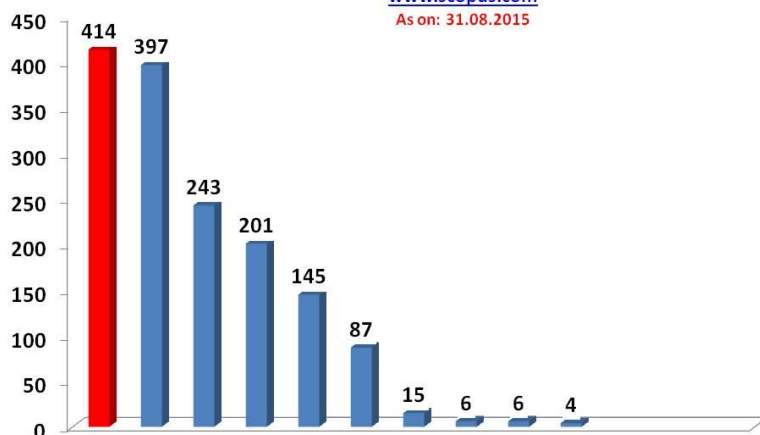


Relative *h*-index of New Central Universities ([www.scopus.com](http://www.scopus.com))

Citation index of New Central Universities ([www.scopus.com](http://www.scopus.com))

### Relative Research Paper Citations of New CU's

Source: Elsevier Inc., USA  
[www.scopus.com](http://www.scopus.com)  
 As on: 31.08.2015



**Figure 3.1:** *h*-index and citations of newly established Central Universities

**3.1.1 Does the university have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.**

CUPB has a well-structured system to promote and monitor high quality research.

- (i) A University level Research Advisory Committee with External Experts sets the guidelines of CUPB's research policies

- (ii) An internal Research Committee looks after the implementation of these policies and lays general guidelines.
- (iii) In addition, each research project has a committee to advise on its implementation
- (iv) Also there are advisory committees for each student.

With an aim of encouragement and quick resolution of problematic issues, the Vice-Chancellor himself interacts with research teams in each Centre regularly.

The overall objective of these committees is to address research activities in the following ways:

- To monitor and evaluate the progress of in house research being carried out by faculty and students of different centres
- To address the issues of facilities and removing the bottlenecks, if any
- To monitor the progress of externally funded projects and facilitate their smooth and successful implementation
- To ensure compliance of regulatory requirements of externally funded projects and in house research projects
- Pre-assessment of research projects to be submitted to different funding agencies
- Advice on acceptance of research grants provided by private agencies

Composition of these committees is as below:

*Research Advisory Committee:*

- Prof. A. K. Dhawan, Professor, Centre for Plant Sciences, Central University of Punjab, Bathinda- Chairperson
- Prof. Dr. N. Sathyamurthy, Director, Indian Institute of Sciences Education and Research, Mohali
- Prof. Veer Singh, Director, Academic Chandigarh Judicial Academy, Chandigarh
- Prof. Dr. R. Tuli, Panjab University Chandigarh (Biological Sciences)

- Prof. V. K. Kapoor, former Chairman UIPS, Panjab University Chandigarh (Pharmaceutical Sciences)/ Director Research, GHG Khalsa College, Raikot
- Prof. Rajesh Gill, Panjab University, Chandigarh (Social Sciences)
- Prof. Sohanbir Singh, Guru Nanak Dev University, Amritsar (Literature)
- Prof. Nandiia, PU, Chandigarh (Education)
- Prof. K N. Pathak, former Vice Chancellor, Panjab University Chandigarh (Physical Sciences)
- Prof. Kesar, Panjab University Chandigarh
- Ms. Shweta Arora, Deputy Registrar, Central University of Punjab, Bathinda (Secretary)

*Internal Research Committees*

1. Prof. R.G. Saini, Invited Professor, Centre for Biochemistry and Microbial Sciences
2. Prof. A.K. Jain, Professor Centre for Computer Science and Technology
3. Prof. P. Ramarao, Professor, Centre for Pharmaceutical Sciences and Natural Products
4. Dr. A.K. Dhawan, Professor, Centre for Plant Sciences
5. Dr. Anjana Munshi, Associate Professor, Centre for Human Genetics and Molecular Medicine
6. Dr. Zameer Pal Kaur, Assistant Professor, Centre for Comparative Literature
7. Dr. Anil Kumar Mantha, Assistant Professor, Centre for Animal Sciences

*Research Committees for the externally funded projects*

1. Principal investigator of the project



2. One senior faculty member of the centre
3. Dean academic affairs

*Research Committee for the student*

1. Coordinator of Centre
2. Supervisor of the student
3. Senior Professor of the centre
4. External expert (in case of final evaluation at Masters level/Doctorate level)

*Recommendations of Committees and their impacts*

Based on the deliberations of research committees and statutory bodies made a significant impact on the University. A policy document on guidelines for research projects was developed and got approved from Academic Council and Executive Council of CUPB. Other impacts of efforts of these committees are listed as below:

- Introduction of policy to grant research seed money
- Improved coordination and cooperation between centre and schools
- Guidelines for externally funded projects
- Autonomy to PI's with regard to their projects
- Proposal for Centre for excellence
- Research proposals for external funding
- Retention of the facilities after completion of the R&D project
- Timely transmission of UC

**3.1.2 What is the policy of the university to promote research in its affiliated / constituent colleges?**

CUPB does not have affiliated colleges. However, the university has a clear policy to encourage interaction among research workers and offers infrastructural facilities including equipment use and access to library to any researcher from colleges of other universities of the region. Following colleges/institutions availing research facilities from the university:

- Moga college of pharmacy used cell culture facility
- Baba Farid group of institutions participate in project revisions
- Students of Chemistry/Pharmacy from PU Chandigarh using our facility

- Students from GNDU, Amritsar using DNA sequencing facility

### **3.1.3 What are the proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/projects?**

CUPB has, in place many proactive mechanisms to facilitate research. A policy document on “Research guidelines for externally funded projects” duly approved by Academic Council and Executive Council gives a lot of autonomy to PIs. (*Annexure 3.1*)

#### *Advancing funds for sanctioned projects*

- As soon as the funds are received, the projects are being put into operation.
- In the event of delays in receipt of grants for ongoing projects, limited over drafts are allowed for urgent expenses.
- In case of late receipt of grants, salaries of research fellows are paid as advance which is adjusted on receipt of funds.
- PI get advance upto Rs 15,000 for project purchase

#### *Providing seed money*

As per the decision of Executive Council, seed money of up to Rs 3.0 lacs is provided to newly joined faculty to begin their research. For availing research seed money, the faculty members submit a research project. This helps newly appointed faculty to begin their research activities and in the meantime, they prepare proposals for research grant from external sponsoring agencies.

The research seed money can be used for lab facilities, small equipment and other technical support. University also encourages faculty to participate in national/ international conferences and provides money for registering as member of societies.

#### *University funded research project*

The Faculty members, in consultation with their CoC, prepare proposals for purchase of equipment and other research needs. These are sanctioned and purchased as per CUPB’s policies.

#### *Simplification of procedures related to sanctions /purchases to be made by the investigators*

- Simple and efficient purchase procedures have been a priority of CUPB

- A separate purchase committee negotiates purchase of instruments/equipment with the manufacturers/ dealers so as to reduce the cost of the instrument to the maximum extent possible.
- For conducting research, funds are released under contingency, travel, non-consumables and consumables etc.

*Autonomy to the principal investigator/coordinator for utilizing overhead charges*

An important objective of CUPB is to make principal investigators fully independent as also, accountable for their projects. Thus complete autonomy is provided to the principal investigators to carry out their research projects.

- CUPB has a well-defined policy for the proper implementation of the externally funded projects.
- Neither the Centres nor the administration impose any restriction for procuring specific brand/source for equipment, chemicals, glass wares, analysis, etc. as long as general financial rules for the Govt. of India are followed.
- Principal investigator can avail the duty leave to do his/her research related work and to present his research work in conferences /seminars/workshops.
- The overhead charges of projects are pooled together to augment the research facilities which are common for all centres such as internet facility, library, electricity, central instrumentation laboratory, infrastructure, etc. are made available to the teachers and students.
- The contingency fund can be utilized by PI for membership of professional societies, publication cost, purchase of books through library, renovation of laboratories, purchase of minor equipment required for execution of the project.
- In addition, the travel fund of the research project may also be used by the PI for partial travel support for attending the national and international conferences/workshops/seminars for presentation of his/her/work as per the guidelines of funding agencies.
- EC has approved 50% of the overhead charges for lab development of PI

### *Timely release of grants*

The grants are released quickly with least possible procedures.

### *Timely auditing*

- Account branch helps in maintenance of project accounts, and all financial transactions are organized to ensure proper records and preparation of utilization certificate at the end of the every financial year.
- The university also has an internal audit officer for internal auditing of revenue income and maintenance of the expenditure of grant funds.

### *Submission of utilization certificate to the funding authorities*

The audited utilization certificate for submission to the funding agencies are obtained from Account office at end of the every financial year and timely submission is ensured by the grants section of the University.

### **3.1.4 How is interdisciplinary research promoted?**

The university promotes interdisciplinary research by encouraging the faculty to formulate interdisciplinary research proposals from among its different centres/faculties. Further, it encourages the students to take up PG/M.Phil./Ph.D. research in interdisciplinary research topics. Several faculty members coordinate with faculty from other centres for student research work. Recently, the Centre for Environment Science and Technology developed a major research proposal for UGC funding in collaboration with Centre for Human Genetics and Molecular Medicine and Centre for Chemical Sciences. **Table 3.1** indicates the research collaborations efforts made by the university to promote interdisciplinary research.

**Table 3.1 Research Collaboration between/among different centres /schools of the university and with national/international institutes /industries**

<b>S.No.</b>	<b>Faculty</b>	<b>Different Centre/National/International</b>	<b>Aspect of Collaboration</b>
1.	Prof. R.K.Kohli (Vice Chancellor), Professor, Centre for EVST	Punjab University Chandigarh	MoEF project
2.	Prof. R.K.Kohli (Vice Chancellor), Professor, Centre for EVST	Dr. Rakesh Monocha, USDA	Research project
3.	Dr. Felix Bast (Assistant Professor) Centre for Plant Sciences	Dr. Vikas Jaitak (Assistant Professor) Centre for Pharmaceutical Sciences and Natural Products	MOES Project
4.	Dr. Felix Bast (Assistant Professor) Centre for Plant Sciences	Dr. Zameer Pal kaur (Assistant Professor), Centre for Comparative Literature	ICSSR-Major Research Project
5.	Dr. Bawa Singh (Assistant Professor) Centre for South and Central Asian Studies	Dr. Sandeep Kaur (Assistant Professor), Centre for Economic Studies	Role of SAARC: Geostrategic and Goeconomic Perspective, ICSSR, New Delhi
6.	Dr. Anil Mantha (Assistant Professor), Centre for Animal Sciences	Prof. Perez-Polo JR, University of Texas Medical Branch, Galveston, TX, USA	Research Purpose
7.	Dr. Felix Bast (Assistant Professor), Centre for Plant Sciences	CDRI, Lucknow	MOES Project

8.	Dr. Raj Kumar (Assistant Professor), Centre for Pharmaceutical Sciences and Natural Products	Dr. U. C. Banerjee NIPER, Mohali	Research Purpose
9.	Dr. Vikas Jaitak (Assistant Professor), Centre for Pharmaceutical Sciences and Natural Products	Dr. V.K.Kaul IHBT (CSIR), Palampur (HP)  Dr. Saroj Arora GNDU, Amritsar (Pb.)  Dr. Iris Stappen University of Vienna, Austria  Dr.NurhayatTabanca University of Mississippi, University, MS, USA  Dr. Leopold Jirovetz University of Vienna, Austria	Research Purpose  Research Purpose  Research Purpose  Research Purpose  Research Purpose

**3.1.5 Give details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.**

The University has organized various workshops / training programs/ sensitization programs/special lectures over the years to motivate and inculcate research aptitude amongst its staff and students. These programs include Research methodology Workshops, training programs for instrumentation and software skill, and sensitization programs for current global trends in research. Many of these programs involved more than one Centres and some were University level. The list of distinguished scholars from reputed institutes visited our university and delivered lectures (*Annexure 3.2*).

**3.1.6 How does the university facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the university?**

The university policy for invited and visiting professors is at *Annexure 3.3*. Visiting Professors to CUPB are listed in Table 3.2.

Whenever a visiting professor visits CUPB, he/she delivers a few lectures. A separate office with computer, internet, phone etc. is marked for the visitors and interested Faculty members set up appointments with 1 to 2 hours slot for discussions. The knowledge and acumen of these scientists and academicians of international repute helps the faculty and the students in broadening their knowledge vistas. Their suggestions help CUPB researchers develop a deeper understanding of newer technologies and discoveries in their areas of specialization.

**Table 3.2 : Visiting and Adjunct Professors**

<b>S.No.</b>	<b>Name and Affiliation</b>
1.	Dr. Ravindra N. Chibbar, Prof. and Canada Research Chair in Molecular, Biology fir Crop Quality, University of Saskatchewan
2.	Prof. R. Gadagkar, FNA, FNASc, FTWAS, President Indian National Science Academy, JC Bose National Fellow, Centre for Ecological Sciences, Banagalore-560 012
3.	Prof. K. N. Pathak, FNA, FNASc, FASc, Former Vice-Chancellor, Professor Emeritus (Life Long) & UGC Emeritus Fellow, Department of Physics, Panjab University, Chandigarh-160 014
4.	Dr. K. K. Bhasin, FNASc, Former Professor, Department of Chemistry, Panjab University, Chandigarh-160 014
5.	Dr. Debashis Banerji, Advisor Bioscience, Baba Amte Centre for People's Empowerment Samaj Pragati Sahayog, Bagli, Distt-Dewas
6.	Prof. R. S. Tripathi, FNA, FNASc, Amarawati, 10/58, Sector-10, Indira Nagar, Lucknow-220 016 (U.P.)
7.	Prof. Ashok Sahni, FNA, FNASc, FASc, FTWAS, F-28, Sector 38A, Chandigarh-160 014
8.	Prof. IBS Passi, FNA, FNASc, FASc, FTWAS, 381, Sector 38A, Chandigarh- 160 014 (Adjunct Professor)
9.	Prof. Veer Singh, Former Vice-Chancellor National Law University Hyderabad, Director, Academics, Chandigarh Judicial academy, HIG Independent, House No. 5567, Sector 38 (West), Chandigarh-160 014.



**3.1.7 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.**

CUPB is committed to encourage research activities in its campus. In the short span of time, university has shown its footprints and became the number one university among newly formed central universities. The university uses 24 to 41% of its budget on research. The percentage total budget and expenditure reports are mentioned in *Table 3.3*.

**3.1.8 In its budget, does the university earmark funds for promoting research in its affiliated colleges? If yes, provide details.**

There are no affiliated colleges.

**3.1.9 Does the university encourage research by awarding Post-Doctoral Fellowships/Research Associateships? If yes, provide details like number of students registered, funding by the university and other sources.**

CUPB encourage PDF's/ Research Associateship funded by National agencies to join here. The University has on its Faculty three DST Inspire fellows, three D.S. Kothari post-doctoral fellows and one Ramanujam fellow. Presently, Dr. Neetu Purohit is working in Centre for Comparative Literature as a Research Associate and Dr. Purshotam Sharma has joined as INSPIRE Faculty.

**3.1.10 What percentage of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the university monitor the output of these scholars?**

Being a new university, no one has availed sabbatical leave for pursuing higher research in premier institutions till now. But the University has adopted UGC policy in this regard.

**3.1.11 Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.**

The university is planning to organize national and international conferences in near future. However, two forty nine seminars, thirty six extra lectures have been organized as per *Annexure 3.2*.

**Table 3.3 : Expenditure Details - UGC Fund**

Sr. No	Item	2009-10	2010-11	2011-12	2012-13	2013-14	Total (Rs. In Lacs)
1	2	3	4	5	6	7	8(3 to 7)
<b>1.</b>	<b>Recurring Expenditure:-</b>						
I.	Fellowship (UGC Budget)	0.00	8.83	14.49	43.68	72.74	<b>139.74</b>
II.	Chemicals , Lab items, Newspaper & Periodicals, Lease Line Rent, Membership Fee	24.27	48.00	60.67	27.29	147.99	<b>308.22</b>
<b>TOTAL-I</b>		<b>24.27</b>	<b>56.83</b>	<b>75.16</b>	<b>70.97</b>	<b>220.73</b>	<b>447.96</b>
<b>2.</b>	<b>Non-Recurring Expenditure:-</b>						
I.	Books & Journals	96.23	89.04	72.71	88.63	136.13	<b>482.74</b>
II.	Laboratory Equipment, Computers & Other equipment	276.40	374.34	275.45	438.80	995.17	<b>2360.61</b>
<b>TOTAL-II</b>		<b>372.63</b>	<b>463.38</b>	<b>348.16</b>	<b>527.43</b>	<b>1131.30</b>	<b>2842.90</b>
<b>Grand Total (I+II)</b>		<b>396.90</b>	<b>520.21</b>	<b>423.32</b>	<b>598.40</b>	<b>1352.03</b>	<b>3290.86</b>
<b>Total Expenditure as per Utilization Certificate submitted to UGC, New Delhi</b>		971.82	1878.19	1686.36	2474.53	3849.53	10861.90
<b>% of the Total Expenditure for Research</b>		<b>40.84%</b>	<b>27.70%</b>	<b>25.10%</b>	<b>24.18%</b>	<b>35.12%</b>	<b>30.30%</b>

**University Projects expenditure Details – Item wise**

Sr. No	Item	2009-10	2010-11	2011-12	2012-13	2013-14	Total (Rs. In Lacs)
1	2	3	4	5	6	7	8
<b>Recurring Expenditure:-</b>							
I.	Student Salary (Fellowship)						
	(a) RGNF	0.00	0.00	7.55	9.45	0	17.00

	(b)CSIR	0.00	0.00	1.06	0.61	0	1.67
	(C)ICMR	0.00	0.00	0.00	2.15	5.86	8.01
	(d)UGC - JRF	0.00	0.00	0.00	0.00	2.04	2.04
	(e) Other fellowship of different projects allotted to faculty	0.00	0.00	0.00	0.00	4.83	4.83
II.	Consumable (Chemicals & other sundry items)	0.00	0.00	0.00	18.55	48.13	66.68
<b>TOTAL - I</b>		<b>0.00</b>	<b>0.00</b>	<b>8.61</b>	<b>30.76</b>	<b>60.86</b>	<b>100.23</b>
<b>2.</b>	<b>Non-Recurring Expenditure:-</b>						
I.	Equipment & other fixed Assets	0	0	0	2.53	26.76	29.31
<b>TOTAL - II</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>2.53</b>	<b>26.77</b>	<b>29.31</b>
<b>Grand Total (I+II)</b>		<b>0.00</b>	<b>0.00</b>	<b>8.61</b>	<b>33.29</b>	<b>87.63</b>	<b>129.54</b>

## **3.2 Resource Mobilization for Research**

### **3.2.1 What are the financial provisions made in the university budget for supporting students' research projects?**

Many of the students in CUPB are getting fellowship from UGC, CSIR, ICAR, DBT, Maulana Azad National Fellowship and Rajiv Gandhi Fellowship. (*Annexure 3.4*). Apart from the grants received from funding agencies, the University allocates funds for doing research in the form of "University Research Fellowships". All research needs of students are met from CUPB budget.

### **3.2.2 Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?**

The University encourages its faculty to file patents to retain IPR emanating from research programmes. The teachers are given due weightage for the patents filed and recognized through awards, points for career advancement, etc. The filing of one patent by Dr. Raj Kumar, titled "Novel fused heterocycles and method of use and manufacture thereof" is in process.

Punjab State Council for Sciences and Technology, Chandigarh has established the IPR cell at CUPB. Dr. Jai Prakash from Centre for Physical and Mathematical Sciences has been working as nodal officer to take care of IPR issues of the University. Details are in *Annexure 3.5*.

### **3.2.3 Provide the following details of ongoing research projects of faculty:**

Details are provided in *Table 3.4*.

### **3.2.4 Does the university have any projects sponsored by the industry/corporate houses? If yes, give details such as the name of the project, funding agency and grants received.**

The consultancy division, University-Industry Forum and University-Industry council aim at seeking collaboration from industries for sponsored projects.

**Table 3.4 : List of ongoing projects at CUPB**

**University Awarded Projects**

S.No.	Principle Investigator	Name of the Project	Name of Funding Agency	Year	Total Grant of Project
			Central University of Punjab		
1.	Dr. Felix Bast	Sequence-based DNA barcoding, Phylogeography and Conservation Genetics of selected Medicinal Plants from Indian Subcontinent	Research Seed Money Grant (RSM)	2014-16	3 lacs
2.	Dr. Anil K.Mantha	Identification of APE1-associated proteome during oxidative stress conditions in Glioblastoma cell lines.	RSM	2014-16	3 lacs
3.	Dr. Sanjeev Kumar	Identification and characterization of stress proteins and related Heat Shock Factors; assessment of up/down-regulated stress genes in preconditioned chickpea ( <i>Cicer arietinum</i> L.)	RSM	2014-16	3 lacs
4.	Dr. Pankaj Bhardwaj	Differential gene expression in response to ultra-low temperature in <i>Rhododendron arboreum</i> by whole genome transcriptome.	RSM	2014-16	3 lacs
5.	Dr. Raj Kumar	Design, synthesis and in vitro screening of mono/bis- Armino quinolines as EGFR inhibitors (RSM Grant).	RSM	2014-16	3 lacs
6.	Dr. Vinod Kumar	Design, synthesis and evaluation of combrestatins inspired small molecules as putative tubulin polymerization inhibitors	RSM	2014-16	3 lacs
7.	Dr. Vikas Jaitak	Studies on Phyto estrogens as anticancer agents from <i>Asparagus racemosus</i> (Shatavari) used in Breast	RSM	2014-16	3 lacs

		cancer chemotherapy (RSM Grant)			
8.	Dr. A.L. Sharma	Preparation, characterization and evaluation of free standing polymeric films for energy storage/conversion device application	RSM	2014-16	3 lacs
9.	Dr. Kamlesh Yadav	Thin Film Deposition of Magnetic Oxides using Spray Pyrolysis Technique and their Characterization	RSM	2014-16	3 lacs
10.	Dr. Mahesh Kulharia	Development of novel scoring function for prediction of PPI affinity	RSM	2014-16	2.91 lacs
11.	Dr Sandeep Singh	Investigation of anticancer potential of <i>Citrullus colocynthis</i> extract	RSM	2014-16	3 lacs
12.	Dr. Monisha Dhiman	Molecular Mechanisms of Pollen-Mediated Stress in Human Epithelial Lung cell line.	RSM	2014-16	3 lacs
13.	Dr. Harish Chandra	Proteasomal mediated regulation of pro-metastasis protein Toca-1 in Breast Cancer	RSM	2014-16	3 lacs
14.	Er. Surinder Singh Khurana	Overcoming the WPA2-PSK's "Hole 196 Vulnerability" using RSA-Public Key based Cryptography Scheme	RSM	2014-16	1.875 lacs
15.	Dr. Puneeta Pandey	Assessment of Urban heat island formation and its relationship with aerosols in Bathinda district, Punjab	RSM	2014-16	3 lacs
16.	Dr. Dhanya M S	Investigations on the potential of agro-wastes for the production of ecofriendly products	RSM	2014-16	3 lacs
17.	Dr. Yogalakshmi K N	Microbial electrolysis cell for integrated landfill leachate treatment and biohydrogen production	RSM	2014-16	3 lacs
18.	Dr. Anjana Munshi	The prevalence of Thalassemia and mutation spectrum associated with the disease in Malwa region of Punjab	RSM	2014-16	3 lacs

19.	Dr. Preeti Khetarpal	Cytogenetic investigations in couples of primary infertility from Malwa region of Punjab, North-West India	RSM	2014-16	3 lacs
20.	Dr. Bawa Singh	Mapping of Maritime Security Concerns for South Asia: Contextualizing Indian Concerns and Strategy.	RSM	2014-16	1.5 Lacs
21.	Dr. Nishtha Kaushiki	The Great Rebalancing and Emerging Triangular Dynamics of India, China, and Japan: An Analysis.	RSM	2014-16	1.5 Lacs

### External funded projects

S.No.	Principle Investigator	Name of the Project	Name of Funding Agency	Year	Total Grant Sanctioned
1.	Dr. Felix Bast	Genotoxicity detection in drinking water from Malwa region, Punjab	UGC-BSR	2012-14	6 lacs
2.	Dr. Felix Bast	Chemical and phylogenetic diversity of seaweeds in Indian sub-continent	DST	2012-15	35 lacs
3.	Dr. Felix Bast	Phylogenetic selection of target taxa for anti-proliferative and anti-metastatic marine natural products from sea weeds of Indian coast.	Ministry of Earth Sciences	2014-17	91.2 lacs (money yet to be released)
4.	Dr. Sanjeev Kumar	Investigating the mechanism associated with temperature stress tolerance imposed by non-lethal stress conditions; Understanding metabolic relationship between cold and draught x heat stress in chickpea ( <i>Cicerarietinum</i> L.)	UGC-BSR	2012-14	6 lacs
5.	Dr. Anil K. Mantha	APEI/Ref-I's dual functions countering beta amyloid induced genotoxicity	Alzheimer's Association, USA	2011-14	54 lacs

6.	Dr. Anil K. Mantha	Mitochondrial oxidative stress DNA-repair in Alzheimer's disease: AP-endonuclease (APE1/Ref1) as a potential therapeutic target	DST	2013-16	46.6 lacs
7.	Dr. Anil K. Mantha	Apurinic/aprimidinic endonuclease (APEI) as an anti-cancer therapeutic agent for Glioblastoma therapy	UGC-BSR	2013-15	6 lacs
8.	Dr. Pankaj Bhardwaj	Analyses of genetic variations and structure of Rhododendron, a rare and endangered tree species in Western Himalayas	DST	2013-16	16 lacs
9.	Dr. Pankaj Bhardwaj	Development and characterization of SSR markers providing genome wide coverage and high resolution in <i>Rhododendron arboreum</i>	UGC-BSR	2013-15	6 lacs
10.	Dr. Raj Kumar.	Design, Synthesis and Biological Screening of Novel multi-target Inhibitors of Tyrosine Kinase(s) and Topoisomerase.	DST	2012-15	27 lacs
11.	Dr. Raj Kumar	Design, Synthesis and Biological Screening of Novel Heterocycles as Inhibitors of Dual Tyrosine Kinase(s) and Histone Deacetylase as Potential Anticancer agents.	UGC	2014-16	12.59 lacs
12.	Dr. Vinod Kumar	Synthesis of Bioactive Heterocyclic Scaffolds Using Novel Green Technologies.	UGC	2013-15	6 lacs
13.	Dr. Vikas Jaitak	Synthesis of Rebaudioside-A: Natural Substitute for sugar from <i>Stevia Rebaudiana</i> (Bertoni).	DST	2013-16	25.50 lacs
14.	Dr. Vikas Jaitak	Chemical investigation, Ant diabetic and anticancer	UGC	2014-16	6 lacs



		study of <i>Stevia rebaudiana</i> (Bertoni) through Invitro and insilico approach.			
15.	Dr. Vikas Jaitak (Co-PI)	Phylogenetic selection of target taxa for anti-proliferative and anti-metastatic marine natural products from sea weeds of Indian coast.	Ministry of Earth Sciences	2014-17	91.2 lacs
16.	Dr. A. L. Sharma	Ionic Conduction and Stability Improvement in Polymer Clay Nanocomposites for Device Applications	UGC	2013-15	6 lacs
17.	Dr. Kamlesh Yadav	Synthesis and Study of Structural, Magnetic, Dielectric and Transport Properties of Doped Nanodimensional BiMnO <sub>3</sub> Perovskite Manganites	UGC	2013-15	6 lacs
18.	Dr. Jai Prakash	Dielectric and electro-optical studies of metal oxide nanoparticles doped ferroelectric liquid crystal and their applications	UGC	2013-15	6 lacs
19.	Dr. Jai Prakash	Exploration of electro-optical properties of nano-materials doped ferroelectric liquid crystals and their applications	DST	2012-17	35 lacs
20.	Dr. Mahesh Kulharia	To develop a support vector machine tool for identification of unique protein-protein interaction sites with lowest cross reactivity potential	UGC	2012-15	6.73 lacs
21.	Dr Sandeep Singh	Genotoxicity of the pesticides used in Bathinda region	UGC	2013-15	6 lacs
22.	Dr. Monisha Dhiman	Cardio-toxicity of the chemotherapeutic drugs	DST	2013-16	22 lacs
23.	Dr. DD Singh	Isolation, 3-D structural characterisation and functional analysis of lectins from microbial	DBT	2014-17	21.798 lacs

		sources.			
24.	Dr Sandeep Singh	Functional evaluation of presence of miRNAs inside the mitochondria of breast cancer cell lines.	DST	2014-17	37 lacs
25.	Prof. R.K.Kohli	Alien Invasive Species, J.C. Bose Fellowship	DST	2012-17	68 lacs
26.	Dr. Sunil Mittal	Bioherbicide potential of immobilized (encapsulated/entrapped) formulations of essential oil from leaves of plant <i>Callistemon viminalis</i>	DST Fast Track	2012-15	29.69 lacs
27.	Dr. Sunil Mittal	Effect of arsenic toxicity and its accumulation potential in <i>Oryza sativa</i> L. varieties grown in Malwa region of Punjab	UGC Start-up Grant	2012-14	6 lacs
28.	Dr. Sunil Mittal	Spatial distribution of uranium and associated water quality parameters in ground water/drinking water of six districts (Fatehgarh Sahib, Ludhiana, SBS Nagar, Rupnagar, Barnala) of Punjab and one district (Hanumangarh) in Rajasthan, India	BRNS-Department of Atomic Energy, India	2015-17	24.59 lacs (money is to be released)
29.	Dr. Yogalakshmi K.N.	Fluorimetric estimation of uranium and its source apportionment in groundwater of Bathinda district in Punjab'	UGC Start-up Grant	2012-14	6 lacs
30.	Dr. Dhanya M.S.	Assessment of Chlorpyrifos in Non- Bt Cotton Soil of Talwandi Sabo, Bathinda and the effect of Amendments and Organic matter on Chlorpyrifos degradation.	UGC Start-up Grant	2012-14	6.0 lacs
31.	Dr. Puneeta Pandey	Assessment of Organochlorine pesticide	UGC Start-up Grant	2015-17	6.0 lacs

		residues in groundwater and soil of Bathinda district, Punjab			
32.	Dr. Nagendra Babu	Synthesis and Evaluation of Callixarene capped Quantum dots for sensing of organic analytes	DST Fast Track	2012-15	24.6 lacs
33.	Dr. Anjana Munshi	Amelioration of the severity of $\beta$ thalassemia by modifier genes.	DBT	2013-16	36.80 lacs
34.	Dr. Preeti Khetarpal	Genetic investigations among Indian children with Silver Russell Syndrome (SRS)	UGC- BSR	2014-16	6.0 lacs
35.	Dr. Kousik Giri	Theoretical Study of the Molecular Mechanism(s) of Arsenic Toxicity	DST	2015-18	25.0 lacs
36.	Dr. Kousik Giri	Arsenate and Arsenite Reaction Kinetics with Ferric Hydroxides Using Quantum Chemical Calculations	UGC- BSR	2015-17	6.0 lacs
37.	Dr. Sandeep Kaur	Socio-economic externalities of Guru Nanak Dev thermal power plant in Bathinda.	ICSSR	2013-15	4.8 lacs
38.	Dr. Kiran K Singh	Assessment of Urban Environment Quality of Bathinda: A Socio-Geographical Perspective.	ICSSR	2013-15	4.0 lacs
39.	Dr. Bawa Singh and Dr. Sandeep Kaur	Role of SAARC: Geostrategic and Geo-economic Perspective	ICSSR	2014-16	7.0 lacs
40.	Dr. Shireesh Pal and Dr. Jubilee Padmanabhan	Research Methodology course for Ph.D. students	ICSSR	2015-16	5.50 lacs
41.	Dr. Shireesh Pal and Dr. Jubilee Padmanabhan	National Seminar on Education for sustainable development	ICSSR	2015-16	2.0 lacs

**3.2.5 How many departments of the university have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.**

In a short period of its existence, CUPB has already received recognition from national and international agencies. The assistance received from agencies in the form of research grants is listed in the **Table 3.4**. University has initiated a process to apply for Centre for Excellence to UGC for Centre for Chemical Sciences, Human Genetics and Molecular Biology and Environmental Science and Technology.

**3.2.6 List details of**

*a. Research projects completed and grants received during the last four years (funded by National/International agencies).*

Thirty eight different projects were received which are funded by different national/international agencies like DST, UGC, DBT, ICSSR and Alzheimer association, USA, etc. Six projects have been completed out of thirty eight (**Table 3.5**).

*b. Inter-institutional collaborative projects and grants received.*

(i) All India collaboration

CUPB has a project in collaboration with CDRI, Lucknow (**Table 3.6**)

(ii) International

CUPB has a project in collaboration with Alzheimer Association, USA (**Table 3.6**)

**Table 3.5 : Projects completed at CUPB**

S.No	Principle Investigator	Name of the Project	Name of Funding Agency National/International	Year	Total Grant Sanctioned
1.	Dr. Felix Bast	Genotoxicity detection in drinking water from Malwa region, Punjab	UGC-BSR	2012-14	6 lacs
2.	Dr. Sanjeev Kumar	Investigating the mechanism associated with temperature stress tolerance imposed by non-lethal stress conditions; Understanding metabolic relationship between cold and draught x heat stress in chickpea ( <i>Cicerarietinum</i> L.)	UGC-BSR	2012-14	6 lacs
3.	Dr. Anil K. Mantha	APEI/Ref-I's dual functions countering beta amyloid induced genotoxicity	Alzheimer's Association, USA	2011-14	54 lacs
4.	Dr. Sunil Mittal	Effect of arsenic toxicity and its accumulation potential in <i>Oryza sativa</i> L. varieties grown in Malwa region of Punjab	UGC Start-up Grant	2012-14	6 lakhs

5.	Dr. Yogalakshmi K.N.	Fluorimetric estimation of uranium and its source apportionment in groundwater of Bathinda district in Punjab'	UGC Start-up Grant	2012-14	6 lacs
6.	Dr. Dhanya M.S.	Assessment of Chlorpyrifos in Non- Bt Cotton Soil of Talwandi Sabo, Bathinda and the effect of Amendments and Organic matter on Chlorpyrifos degradation.	UGC Start-up Grant	2012-14	6 lacs

**Table 3.6 : Externally funded projects in National and International Collaboration**

<b>S.No.</b>	<b>Principle Investigator/Co-PI</b>	<b>Name of the Project</b>	<b>Name of Funding Agency National/International</b>	<b>Year</b>	<b>Total Grant Sanctioned</b>
1.	Dr. Felix Bast Centre for Biosciences, Central University of Punjab, Bathinda  Dr. Vikas Jaitak Centre for Chemical and Pharmaceutical Sciences, Central University of Punjab, Bathinda  CDRI, Lucknow	Phylogenetic selection of target taxa for anti-proliferative and anti-metastatic marine natural products from sea weeds of Indian coast.	Ministry of Earth Sciences	2014-17	91,00,000/-
2.	Dr. Anil K. Mantha	APEI/Ref-I's dual functions countering beta amyloid induced genotoxicity	Alzheimer's Association, USA	2011-14	54 lacs

### 3.3 Research Facilities

#### 3.3.1 What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

Constant efforts have been made at CUPB to augment the research infrastructure and support facilities like laboratories, uninterrupted power supply, IT facilities, common instrumentation facility and Experimental areas for field research. Because of a much focused approach to create research infrastructure, CUPB is known to be among the best equipped Universities of the region. The major equipment available in University are:

- Inductively coupled plasma (ICP)
- Ultra Pressure Liquid Chromatography (UPLC)
- Microbial Identification system
- Arc GIS
- ERDAS
- Gas Chromatography-Mass Spectroscopy (GC-MS)
- Leica Microscope
- Fluorescent Microscope
- Elisa Reader
- 2D Gel electrophoresis
- Scintillation Counter
- Ultra violet-Visible (UV-VIS) Spectrophotometer
- Spectrofluorometer
- Atomic absorption spectroscopy (AAS)
- High speed refrigeration centrifuges
- Mercury analyzer
- Polymer Chain Reaction (PCR)
- Reverse transcriptase-PCR
- Gel documentation system
- Freeze dryer
- Cell and tissue culture facility
- Seawater circulation system
- Scanning Electron Microscope with Energy Dispersive Spectroscopy (SEM –EDS )
- Atomic Force Microscope (AFM)
- Simultaneous TG-DTA/DSC
- FT-IR Spectrometer

*Strategies to meet the needs of researchers:*

Requirements for research infrastructure are determined by specific user-meetings and interaction with Coordinators of Centres. Periodic updating and



up gradation of the inventory of scientific equipments is made. Training is provided to students for efficient handling of laboratory equipment in different Centres. CUPB already has infrastructure for high end research in front line areas of Life Sciences, Health Sciences, Environmental and Pharmaceutical Sciences. Apart from the equipment as above, the following support facilities are available:

- The university has a Common instrumentation lab which provides service to students and research scholars and also to outsiders.
- The university has Cheminformatics laboratory, Plant Tissue Culture laboratory, Shade House, Computational Physics laboratory and Networking laboratory to meet the demand of the researchers.
- A computer centre with high configured systems and high end work stations have been prepared as per the requirement of the researchers.
- Facilitation in purchase of e-resources and print journals for research.

Around 22 software have been procured for research and teaching purpose. The details of the number of systems and software are provided in the **Table 3.7**. The University has excellent internet facility with 40 Mbps and 1Gbps lease lines. The University is in the process of installing another one Gbps lease line through BSNL under NMEICT.

**Table 3.7: IT Resources of CUPB**

S.No.	Resources	Total
1	Computers	511
2	High end Work stations	10
3	Blade Server with capacity for 16 blades. Each blade with 16 GB RAM	12
4	Two lease lines	40 Mbps and 1 Gbps
5	Laptops	52
6	Software	22
7	SAN Storage	30 TB (1)

- Scientific software & application based software installed at dedicated network Computational Laboratory.
- Wi-Fi is installed in all centres

- E-resources, the e-journals, e-publications, e-Books can be accessed with desktops and laptops through intra and internet.
- Uninterrupted power supplied to all departments
- The university has a library and equipped with a variety of books to cater to the needs of researchers.

**3.3.2 Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, provide details of the facility.**

Yes. This facility is available in the Main Library. The University Library is on a rapid and consistent path of expansion and development since its inception in 2009, catering to the learning and research requirements of teachers and students of the university. Details are in *Table 3.8*.

**3.3.3 Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?**

The university has established a Central Instrumentation Laboratory (CIL) which has been playing a vital role in meeting the needs of faculty and students, particularly those in science schools. The new faculty members, who have to spend several months initially in developing their research laboratories, find CIL very useful. This facility is made available to all the research scholars as well. For the students and faculty of the university, instruments can be used for the research work as and when required. Instead, other instruments in different centres can also be used by the students and faculty on their request to the concerned person. Separate budget has been provided to run and develop and maintain the central instrumentation facility. List of instruments with funds are mentioned in *Insert 3.1*.

**3.3.4 Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?**

Separate hostels for research scholars are available on the university campus. Wi-Fi internet facility is available in these hostels, central library, Guest house and campus residences. The university computer centre has 180 computers with internet for open access. Internet facility is also provided to students having their own laptops. Visiting Scientists are provided furnished accommodation in University Guest House and a centrally located office with computer and internet has been marked for them.

**Table 3.8: Information resources at CUPB's University Library**

**Library Sections**

General Book Section	Donated Book Section	Audio-Video Section
Text Book Section	Braille Section	Newspaper Corner
Reference Book Section	Thesis and Dissertations Section	Maps and Atlas Section
Regional Language Section		

**Library Collections**

The library collection consists of Books, Reference Books, Text Books, Print Journals, Newspapers, M.Phil Dissertations, E-Journals & Databases, CD ROM/DVDs.

<b>Sr. No.</b>	<b>Resources</b>	<b>Total</b>
01	Books	25,070
02	Journals and Print Format	40
03	E-Journals ,	8900
04	Thesis and Dissertation	107
05	News Papers	21
06	CD-ROM/DVD	370

**Library Services**

Reprographic services: University Library provides reprographic services to the users for photocopying library materials
Reference Service: It provides the users with directional assistance in locating books and resources.
Inter-library Loan (ILL): Assistance to access materials and resources from the networking libraries through DELNET.
Current Awareness Service (CAS): Updating the users with the latest information in the academic front and new arrivals to the library.
Selective Dissemination of Information (SDI): Provides information and updates to

the interested users on specific theme/area/topic as required.

Binding: Provides binding service to the users for official purposes.

### E-Journals

<b>Publisher</b>	<b>URL</b>	<b>No of Title</b>
American Chemical Society	<a href="http://pubs.acs.org/">http://pubs.acs.org/</a>	37
American Physical Society	<a href="http://publish.aps.org/browse.html">http://publish.aps.org/browse.html</a>	10
Annual Reviews	<a href="http://www.annualreviews.org/">http://www.annualreviews.org/</a>	33
Cambridge University Press	<a href="http://journals.cambridge.org/">http://journals.cambridge.org/</a>	224
Economic & Political Weekly	<a href="http://www.epw.in/">http://www.epw.in/</a>	1
Institute of Physics	<a href="http://iopscience.iop.org/journals">http://iopscience.iop.org/journals</a>	46
JSTOR	<a href="http://www.jstor.org/">http://www.jstor.org/</a>	2585
Oxford University Press	<a href="http://www.oxfordjournals.org/">http://www.oxfordjournals.org/</a>	206
Project Muse	<a href="http://muse.jhu.edu/browse/">http://muse.jhu.edu/browse/</a>	493
Royal Society of Chemistry	<a href="http://www.rsc.org/">http://www.rsc.org/</a>	29
Science Direct (10 Subject Collection)	<a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a>	1389
Springer Link	<a href="http://link.springer.com/">http://link.springer.com/</a>	1763
Taylor & Francis	<a href="http://www.tandfonline.com/">http://www.tandfonline.com/</a>	1173
Wiley-Blackwell	<a href="http://onlinelibrary.wiley.com/">http://onlinelibrary.wiley.com/</a>	908
Science Online	<a href="http://www.sciencemag.org/">http://www.sciencemag.org/</a>	01
Sage	<a href="http://online.sagepub.com/">http://online.sagepub.com/</a>	11

### E-Resources

<b>Publisher</b>	<b>Description</b>
Economic Outlook <a href="http://economicoutlook.cmie.com">http://economicoutlook.cmie.com</a>	Carries data on macro-economic forecasts and insights on growth, inflation, fiscal balance, balance of payments, corporate earnings and a host of sectoral indicators on India.

Prowess <a href="http://prowess.cme.com">http://prowess.cme.com</a>	Provides database of the financial performance and business of over 27,000 companies in India.
States of India <a href="http://statesofindia.cmie.com">http://statesofindia.cmie.com</a>	Provides statistics, official documents of state governments in India on diverse fields and sectors.
Indiastat.com <a href="http://www.indiastat.com">www.indiastat.com</a>	Provides ready to use data on socio-economic life of India and its states online.
DELNET Online <a href="http://delnet.nic.in/">http://delnet.nic.in/</a>	Promotes resource sharing among the libraries through the development of a network of libraries. Enables accessing data from the libraries in the network.
Possum Web <a href="http://www.possum.net.au/">http://www.possum.net.au/</a>	Database on birth defects.
ISID (The Institute for Studies in Industrial Development) <a href="http://isid.org.in/">http://isid.org.in/</a>	Access to databases on various aspects of the Indian economy, particularly industry and the corporate sector and On-line Indexes of Indian Social Science Journals (OLI).
JCCC (J-Gate Custom Content for Consortium) <a href="http://jccc-indest.informindia.co.in/">http://jccc-indest.informindia.co.in /</a>	JCCC provides a one point access to journals subscribed under UGC INFONET Digital library consortium as well as university libraries designated as Inter Library Loan (ILL) Centers.
Hein Online <a href="http://home.heinonline.org">http://home.heinonline.org</a>	Provides access to more than 1,800 law and law-related periodicals.
Manuparta <a href="http://www.manupatra.com">http://www.manupatra.com</a>	Provides databases on Legal, Taxation, Corporate and Business Policy.
SciFinder Evaluation <a href="http://www.cas.org/SCIFINDER/SCHOLAR/index.html">http://www.cas.org/SCIFINDER/SCHOLAR/index.html</a>	Scientific database that focuses on chemistry.
Westlaw India <a href="http://www.westlawindia.com">http://www.westlawindia.com</a>	Provide access to a large collection of case laws and legal materials from India, and outside particularly from the UK, EU, United States and other Commonwealth Jurisdictions.
SCOPUS <a href="http://www.scopus.com/">http://www.scopus.com/</a>	Scopus, the largest abstract and citation database of peer-reviewed literature.
Web of Science <a href="http://webofknowledge.com">http://webofknowledge.com</a>	Web of Science is an online subscription-based scientific citation indexing service

	maintained by Thomson Reuters that provides a comprehensive citation search.
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### **Library IT Infrastructure**

<b>Sl.No.</b>	<b>Particulars</b>	<b>Total Numbers</b>
01	Computers	07
02	Servers	01
03	Print/Photocopier/Scanner	01
04	Book Eye 4 Scanner	01

### **Library Automation**

The University Library is fully automated with Library Management Software which functions from cataloging to security protocols are integrated. The acquisition, cataloging, circulation, serials controlling, catalog access and security protocols come under the purview of automation. The Online Public Access Catalog (OPAC) system in the University Library is enabled with LMS which allows cataloging of diverse resources such as books, journals, articles, slides, maps, audio/video, films, cassettes, texts, drawings, clippings, serial publications, softwares and so on. OPAC enables searching through clusters like Author, Keyword, Subject, Class, Title, Publisher, Place of publication, Main entry, Material type, Place of conference, Subject name, ISBN / ISSN, Series titles, Serials title and Year of publication. It also supports circulation, acquisition, front desk operations, Serials Control and data entry in vernacular languages.

### **The Radio Frequency Identification (RFID)**

RFID system installed in the University Library is with the latest technology and configuration in this regard. It ensures efficient service delivery and security with minimum human input. It is defined by the following features:

Durable RFID tags with 1,024-2,048 bits memory to enable cataloging and circulation.
Tattle Tapes security strips providing covert security to the library resources.
Pad Staff Workstation (PSW) which can be operated as a circulation desk or tag programming station.
Digital Library Assistant (DLA) to simplify shelf management tasks and making physical verification of resources easy.

Electromagnetic Detection System (EDS) offering state-of-the art protection to help secure valuable library materials marked with Tattle tapes security strips.

Self-Check system facilitating self-issuing, self-return and self-renewal by the users themselves.

## **CENTRAL INSTRUMENTATION LABORATORY (CIL)**

### **Mission Statement**

CIL aims at the optimized utilization of the major instruments with quality assurance of analytical and subsequent research outcomes.

### **Role of CIL in the University**

Central Instrumentation Laboratory (CIL) was established in the University in 2010. An amount of Rs. 7 crores has been spent to house 9 state-of-the art instruments of common use. CIL has been playing a pivotal role in supporting the research activities of many centers, in particular Centre for Biosciences, Centre for Bioinformatics, Centre for Chemical and Pharmaceutical Sciences, Centre for Computational Sciences, Centre for Environmental Sciences and Technology, Centre for Genetic Diseases and Molecular Medicine, Centre for Human Genetics and Centre for Physical and Mathematical Sciences.

### **Facilities in the Laboratory:**

The central instrumentation laboratory presently hosts the following analytical instruments

- Gas Chromatography-Mass Spectrometer
- Gas Chromatography With Thermal Conductivity Detector and Flame Ionization Detector
- Atomic Absorption Spectrometer
- Ultra High Performance Liquid Chromatography
- UV-Visible Spectrophotometer
- Fourier Transform Infrared Spectrometer
- Gas Chromatograph for Producer gas and Biogas analysis

Apart from the above CIL also hosts an imaging section which has following instruments.

- Fluorescence Microscope
- Field Emission Scanning Electron Microscope
- Confocal Laser Scanning Microscope



## OBJECTIVES

- I. To provide research support to the centres of science and social science for their instrumentation requirements.
- II. To develop as a state-of-art facility with advanced research instruments and become a model hub for scientific research in this region.
- III. Maintenance and upgradation of instruments in the facility as well as that at various centres in the university.
- IV. Promoting University and Industry Collaboration through essential Services for sponsored research and consultancy.

## Manpower

The Laboratory comes under the office of Dean Academic Affairs, CUPB. Present staff strength of the CIL is as follows

- Dr. J. Nagendra Babu, Faculty Incharge
- Mr. Gopal Soni, Senior Technical Assistant
- Mr. Ashish Kumar Pandey, Resident Engineer, DSS Imagetech Pvt. Ltd
- Er. Sumit Srivastava, Resident Engineer, Carl-Zeiss Pvt. Ltd
- Mrs. Kuldeep Kaur, Laboratory Attendant

## Research support

The university has 70 research students (including Ph.D., M.Pharm and M.Phil.) in the sciences and an active faculty of 40 in the science disciplines. The CIL is playing a vital role in meeting their equipment needs. The newly joined faculty, who have to spend a few years initially in developing their research laboratories, find CIL particularly useful. CIL has been providing a major support to all the science schools with an average number of around 9 common-use type of state-of-the-art instruments covering microscopy, spectroscopy and chromatography. Within this small span of four years of its inception, the CIL has analyzed an average of 7022 samples every year with 10,880 samples completed in year 2014.

## Instruments in CIL:

The detailed list of the instruments in Central Instrumentation Laboratory is given in **Table 1**.

The instruments with specific precautions are as below:

1. The GC-MS facility is equipped with radioactive nuclide  $^{63}\text{Ni}$ . It is a potent radiation source.
2. The confocal facility is equipped with Class 3B lasers. Direct contact of lasers may damage the exposed parts of the body.

## **Support Facility**

1. Uninterrupted Power Supply: Capacity upto 60 KVA for backup of Atomic Absorption Spectrometer, Gas and High Pressure Liquid Chromatography, Mass spectrometry, Fluorescence, FE-SEM and Confocal Microscopy.
2. Online Backup Genset
3. Dedicated Earthings <1 Volt
4. Modular Laboratory Furniture
5. Gas Equipment Assembly

**Table 1: Details of the Instrumentation Facility with Central Instrumentation Facility**

S. No.	Instruments	Make & Model No.	Instrument Cost	Date of Installation	Accessories / Capabilities	Applied Area
1.	Fluorescence Microscope	Olympus, FSX-100	26,53,000/-	10/06/2010	NA	Brightfield, Phase Contrast and Fluorescence Imaging
2.	Ultra High Performance Liquid Chromatography	ThermoFischer Scientific Pvt. Ltd., Dionex Ultimate-3000	11,07,536/- + 10,64,000/-	11/11/2011	C-18 and C-8 Column Diode Array Detector Fluorescence Detector	Reverse Phase Chromatography
3.	UV-Visible Spectrophotometer	Shimadzu Pvt Ltd., UV-2450	12,36,123/-	03/04/2012	PMT Detector, Flow Cell Unit, Peltier Thermostat, Multiple Cuvette Holder	Absorbance and Spectral measurement in UV and Visible region (200-900 nm)
4.	Fourier Transform Infrared Spectrometer	Bruker Inc., Tensor-27	17,02,500/-	05/09/2012	ZnSe Beamsplitter, PMT Detector, ATR Cell, Drift Cell, Hydraulic Press	Transmission, Attenuated Transmitted Reflectance (ATR) and Diffused Reflectance (DR) Infrared Spectra (4000-600 cm <sup>-1</sup> )
5.	Atomic Absorption Spectrometer	Shimadzu AA-7000	26,14,000/-	26/12/2012	Na, Cr, Mg, Mn, Co, Fe, Cu, As, Se, Hg Lamps GF-7000, HVG-1, Autosampler ASC-7000	Graphite Furnace Analysis Cold Vapour and Hydride Generator Analysis Flame Analysis
6.	Gas Chromatography Mass Spectrometry	Shimadzu QP2010 Ultra Plus	78,00,000/-	20/01/2014	DI Probe, CI/EI mode Teledyne TEKMAR HT3 Headspace Auto Sampler	Mass Spectroscopy, Headspace Analysis, Pesticide Residue analysis
7.	Confocal	Olympus Pvt.	2,82,00,000/-	28/05/2014	Picoquant	Laser imaging

	Microscope	Ltd., FV-1200	-		PicoHarp 300 SPAD Detection Unit Live Cell Imaging setup (OKO Lab)	with six laser lines 405, 635, 488, 515, 543 and 559 nm. Differential Interference Contrast Live Cell Imaging and Fluorescence Correlation Spectroscopy
8.	Field Emission Scanning Electron Microscope	Carl Zeiss Pvt Ltd, Germany,	2,64,00,000/-	28/07/2014	Quorum-Q150R ES Sputter Coater Oxford Instruments EDX Analysis Probe Model XMax <sup>n</sup> , Detectors SE, BSC, InLens, STEM	Resolution upto 0.8 nm. With Six detectors for Imaging SE, BSD, EDX and STEM
9.	Gas Chromatography	Nucon Pvt. Ltd., New Delhi NUCON-5765	5,88,000/-	02/09/2013	TCD and FID Detectors With 3 Wide Bore columns	Biogas and Producer gas analysis

### A detailed samples run during various Periods:

Instrument Purchase and facility development was initiated during **January - December, 2010**

#### 1. Instrument Usage:

Name of the Instrument	No of samples analyzed per year				Total samples Analyzed
	2011	2012	2013	2014	
Fluorescence Microscope	105	182	205	132	<b>624</b>
Field Emission Scanning Electron Microscope (FESEM)	-	-	-	142	<b>142</b>
Confocal Laser Scanning Microscope (CLSM)	-	-	-	4	<b>4</b>
Fluorescence Correlation Spectroscopy	-	-	-	1	<b>1</b>
Ultrahigh Performance Liquid Chromatography (HPLC)	10	66	224	85	<b>385</b>
Atomic Absorption Spectrometry (AAS)	-	140	752	2020	<b>2,912</b>
Fourier Transform Infrared Spectrometer (FTIR)	-	45	213	398	<b>656</b>
UV- Vis Spectrophotometer	-	8384	6869	6271	<b>21,524</b>
Gas Chromatography Mass Spectrometer (GC- MS)	-	-	-	1766	<b>1,766</b>
Gas Chromatograph (FID/TCD)	-	-	-	61	<b>61</b>
<b>TOTAL</b>	<b>115</b>	<b>8,817</b>	<b>8,263</b>	<b>10,880</b>	<b>27,995</b>

GRAND TOTAL OF 10,880 samples were run during the calendar year of 2014.

The CIL is on the verge of extending the FE-SEM, Chromatography and spectrometric facility to the institution in the neighborhood including researchers in academic institutions, food and consultancy laboratories, industries and health care systems.

#### CIL capacity in taking up the course

- CIL having One-Ph.D., Two M.Sc. and One B.Tech., as their staff, is capable of conducting training programs for the students of basic and applied sciences for analytical and imaging works.

**3.3.5 Does the university have a specialized research centre/workstation on-campus and off-campus to address the special challenges of research programmes?**

Yes, university has common instrumentation laboratory (CIL) in the campus to address the special challenges for research programs. Along with CIL, computer Centre has common facility of work station for drug design and development and Computational Sciences.

**3.3.6 Does the university have Centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.**

CUPB Faculty involved in front line areas such as as Bioscience, Chemical and Pharmaceutical Sciences, Environmental Sciences, Genetic Diseases and Molecular Medicine and Human Genetics have acquired national and international reputation in the sphere of research and academic pursuit as evidenced by publications, h- index and award of prestigious projects. Centre for Education and Centre for Pharmaceutical Sciences and Natural Products along with Centre for Computer Science and Technology got approval from *NCTE* and *AICTE* from their respective courses. A major collaborative 'Centre for Excellence' project has been developed by faculty members belonging to Pharmaceutical Sciences and Natural Products, Environment Science & Technology and Human Genetics and Molecular Medicine is in the process of submission.

*These research Centres help the scientist/students from other labs/institutes in following ways:*

- Sharing updated knowledge through various programmes
- Creating platform to do collaborative research.
- Utilizing the laboratory facility available through samples sent or collected from across the partners.
- Validating their research findings by virtue of replicating and confirmatory tests.
- Exchanging of Faculty/Students for research

**3.4 Research Publications and Awards**

**3.4.1 Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.**

No, the university is not publishing any research journals. However, every four months university publishes a "News Letter" to highlight the academics

and research updates in different Centres of university. University has published nine issues of News Letter till date. List of other publications of the university is presented in **Table 3.9**.

**Table 3.9 University Publications from CUPB**

1.	Newsletters
	<ul style="list-style-type: none"> <li>a) January 2013 -April 2013</li> <li>b) May 2013-July 2013</li> <li>c) August 2013 –October 2013</li> <li>d) Nov. 2013– January 2014</li> <li>e) February 2014 - August 2014</li> <li>f) Sep 2014-Nov 2014</li> <li>g) December 2014 – February 2015</li> <li>o) March 2015-June 2015</li> </ul>
2.	Odyssey towards excellence (2010-11)
3.	Museum Brochure (July 2013)
4.	Library Strength to Strength
5.	Annotated Bibliography (2009-2013)-Library Collection
6.	Research Initiatives – Report on the externally funded Research Projects initiated by the university Faculty and Students (2009-2013)
7.	University Library Manual (2014)
8.	Plant Biodiversity of Central University of Punjab, Main Campus (February 2014)
9.	A Rising Star in Higher Education (2009-2014)
10.	Annual Reports
	<ul style="list-style-type: none"> <li>a) 2008-09; 2009-10</li> <li>b) 2010-2011</li> <li>c) 2011-12</li> <li>d) 2012-13</li> <li>e) 2013-14</li> <li>f) 2014-2015</li> </ul>
11.	Annual Financial Reports
	<ul style="list-style-type: none"> <li>a) 2008-09; 2009-10</li> <li>b) 2010-2011</li> <li>c) 2011-12</li> <li>d) 2012-13</li> <li>e) 2013-14</li> <li>f) 2014-2015</li> </ul>

### **3.4.2 Give details of publications by the faculty**

Faculties of the CUPB are continuously publishing research articles in different national/international reputed journals. Details of publications is included in *Table 3.10*.

### **3.4.3 Give details of Faculty serving on the editorial boards of national and international journals**

CUPB faculties are working in different editorial boards of national and international journals (*Table 3.11*)

### **3.4.4 Provide details of Research awards received by the students**

Details are mentioned in *Table 3.12*.

### **3.4.5 Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years. Does the university participate in Shodhganga by depositing the Ph.D. thesis with INFLIBNET for electronic dissemination through open access?**

A list of successful scholar guided by per faculty during the last four year is attached in *Table 3.13*.

Yes, the university has decided to participate in Shodhganga by depositing the Ph.D. thesis with INFLIBNET for electronic dissemination through open access.

### **3.4.6 What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.**

3.4.6.1 CUPB has well defined policy to check malpractices and plagiarism in research (*Annexure 3.6*). Grammarly software is being used by the university. Till now no case has been reported.

### **3.4.7 Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavors?**

Yes. University promotes interdisciplinary research. Inter disciplinary / interdepartmental research projects have been under taken by the departments (*Table 3.14*).



**Table 3.10 : Details of publications by Faculty**

S. No	Name of the Centre	Name of faculty	Papers in Reviewed Journals		Mono graphs	Chapters in Books	Books Edited	Books with ISBN with details of publishers	Number listed in international database	Citation Index	Impact factor(range/index)	h-index
			National	International								
1	Physical Sciences	Dr. A.L. Sharma	12							34	1.3 to 3.8 Total Impact Factor- 18	03
		Dr. Kamlesh Yadav							12	24	0.449-2.999	3
		Dr. Jai Prakash		38				01 (ISBN: 978-3-659-32404-8) Lambert Academic Publishing, Germany		643 (Google Scholar)	0.380-7.728 Total Impact Factor-102.42	13
		Dr. Ashok Kumar		20		01				330 (Google Scholar)	1.3-4.5 Total Impact Factor- 46	10 (Google Scholar)
2	Computational sciences	Dr. Kaushik Giri		10						157	1.5-3.15	7
		Dr. Purshotum Sharma		31						299	1.5-9.5	10
		Dr. Mahesh Kulharia		11					11	96	2.02-12.114	4
3	Comparative literature	Dr. Zameerpal Kaur	7	2		1		3				
		Dr. Rajinder	30	5		3	2	1				
		Dr. Amandeep	2									
		Dr. Neetu				2	1					
4	Animal sciences	Dr. Anil K. Manth		29		2			29	507	0.33-17.47	13

		a										
		Dr. Jyoti Prakash		18					18	336	0.13-13.77	10
		Dr. R. Krishna Chaitanya		10					10	67	0.59-6.33	4
		Dr. Ajay Kumar		10					10	84	1.78-4.38	5
5	Classical and modern language (Punjab i, literature and culture; english)	Dr. Alpna Saini	8	9	3	4	10	2				
		Dr. Ramanpreet	17				11	1	2			
		Dr. Dinesh Babu		5			1					
6	Chemical sciences	Dr. Rakesh Kumar	1	20					21	320	0.38-30.43	10
		Dr. KK Haldar		14					14	433	2.15-8.31	10
		Dr. Rajendra S. Dhayal	1	17					18	180	0.628-12.113	8
		Dr. J. Nagnendra		16					16	262	0.68-6.4	11
7	Pharmaceutical sciences and Natural product	Dr. Vinod Kumar		20						412	1.5-5.5	13
		Dr. Pradeep		46			13			311	0.3-3.5	11
		Dr. Vikas Jaitak		32			1			302	0.5-3.8	10
		Dr. Raj Kumar		50				1 (978-81-921432-9-3)		1159	1.4-6.36	21
8	Geography and geology	Dr. Kiran Singh	3	5	1			978-36393-05753				
		Dr. JK Pathania	1	7			9		ISBN-978-81-90442-3-1 ISBN-978-81-90442-3-1 ISSN-0973-256x ISSN-0973-		16.374	3

							256x ISBN- 81- 8372- 034-x ISBN- 81- 8372- 020-x				
		Dr. Sasang Geete	1	2		1	ISSN-0970-7913 ISSN-2277-6168 ISSN-2244-1522 ISBN-978-81-212-1208-3 ISBN-978-93-80036-75-5				
9	Environmental sciences and technology	Prof (Dr.) R.K Kohli		281		78	12		486 2		32
		Prof (Dr.) R.C. Sharma	87	10		9			8	0.355-1.119	2
		Dr. Sunil Mittal		17		2			296	32.04	10
		Dr. Yogalakshmi		9					62	0.626-4.49	2
		Dr. Dhanya M.S	4	3		5		1; 9789380 428789	20		2
		Dr. Puneeta Pandey		10					26		3
10	Law	Dr. T. Arora	17			2		1; 978-938521202-4			
		HR Arora	1	7		2		4			
		Puneet Pathak	10	1		4					
		Dr. Dunder Mehra	5								
		Dr. Deepak Kumar	6	2		4					
		Dr. Sukhwinder	3			2					

		Kaur										
11	South and central Asian studies	Dr. Bawa Singh	8			8						
		Dr. Nishtha Kaushiki		2		2						
		Dr. Sudheer Singh	1			2						
		Dr. Vinay Rao	11	3	1		3					
12	Human genetics and molecular medicine	Dr. Anjana Munshi	7	75	-	13	2	DNA sequencing methods and applications, ISBN 978-953-51-0564-0(Intech, Europe)	75	609	1-7	16
		Dr. Harish Chander	1	16					16	609	1-9	11
		Dr. Monisha Dhiman		21		3			24	324	3-15	11
		Dr. Preeti Kheterpal	1	2		2				4	0-2	1
		Dr. Sandeep Singh		16					16	101	1.5-22.2	6
		Dr. Sabyasachi Senapati		6						354	3.5-29.6	4
		Dr. Neeraj Kumar		4					5	13	0.87-6.43	2
13	Education	Dr. SK Bawa	67			8	1					
		Dr. Satvin der	19			2					25.16	
		Dr. Shireesh	13	13		11	9	9		23		3
		Dr. Jubilee	6			6	2	2				
		Dr. Pary	17	12			1	2				

14	Sociology	Dr. Vinod Arya				1						
		Dr. Aditya R Kapoor				2						
		Dr. Anoop Kumar										
15	Mathematics and statistics	Dr. Sachin Kumar		24					172	30.2	7	
		Dr. Akhla Iqbal		6					32	5.25	4	
		Dr. Anoop Kumar		7					23	1.63	4	
		Dr. Harmanpreet Singh Kapoor		3								
16	Plant Sciences	Prof. Ashok Dhawan	118	22	9	19			711	0.5-6.8	11	
		Ramakrishna wusirika		51		4	1	4	51	3214	0.6-33.6	26
		Dr. Felix Bast	11	29		3		2	40	94	0-3.7	6
		Dr. Sanjeev Kumar	1	27					28	616	0-3.5	15
		Dr. Pankaj Bhardwaj		11					11	167	0.45-3.94	7
		Dr. Vinay Kumar		15		6			21	116	0-5.9	7
17	Computer science and technology	Prof. AK Jain		28		7			197	1-6	8	
		Er. Meena kshi		6		2			3	3.924	1	
		Er. SS Khurana		2								
		Er. Sukhreet singh		1				1				
		Er. Navjot Sidhu		5					5		1	
		Dr. amand eep		17							1-3.5	5

		kaur										
18	Economics	Dr. PK Mishra	21	28		4		2		316	0.4-1.5	11
		Dr. Naresh singla	9			6		1				2
		Dr. JK verma		15							Not known	
		Dr. JK parida	5	3		2				33	0.129-1.345	4
		Dr. Sandeep kaur										
19	Biochemistry and microbial sciences	Dr. Akank Jain	1	18					19	490	0.5-9.12	13
		Dr. Aditya R Kapoor	3	25					26	401	0.04-2.88	11
		Dr. Anoop Kumar	0	26		1			27	503	2.265-16.710	9
		Prof Saini										

**Table 3.11 : Faculty of CUPB serving in Editorial Boards of Scientific Journals**

**Centre for Biosciences**

Prof. R.G.Saini

- Member Editorial Board Indian Journal of Genetics & Plant Breeding

Prof A. K. Dhawan

- Editor Indian J.of Plant Physiology

Dr. Sanjeev Kumar

- Guest editor World Science Journal (Hindawi)

Dr. A.K.Mantha

- Editorial board member, Jacobs Journal of Bioinformatics and Proteomics, USA.
- Editorial board member, Austin Journal of Proteomics, Bioinformatics & Genomics, USA.
- Editorial board member, Journal of Cell Science & Molecular Biology
- Editorial board member, Journal of Biotechnology and Biomaterials

Dr. Pankaj Bhardwaj

- Reviewer of BMC Plant Biology
- Reviewer of Protoplasma
- Reviewer of Molecular Biology Reports

**Centre for Pharmaceutical Sciences and Natural Products**

Dr. Raj Kumar

- **Lead Guest Editor** of Special Issue on “*Signal Transduction Inhibitors as Promising Anticancer Agents*” Bio Med Research International (<http://www.hindawi.com/journals/bmri/si/636318/cfp/>)
- Reviewer to MedChemCom (RSC)
- Reviewer to Bioorganic and Medicinal Chemistry (BMC, Elsevier)
- Reviewer to Bioorganic and Medicinal Chemistry Letters (BMC, Elsevier)
- Reviewer to Food and Chemical Toxicology (FCT, Elsevier)
- Reviewer to European Journal of Medicinal Chemistry (EJMC, Elsevier)
- Reviewer to International Journal of Biological Macromolecules (Elsevier)
- Reviewer to Medicinal Chemistry Research (Springer)
- Reviewer to Mini Reviews in Medicinal Chemistry (Bentham)
- Reviewer to Journal of Enzyme Inhibition and Medicinal Chemistry (Informa healthcare)
- Reviewer to Letters in Drug Design & Discovery (Bentham science)
- Reviewer to Biomarkers in Cancer (Libertas Academica)
- Reviewer to Drug Target Insights (Libertas Academica)
- Reviewer to Organic Chemistry Insights (Libertas Academica)

- Associate Editor to *Pharmaceutica Analytica Acta* ([www.omicsonline.org](http://www.omicsonline.org))

Dr. Vinod Kumar

- Reviewer of *Tetrahedron Letter*
- *Journal of Indian Chemical Society*
- *Indian Journal of Chemistry*

Dr. Vikas Jaitak

- Journal Reviewer of *Medicinal Chemistry Research* (Springer)
- Journal Reviewer of *Journal of Agricultural and Food Chemistry* (ACS)
- Journal Reviewer of *African Journal of Pharmacy and Pharmacology*
- Journal Reviewer of *Natural Product Research* (Taylor & Francis)
- Journal Reviewer of *Annals of Microbiology* (Springer)
- Journal Reviewer of *Acta Physiologiae Plantarum* (Springer)
- Associate Editor of *International Journal of Medicinal Chemistry Letters* (Bioinfo Publications)
- Associate Editor of *International Journal of Chemical Research* (Bioinfo Publications)
- Associate Editor of *International Journal of Analytical Chemistry Research* (Bioinfo Publications)
- Guest Editor of *Evidence-Based Complementary and Alternative Medicine*, Special Issue "Essential Oils: New Perspectives in Human Health and Wellness" (Hindwai)

### **Centre for Education**

Dr. Shireesh Pal Singh

- Chief Editor of an International Journal-LEARNING COMMUNITY (An International Journal of Educational and Social Development)
- Chief Editor of an International Journal-EDUCATIONAL QUEST (An International Journal of Education and Social Sciences)
- Chief Editor of a national journal on Education in Hindi-SANDARBH
- Chief Executive Editor of an International journal-TechnoLEARN
- Member Editorial Board - International Journal of Social Sciences and Education
- Member Editorial Board-Online journal of Education-SAMWAD
- Member Editorial Board -International Journal of Educational Planning & Administration
- Member Editorial Board -Global Journal of Educational Administration and Policy Studies
- Member Editorial Board -International Journal of Vocational and Technical Education
- Member Editorial Board- International Journal of Psychology and Counseling
- Member Editorial Board -International Journal of Education and Information Studies



- Member Editorial Board-E-Reflection, an International multidisciplinary peer reviewed e journal
- Member Editorial Board, SRJIS, an International Peer reviewed Journal
- Chief Academic Advisor of National Journal -Chhavi: National Journal of Higher Education
- International Journal of Advanced Research in Social Science and Humanities
- International Journal of Advanced Research in Education
- International Journal of Technological Exploration and Learning
- Asian Journal of Academic Research

### **Centre for Environmental Sciences and Technology**

Prof. R.K.Kohli

- Editor of Journal of Crop Improvement, Taylor & Francis, NY, USA
- Editor of World Journal of Agricultural & Environmental Sciences, USA
- Editor of Asian Ecology Section of the journal of ESA committee, USA
- Editor of Journal of Plant Archives, India
- Editor of Indian Journal of Tree Sciences
- Reviewer of Weed Technology (USA),
- Reviewer of Weed Science (USA)
- Reviewer of Weed Research (UK),
- Reviewer of Annals of Applied Biology (UK),
- Reviewer of Journal of Applied Sciences (USA)
- Reviewer of Journal of Environmental Biology (SCI India)
- Reviewer of Journal of Biological Sciences (USA),
- Reviewer of African Journal of Agricultural Research (Africa)
- Reviewer of Canadian Journal of Plant Sciences
- Reviewer of Biological Invasion (USA)
- Reviewer of Journal of Chemical Ecology, (USA)
- Reviewer of Journal of Medicinal Plant Research

### **Dr. Puneeta Pandey**

- Editorial member of International Journal of Biological and Medical Sciences, Catalyst Publishers
- Atmospheric Research, Elsevier
- Journal of Energy and Power Engineering, David Publishing
- Agricultural Science Research Journal (ASRJ), International Research Journals Publications
- African Journal of Pharmacy and Pharmacology (AJPP), Academic Journals Publications
- Journal of Research in Environment Science and Technology, Newark, USA

### **Centre for Environmental Law**

Dr. Puneet Pathak

- Member of Editorial Board: Journal of Humanities and Culture

- Member of Editorial Board: Asian Journal of Human Development and Livelihood

### **Centre for Human Genetics and Molecular Medicine**

Dr. Monisha Dhiman

- Editorial board member Journal of Cell Science & Molecular Biology
- Reviewer “Revista do Instituto de Medicina Tropical de São Paulo”
- Reviewer American Journal of Tropical Medicine and Hygiene
- Reviewer Journal of Biomedicine and Biotechnology

### **Centre for Physical Sciences**

Dr. Jai Prakash

- Reviewer of Physical Review Journals and Macromolecule Symposia

**Table 3.12 : Fellowships/Awards received by the students**

S.	Name of Student	Batch	Achievement
<b>Centre for Biosciences</b>			
1.	Shweta Thakur	2010-11	ICMR JRF 2012
2.	Sarabjeet Kour Sudan	2011-12	DBT JRF 2012
3.	Aijaz Ahmad John	2011-12	CSIR JRF (June 2012)
			CSIR NET (Dec.-2012)
4.	Navgeet	2011-12	CSIR UGC NET (Dec-2012)
5.	Satej Bhushan	2011-12	CSIR UGC NET (Dec. 2012)
6.	Navrattan Kaur	2012-13	ICMR JRF (2012)
			GATE-2012
			CSIR-NET 2013
7.	Amandeep	2012-13	DST INSPIRE 2012
			GATE 2013
8.	Rashmi Saini	2012-13	GATE 2012
			ICMR-JRF 2013
9.	Shishir Upadhayay	2012-13	GATE 2012
			CSIR-NET 2013
			ICMR-JRF 2014 (15 <sup>th</sup> Rank)
			CSIR-JRF 2014 (61 <sup>st</sup> rank)
10	Balraj Singh Gill	2011-12	MANF 2011
			GATE 2011
			CSIR-NET 2011
11.	Richa Mehra	2012-13	GATE 2012
			CSIR-NET 2013
			ICMR-JRF 2014 (37 <sup>th</sup> Rank)
12.	Renu	2012-13	GATE 2013
			ICAR-NET March 2014
			ICAR-NET June 2014
			CSIR-NET 2014
13.	Sapna Thakur	2012-13	GATE 2013
			ICAR SRF 2012
			ICMR-JRF 2013
			ICAR-NET June 2014
14.	Shruti Chaudhary	2012-13	CSIR-UGC-JRF 2013
15.	Raof Ahmad Najar	2012-13	ICAR-NET March 2014
16.	Pushpendu Kundu	2013-14	ICAR-NET March 2014
17.	Aasim Majeed	2013-14	CSIR JRF 2014 (54 rank)
18.	Kunj Bihari Gupta	2013-14	CSIR-NET 2014
19.	Arindam Adhikary	2012-13	ICAR-NET June 2014
<b>Centre for Environment Sciences &amp; Technology</b>			
1	Upma Vaid	2009-10	UGC NET SET (June and Dec.
2	Gajendra Singh Viswakarma	2009-10	JRF DST (Project)
			UGC NET (June. 2012)
3	Anamika Das	2009-10	UGC NET Dec. 2012
4	Gurpreet Kaur	2010-11	UGC NET June 2012
5	Nandini Gautum	2010-11	UGC NET Dec. 2012

6	Amita Bhatti	2011-12	CSIR-UGC NET June 2012
			RGNF 2012
			GATE 2012
7	Navneet Kaur	2011-12	UGC Dec.2012
8	Annu Sharma	2011-12	UGC-NET
9	Disha Mishra	2011-12	UGC JRF Dec. 2011
10	Rishikesh Singh	2011-12	UGC JRF June 2012
11	Harmandeep	2012-13	DST Inspire 2012-13
12	Gulam Nazar		ICAR-NET 2013
13	Amit Kumar		ICAR-NET 2013, UGC-JRF
14	Shashi Ranjan		UGC-JRF December, 2013
15	Vijay Jaswal	2013-14	ICAR-NET 2014
16	Gini Rani	2013-14	UGC-NET, RGNF 2015
<b>Centre for South Central Asian Studies</b>			
1	Maninderjit Singh	2010-11	UGC NET (Dec-2012)
2	Kovid Kumar	2010-11	UGC-JRF (2011)
3	Mohammad Arif	2011-12	UGC NET (June 2012)
4	Amandeep Kaur	2012-13	MANF (2012), UGC-NET
5	Mohd. Hussain Naik		UGC-NET December, 2013.
6	Amritpal Singh		UGC-NET
<b>Centre for Comparative Literature</b>			
1	Yeshpal	2009-10	UGC NET June 2012
2	Barjinder Singh	2010-11	UGC-JRF- JUNE 2013
3	Chitra	2011-12	UGC NET Dec. 2013
4	Vandana Bathla	2011-12	UGC NET Dec. 2012
5	Rajpal	2011-12	UGC NET Dec. 2012
<b>Centre for Economic Studies</b>			
1	Harmeet Kaur	2014-15	UGC-JRF 2014
2	Ramandeep Kaur		UGC-NET 2014
3	Vinish	2013-14	UGC-NET 2014
4	Nadeem	2013-14	UGC-NET 2014
<b>Centre for Environment Law</b>			
1	Ramandeep	2011-12	UGC NET (Dec. 2012)
2	Abhishek	2011-12	UGC NET (Dec. 2012)
<b>Chemical and Pharmaceutical Sciences</b>			
1	Arvind Negi	2011-12	GATE2013
2	Ramit Singla	2011-12	GPAT 2011
3	Monika Chouhan	2011-12	GPAT 2011
4	Yashika Bhalla	2011-12	GPAT 2011
5	Jimi Marin Alex	2011-12	GPAT 2011
			MANF
6	Prakriti Monga	2011-12	GPAT 2011
7	Deependra Kumar	2011-12	GPAT 2011
8	Vinay Kumar Gupta	2011-12	GPAT 2011
9	Archna Khyap	2013-14	GPAT 2013
10	Shevani Sharma	2013-14	GPAT 2013
11	Jagpreet Singh	2013-14	GPAT 2013
12	Sapna Kumari	2013-14	GPAT 2013

13	Bhupender Kumar	2013-14	GPAT 2013
14	Vivek Parkash Gupta	2013-14	GPAT 2013
15	Pankaj Kumar Singh	2013-14	GPAT 2013
16	Joyti Dandriyal	2014-15	GPAT 2014
17	Manavendra Bhatt	2014-15	GPAT 2014
18	Harmeet Kaur	2014-15	GPAT 2014
19	Gaurav Sharma	2014-15	GPAT 2014
20	Gaurav Joshi	2012-13	GPAT 2012
21	Ashish Ranjan Dwivedi	2012-13	GPAT 2012
22	Sheetal	2012-13	GPAT 2012
23	Vijayinder Saini	2012-13	GPAT 2012
24	Mayank	2012-13	GPAT 2012
25	Gagandeep Kaur	2012-13	GPAT 2012
<b>Centre for Computer Science and Technology</b>			
1	Deepika Dhiman	2012-13	GATE 2013
2	Khushmeet Singh	2012-13	GATE 2012, 2013
3	Amandeep Kaur	2012-13	GATE 2012
4	Ruby Goel	2012-13	GATE 2012
5	Kanika	2012-13	GATE 2012
	Shifali Hans	2012-13	GATE 2012
6	Mandeep Singh	2012-13	GATE 2012
7	Amandeep Kaur		GATE-2014
8	Kanika		GATE-2014
9	Siddharth Kumar		GATE-2014
10	Rinku		GATE-2014
11	Amita Get	2013-14	GATE-2013
12	Dharamveer	2013-14	GATE-2013
13	Gaurav Kumar	2013-14	GATE-2013
14	Pankaj Kumar	2013-14	GATE-2013
15	Vicky Kumar	2013-14	GATE-2013
16	Suchismita Mahato	2013-14	GATE-2012, 2013
17	Saurav Kr. Gupta	2013-14	GATE-2013
18	Komal Rani	2013-14	GATE-2013
19	Rohit Goyal	2013-14	GATE-2013
20	Meenu Singh	2013-14	GATE-2013
21	Rajshree Purohit	2013-14	GATE-2013
22	Rajiv Kumar	2013-14	GATE-2013
23	Shrikant Saini	2013-14	GATE-2013

UGC = University Grants Commission

GATE = Graduate Aptitude Test

GPAT = Graduate Pharmacy Aptitude Test

**Table 3.13 : Students guided by Faculty members at CUPB**

<b>Name of Centre</b>	<b>Master's</b>	<b>MPhil</b>	<b>Ph.D</b>
<b>Centre for Biosciences</b>			
Prof. R.G. Saini	-	5	-
Dr. Felix Bast	2	8	-
Dr. Sanjeev Kumar	5	9	-
Dr. Anil Kumar Mantha	3	3	-
Dr. Pankaj Bhardwaj	3	5	-
<b>Centre for Chemical and Pharmaceutical Sciences</b>			
Prof P.Ramarao		-	-
Dr. Raj Kumar	6	-	-
Dr. Vinod Kumar	4	-	-
Dr. Vikas Jaitak	6	-	-
<b>Centre for Computer Science and Technology</b>			
Er. Meenakshi Mittal	2	-	-
Er. Surinder Singh Khurana	4	-	-
Er. Amanpreet Kaur	4	-	-
Er. Navjot Sidhu	3	-	-
Er. Sukhreet Singh Brar	5	-	-
<b>Centre for Environmental Sciences and Technology</b>			
Dr. A. K. Jain	-	-	-
Dr. R.C. Sharma	-	-	-
Dr. Sunil Mittal	4	10	-
Dr. M S Dhanya	-	3	-
Dr. K. N. Yogalakshmi	-	3	-
Dr. Puneeta Pandey	-	4	-
Dr. J Nagendra Babu	1	5	-
<b>Centre for South and Central Asian Studies</b>			
Dr. Kiran Kumari Singh	-	5	-
Dr. Bawa Singh		4	-
Dr. Nishtha Kaushiki	-	9	-
Dr. V.J. Varghese	-	6	
<b>Centre for Comparative Literature</b>			
Dr. Zameerpal Kaur	-	9	-
Dr. Rajinder Kumar	-	7	-
Dr. Alpna Saini	-	5	-
Dr. Amandeep Singh	-	8	-
<b>Centre for Environment Law</b>			
Dr. Deepak Kumar	05	-	-
Dr. Puneet Pathak	04	-	-
Dr. Hans Raj Arora	04	-	-
<b>Centre for Economic Studies</b>			
Dr. Sandeep Kaur	-	10	-
Dr. Naresh Kumar Singla	-	6	-
Dr. A S Kahlon	-	4	-
Dr. Kulwinder Singh	-	2	-
<b>Centre for Genetic diseases and molecular medicine</b>			
Dr. Monisha Dhiman	3	1	-

**Table 3.14 : Interdisciplinary projects at CUPB**

S.No.	Faculty	Different Centre	Aspect of Collaboration
1.	Dr. Felix Bast (Assistant Professor) Centre for Biosciences	Dr. Vikas Jaitak (Assistant Professor) Centre for Chemical and Pharmaceutical Sciences	MOES Project
2.	Dr. Bawa Singh (Assistant Professor) Centre for South Central and Asian Studies	Dr. Sandeep Kaur (Assistant Professor) Development Economics	Role of SAARC: Geostrategic and Geoeconomic Perspective, ICSSR, New Delhi

**3.4.8 Has the university instituted any research awards? If yes, list the awards.**

Yes, the University provides a creative atmosphere in which higher studies and research thrive amongst the students and the faculty. The University has introduced Research Awards for innovative faculty members who produce outstanding research achievements. The purpose of these awards is to promote research at CUPB, create a research atmosphere and give recognition to outstanding performance of individual researchers. University has framed policy for research awards and details are mentioned in *Annexure 2.6*. As per this policy all those who publish in journals of high impact, obtain research grants from National/ International agencies or file patents are honoured.

**3.4.9 What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?**

University has framed policy to give incentives to faculties for receiving state, national and international recognition for research contributions. All national/ international recognitions are applauded by the University. Other details are mentioned in *Annexure 2.6*.

**3.5 Consultancy**

**3.5.1 What is the official policy of the University for Structured Consultancy? List a few important consultancies undertaken by the university during the last four years.**

Central University of Punjab encourages the faculty members to undertake consultancy projects as a part of their academic duties. There is a strong

realization in the CUPB that consultancy projects enrich professional knowledge of Faculty, augment the university resources and promote university academy alliance. Details of the consultancy policy have been mentioned in *Annexure 3.7*.

**3.5.2 Does the university have a university-industry cell? If yes, what is its scope and range of activities?**

Yes, CUPB values the importance of corporate resources and of industry connect in its functioning. The university has established a strong link with industries relevant to its domain areas and has therefore constituted University-Industry Forum and University-Industry Council for the purpose. Policy, scope and range of activities of these bodies are mentioned in *Annexure 3.8*.

**3.5.3 What is the mode of publicizing the expertise of the University for Consultancy Services? Which are the departments from whom consultancy has been sought?**

University website is using to publicize expertise for consultancy services.

**3.5.4 How does the university utilize the expertise of its faculty with regard to consultancy services?**

The faculty deals with the consultancy projects as per their expertise and handles them at their own level. *Annexure 3.7*.

**3.5.5 List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.**

CUPB has decided to provide consultancy in all areas of expertise, particularly in Bioscience, Pharmaceutical Sciences and Natural Products, Environment Science and Technology.

**3.6 Extension Activities and Institutional Social Responsibility (ISR)**

**3.6.1 How does the university sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.**

The University plays its role in the social upliftment of this rather less developed region of Punjab and involves its faculty and students in different ways. It has organized Blood donation camps, World Cancer Day, Computer literacy program for senior citizens, Innovators days to motivate the local



people and farmers in generating the novel innovative ideas which will benefit to the society, skill development training to youth, etc. In all these programmes, the teaching faculties along with post graduate and PhD students are involved to sensitize them on their social responsibilities and to motivate for their social commitment by virtue of visualizing the impact of the services rendered at community level.

The social outreach programs which have created an impact on students' campus experience are

- World Earth Day celebrated on dated April 22, 2015
- Human Rights day Dec 10, 2014 (Theme: Human Rights of Unpaid Homemakers: Will a Price Tag Help Empowerment of Women?)
- Celebration of International Women's day March 4, 2015
- Labour day May 1, 2015
- World Plant Day May 18, 2015
- World Biodiversity day May 22, 2015

The University has planned and is working on the health related issues involving the testing of following parameters in its laboratories on the campus under community development programmes:

- Ground and surface water
- Soil health
- Food grown in the area
- Human health through testing of relevant parameters of the blood samples of the residents of the following villages:
  - (i) Ghudda Village
  - (ii) Badal Village
  - (iii) Daula Village
  - (iv) Multania Village
  - (v) Pakka Kalan Village

CUPB provides skill-oriented programmes relevant to regional needs in the campus with the objective to provide specialized manpower to meet the regional needs. The aim of the programme is to provide entrepreneurial orientation along with required skill training for self-employment and ensure and certifiable skills based on National Occupational Standards (NOSs). The Curricula and system of certification of the diploma course will align with the National Occupational Standards and National Skills Qualification Framework (NSQF) of Govt. of India.

*Diploma in Green Farming Technologies*

*Short Courses of direct relevance to current social needs:*

1. Vermicomposting
2. Apiculture
3. Mushroom cultivation
4. Sericulture.

*Value added short term courses:*

1. Computer course for senior citizen
2. Introductory Punjabi Language Course
3. Japanese Language Course.
4. Soft Skills

*B. Voc Programme*

Apart from it CUPB has submitted proposal to UGC for the following B.VOC Programmes:

- B.VOC in Food Processing Technology
- B.VOC in Theatre and Stage Craft
- B.VOC in Medical Technology and Health Sciences

**3.6.2 How does the university promote university-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development?**

- The university interacts with nearby community and strengthens the neighborhood network by contributing to social development of the area.
- Apart from the activities listed in 3.6.1 above, the students are engaged in various community development activities like:
  - Adoption of villages
  - Adoption of school and colleges
  - Serving during local festivals
  - Spot Painting Competition for school boys and girls.
  - Social services

### **3.6.3 How does the university promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International programmes?**

The university applied to the concerned department for allotment of the unit of N.S.S. and it has got sanction of 500 seats for the students.

Regarding N.C.C., the programme is available only for undergraduate students or the students who are supposed to stay at least for 3 consecutive years; therefore, the CUPB could not get sanction for introducing N.C.C.

Participation in activities of Youth Red Cross has been organized in the form of Blood Donation Camps organized in February 2013 and February 2014 on occasion of Foundation Day Ceremony.

Other Extension Activities organized by the University:

- Sensitization Programme for Teachers of Elementary, Primary, Secondary and Senior Higher Secondary Education on Water Quality Profile on February 12, 2015.
- Seminar on ‘Awareness about Environment Protection’ was organized on the occasion of Earth Day dated April 22, 2015 in collaboration with Punjab Pollution Control Board to sensitize various section of community.
- Workshop on ‘Bio-diversity for Sustainable Development’ organized in collaboration with Punjab State Council for Science and Technology, Chandigarh, National Bio Diversity Authority and State Bio-Diversity Authority, Punjab on International Day for Biological Diversity dated May 22, 2015. Representatives of NGOs, Social Welfare Clubs, Educational Institutes also participated in the event with great enthusiasm.
- Extension Lecture on the ‘Contribution of Dr. B.R. Ambedkar in Social Justice’ on April 28, 2015 with the purpose to sensitize the students as well as workers from outsourcing agency about the versatile personality of Dr. B.R. Ambedkar.
- Celebration of Labour Day – May 1, 2015 by University Administration (Teaching and Non Teaching) and students with labourers and workers from the outsourcing agency.
- Awareness Camp on Human Rights organized at Village Gurchari organized on May 17, 2015.

- Biological Biodiversity day on May 22, 2015
- World Environment day, June 5, 2015
- Yoga Week, 15-21 June, 2015
- International day against drug abuse, June 26, 2015
- World Population day, July 11, 2015
- Massive plantation drive at Main campus, July 18-18, 2015
- NSS Camps organised at Main campus, July 24-25, 2015
- Swach Bharat Abhiyan 2015
- Contribution to flood in J&K and Nepal Earthquake

**3.6.4 Give details of social surveys, research or extension work, if any, undertaken by the university to ensure social justice and empower the underprivileged and the most vulnerable sections of society?**

- a) To ensure contribution of the University in Social Justice and empowerment of the underprivileged and other vulnerable sections of the society, the School of Legal Studies and Governance has proceeded to establish Legal Aid Clinic that shall run legal literacy activities within and outside the campus especially in rural area for creating awareness about the rights, providing free legal aid and consultancy to the stakeholders.

The Legal Aid Clinic aims to provide a single window facility for following:

- Client Counselling
- Legal Awareness in the rural as well as urban area
- Publication and dissemination of legal aid literature
- Workshops for NGOs
- Field Surveys;
- Adult literacy classes for the residents of surrounding areas and non teaching employees
- Street plays on socio-legal issues
- Guidance and preparation of various applications for schemes

b) School of Social Studies is involved in the following research activities to ensure justice and empower the underprivileged and the most vulnerable sections of society:

- Problem of land acquisition: a case study of Gobindpura
- Socio-Economic implications of pesticide use in Bathinda district of the Punjab state
- Socio-Economic externalities of Guru Nanak Dev Thermal Power Plant in Bathinda
- Child Labor in Prosperous State of India: A Case Study of the agriculture belt of Punjab
- Women's Exploitation in Contemporary South Asia: Field

Experiences of Child Marriage in Bathinda District. A field study and survey was conducted that was related to the sexual abuse of child bride. The survey in the district wherein 80 women were interviewed. Villages for the field study included Deon, Bhokhra, Gill Patti, Bir Talab, Naruana, Jai Sing Wala, Khialiwala, Joganand, Mehta, Jassi Pou Wali, Bahoo, Gehri, etc. The urban areas of Bathinda that were covered were Bhucho Mandi, Maur Mandi and main city.

- Socio-Legal Dimensions of Domestic Violence against Women: A

Field Experience of Malwa and Doaba Regions of Indian Punjab. In Jalandhar and Bathinda, 200 and 100 women were interviewed respectively. Major issues within the ambit of domestic violence such as dowry, sexual harassment, gender discrimination and legal awareness have been examined.

### **3.6.5 Does the university have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?**

The students involved in citizenship roles are monitored by the concerned teachers in charge of that activity and Dean of Students' welfare. Further, to motivate student's involvement on activities that promote these roles, recognition awards have been given for glorious activities like participation in Republic Day function, sports meet, annual function, etc. The awards are also given to the male and female volunteers to encourage them for community roles.

**3.6.6 Bearing in mind the objectives and expected outcomes of the extension activities organized by the university, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.**

The extension activities of CUPB are a practical experience in knowledge and skill enhancement of students as a follow up of class room teaching. The students get important lessons in Organizational skill, Leadership quality, Civic sense, Adaptability to socio-environmental conditions, Practical knowledge, Hands on experience, Communication skill, Community involvement, Commitment to nation building, etc.

**3.6.7 How does the university ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the university which have encouraged community participation in its activities.**

CUPB has already developed links in the nearby areas through its outreach activities. Students from nearby schools and colleges are regularly invited to visit CUPB facilities. The Environmental awareness club involves local communities in its programmes. As a unique venture university organises "Computer Literacy Programme" for senior citizens. In 6 batches, 49 senior citizens have participated in the programme which consists of six modules that were administered in 6 days. Participants were provided notes of learning modules in English, Hindi and Punjabi.

Recently CUPB organised tree plantation drive at its main campus Guddha. NDRF team actively participated along with students, faculty and non-teaching staff.

**3.6.8 Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.**

None

**3.7 Collaboration**

**3.7.1 How has the university's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?**

The University has signed Memorandum of Understanding (MoU) with The University of Texas Medical Branch, Galveston, Tx, USA, Cherite

University of Hospital Berlin Germany, Department of Plant Sciences, University of Saskatchewan Canada, IHBT Palampur, PAU Ludhiana, NABI Mohali, Baba Farid University of Health Sciences Faridkot, National Academy of Medical Sciences Delhi, and Centre for Research in Rural and Industrial Development, Chandigarh etc. These MoU's help the University and linked institute in getting academic and research benefits by the way of collaborative research works, programmes, technology transfer, updating knowledge, training, etc. These collaborative researchers reinforced visible changes among the faculties' in terms of their ability to work in interdisciplinary concepts, increased and consistent participation in research and flexibility to co-ordinate with other players in contemporary research.

### **3.7.2 Mention specific examples of how these linkages promote**

#### *Curriculum development:*

- Linkages facilitate the collection of data and analysis, help identify opportunities and also feedback from linkages helps to improve curriculum
- In the proposal for B. Voc. (Food Processing Technology), Punjab Biotechnology Incubator and Centre for Innovative and Applied Bioprocessing have been identified as Partners. Our MoU with these organizations was very useful in facilitating such co-operation.
- Similarly, an MoU with Baba Farid University of Health Sciences was very helpful for partnership in another B. Voc. Proposal on Medical Techniques and Health Science

#### *Internship:*

- Linkages promote research and training opportunities for CUPB students and also promote the sharing of knowledge, resources and expertise between CUPB and partner organizations.
- Enhance the education and employability of students by building their knowledge, expertise and work skills through hands on training in real-life settings.
- The organizations in MoU with CUPB are always helpful in training internships for students

*On the job training:*

- Interns build up knowledge through their experience for the challenges ahead in life.
- List of the students who have been employed in different sectors and industries is given in **Table 3.15**.

**Table 3.15: List of Students employed in various sections**

S.No.	Name of Student	Centre	Organisation/Institution where employed
29.	Mr. Shokit Amin Poawal	(M.Phil.) Centre for Biosciences	School Teacher, Department of Education, State of Jammu and Kashmir, Srinagar
30.	Mr. Ashish Kumar Pandey,	(M.Sc.) Centre for Biosciences	Resident Engineer, Confocal Laser Scanning Microscope, Ms. DSS Imagetech, New Delhi, Placed at Imaging facility, CUPB
31.	Mr. Rajiv Kumar,	Centre for (M.Phil.) Biosciences	Scientific Assistant, Forensic Science Laboratory, Punjab Police Academy, Phillaur, Ludhiana.
32.	Deependra Kumar	M.Pharm.	Data Analyst Innodata, New Delhi
33.	Vinay Gupta	M.Pharm.	Technical Analyst Evalueserve, Gurgaon, New Delhi
34.	Prakriti Monga	M.Pharm.	Chemical Analyst Ind Swift, Chandigarh
35.	Nidhi Singh	M.Sc.	PGT teacher, Ghaziabad, UP
36.	Ramandeep Kaur	M.Sc.	Lecturer, Mata Sahib Kaur, college Talwandi Sabo
37.	Ashish Ranjan Dwivedi	M.Pharm.	Research Associate Integral Biosciences, New Delhi
38.	Anil Rana	M.Pharm.	Research Associate Integral Biosciences, New Delhi
39.	Vijayinder Saini	M.Pharm.	Research Associate Integral Biosciences, New Delhi
40.	Gagandeep Kaur	M.Pharm.	Data Analyst Parexal (Heron), Chandigarh
41.	Mayank	M.Pharm.	Pharmacist NRHM, Bathinda
42.	Gaurav Joshi	M.Pharm.	Project Fellow (UGC Major Project) Central University of Punjab
43.	Khushmeet	M.Tech (CST)	Inspector (Grade 1), Department of



	Singh		Food Civil Supplies and Consumer Affairs, Govt of Punjab
44.	Mandeep Singh	M.Tech (CST)	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab
45.	Amandeep Kaur	M.Tech (CST)	Junior Research Fellow (JRF), Terminal Ballistics Research Laboratory (TBRL) – Lab of Defence Research & Development Organization (DRDO)
46.	Krishan Singh	(M.PHIL.-Ph.D)Development Economics	Researcher, Planning Commission, Chandigarh
47.	Rajpreet Kaur	(M.PHIL.-Ph.D) Development Economics	Teacher, Govt. Sen. Sec. school, Pathrala , Bathinda
48.	Pushpinder Kaur	(M.PHIL.-Ph.D) Development Economics	Teacher, Govt. Middle School, Mandi Khurd,Bathinda
49.	Disha Bains	(M.PHIL.-Ph.D) Comparative Literature	Assistant Prof in English at K.M.R.D. Jain college, Malerkotla.
50.	Manpreet Kaur	(M.PHIL.-Ph.D) Comparative Literature	PGT-English , Govt. Adarsh Sen. Sec. School, Bukan Khan Vala, Ferozpur.

*Faculty exchange and development:*

- Professor R. Chibbar from University of Saskatchewan visited CUPB and delivered lectures.
- CUPB Faculty and students have the facilities of MoU partners open for use.

*Research:*

- In a proposal on climate change to be funded by IRDC, Canada, the University of Saskatchewan is our partner organization. MoU with this University was instrumental in building up this significant collaborative preposition.
- More possibilities of joint research, frequent exchange of students and Faculty, learning through discussions and exchange lectures are some of the many possibilities in joint research with MoU partners.

*Publications:*

Collaborations are filled with potential. Combined efforts of CUPB Faculty with scientists in partner organizations are certain to improve the quality of publications.

*Consultancy and extension:*

It is proposed to have joint consultancy projects in future.

*Student placement:*

Networks that are built through collaborations are concrete and helpful in students internships as also job placements.

**3.7.3 Has the university signed any MoUs with institutions of national/international importance/other universities/industries/corporate houses etc.? If yes, how have they enhanced the research and development activities of the university?**

Central University of Punjab, Bathinda understands the power of networking with peer institutions. MOU's have been developed between CUPB and other organisations nationally and internationally as in the *Table 3.16*. This has facilitated use of facilities at both the institutions and sharing of resources, exchange programmes, curriculum development, conducting training programmes, seminars, workshops and research activities. The faculty will also be able to take advantage of these MoUs through exchange of information on teaching, learning material and other literature relevant to their programmes.

**3.7.4 Have the university-industry interactions resulted in the establishment / creation of highly specialized laboratories /facilities?**

CUPB has a strong emphasis on university-industry interactions. The university has established a "University-Industry Forum" which includes small, medium, large and multinational industries. Five industries out of these form University-Industry council (*Annexure 1.4*). Both these are CUPB's advisory bodies in the matters related to curriculum development, research priorities, skill development, entrepreneurship development and students placement.

**Table 3.16: List of MOUs**

<b>S.No.</b>	<b>Name of organisations</b>	<b>Date</b>
1.	CSIR-Institute of Himalyan Bioresource Technology, Palampur	8.3.2013
2.	National Agri-Food Biotechnology Institute, Mohali	28.3.2013
3.	National Academy of Medical Sciences, New Delhi	19.8.2013
4.	Punjab Agriculture University, Ludhiana	20.9.2013
5.	Baba Farid University of Health Sciences, Faridkot	17.10.2013
6.	Centre of Innovative and Applied Bioprocessing, Mohali	17.1.2014
7.	Punjab Biotechnology Incubator, Mohali	3.2.2014
8.	Department of Plant Sciences, University of Saskatchewan, Canada	12.6.2015
9.	Centre for Research in Rural and Industrial Development, Chandigarh	26.6.2015

**MOU's as Institutional Social Reponsibility**

<b>S.No.</b>	<b>Name of organisations</b>	<b>Date</b>
1.	R.B.D.A.V. Senior Secondary School Bathinda	22.1.2015
2.	DAV College Bathinda	22.1.2015
3.	Silver Oak School, Bathinda	22.1.2015
4.	Shaheed Sandeep Singh Govt. Senior Secondary School, Bathinda	22.1.2015

**GUIDELINES FOR SUBMISSION AND IMPLEMENTATION OF  
RESEARCH PROJECTS FUNDED BY OUTSIDE AGENCIES**

**1. Applications for Research Schemes**

- i. All proposals for research schemes for submission to the sponsoring bodies should be forwarded through the Coordinator of the Centre to the Registrar. The Coordinator of the Centre will also indicate in the proposal those requirements of the schemes which may have to be met by the University to enable provision of the necessary facilities. Foreign exchange, if needed shall also be mentioned/spelt out.
- ii. All such proposals up to Rs. 10.00 lacs as total budget for the duration of the scheme where no financial liability on the part of University is involved shall be forwarded to the sponsoring bodies directly by the Registrar on the recommendations of Dean Academic Affairs. The prior approval of Vice-Chancellor in these cases will not be necessary.
- iii. The Principal Investigator (P.I.) may associate a Co-Principal Investigator (Co-P.I.), who will be responsible for execution of the project in the absence of the Principal Investigator. Invariably, the co-investigators of the project may be named in the proposal.
- iv. When a proposal is approved by the funding agency and sanction letter is received; approval from the Vice-chancellor will be sought for operation of the project at CUPB and its inclusion in the university budget. Subsequently, the project will be assigned a project code by the university.
- v. The date of commencement of the project shall be treated as the date on which the CUPB assigns a code to the project. The Principal Investigator will convey this date to the funding agency as the official date of commencement of the project.
- vi. The accounts branch shall maintain a separate account for each project and shall provide tracking facility to the P.I.
- vii. The budget of project shall be operated by PI and Co-PI (In absence of PI). The issue of cheques towards approved payments will be jointly under the signatures of PI/Co-PI (In absence of PI) and Registrar.
- viii. If the proposal is for a grant from a non-government organization, a statement on the terms and conditions of the grant including the rights of patents/royalties and commercial gains will be a part of the proposal.

- ix. If an MOU is to be signed with the Funding agency upon sanction of the project, exact terms and conditions of the MOU must be spelt out in the proposal.
- x. All records relating to each research proposal shall be maintained in the office of Dean Research/Dean Academic Affairs.

## **2. Provision for Posts**

- (i) The posts required under the scheme should be clearly specified in the proposal. After the proposal for the scheme is approved, it will not be necessary to obtain once again order of the Vice-Chancellor for creation of posts.

In case the proposal also includes research and supporting/secretarial staff.

- (ii) The posts provided in the proposal should preferably carry the scales of pay as required by the sponsoring authority. If there are no such requirements then the scales of pay should be identical to those of the corresponding posts in the university.
- (iii) The qualifications for the posts will be similar to those prescribed for the corresponding posts in the university.

## **3. Appointments**

- (i) For appointments to the posts under the scheme, applications should be invited by the Principle Investigator after due publicity regarding the vacancies, including, if necessary, a press advertisement in the newspaper (s).
- (ii) The applications will be processed by the Principle Investigator.
- (iii) Selection will be made by a committee consisting of the Centre Coordinator, the Principle Investigator and one more member of the Centre in the field (to be appointed by the Centre Coordinator in consultation with the Principle Investigator). In the case of a Senior position like Research Associate and above, the Committee will also include the Dean Academic Affairs.
- (iv) Unless required by the sponsoring authority; the Committee may make recommendation for appointment without interview. However, if the committee decides to interview the candidates, it may do so. No TA/ DA etc. will be paid to the outstation candidates called for interview for employment in the scheme. The Committee shall also make recommendation for the starting pay/emoluments to the successful candidate (s).
- (v) On the recommendation of the committee referred to at (iii) the services of specialists may be had without advertisement up to two years, from University/Govt./Research Institutions or Public or

Private Sector. Wherever services of such a person are acquired on deputation basis, the conditions of service may be regulated according to the standard terms of deputation as followed in the Central Government with the approval of the sponsoring body.

- (vi) The minutes shall be signed by all the members present. After the minutes are approved by the competent authority these shall be forwarded to the Registrar's office. The appointment letter (s) will ordinarily be issued by the Registrar office within three days of receipt of the minutes duly approved by the competent authority.
- (vii) Appointment of the staff in the scheme/project will be on temporary basis and shall not exceed the duration thereof. The staff will have no claim for regular appointment in the University on the termination of the scheme/project.
- (viii) The staff employed in the schemes will be governed by the same rules and conditions of service as applicable to the temporary employees of the university from time to time except in those schemes where the conditions of service have been laid down by the sponsoring bodies.
- (ix) The leave to the members of staff under the scheme will be admissible to the same extent as is admissible to the corresponding non-vacation employees of the university working in the non-vacation departments unless the sponsors specify otherwise. The scheme in-charge will be competent to sanction leave to the extent it is admissible.
- (x) The joining report of the selected candidate should be countersigned by the Principle Investigator and forwarded to the Registrar's office. A copy may be retained in the office of the Centre.

#### **4. Benefit of Provident Fund**

- i. The benefit of provident fund, if admissible under the scheme will be allowed to the employees in accordance with the rules of the University. At the time of sending proposals by the In-charge of the scheme to the University the provision for P.F. should be considered by him and clearly indicated in the budget.
- ii. In case there is no provision of Provident Fund in the scheme/project, no contribution towards General Provident Fund will be made.
- iii. Each project/scheme will be treated as individual set-up /institution especially with respect to labour laws.

#### **5. Payment of Honorarium to the Staff**

- i. Unless the scheme permits, the Principle Investigator or anyone else working on the establishment of the university shall not be entitled to

any honorarium or extra payment in the event of their being detained to supervise any project/scheme to be financed by the different organisations from the funds of the schemes.

## **6. Utilization of Project Funds**

- I. Diversion of funds from non-recurring to recurring as well as within non-recurring and recurring heads shall be done with the approval of funding agency only. Similarly, new equipment or posts may be added only with the approval of funding agency. Also, the unutilised grant from the previous financial year may be carried forward to the next financial year with the approval of the Vice-chancellor, unless required otherwise by the funding agency.
- II. The contingencies provided in the project may be used strictly as per the sub-heads in the sanction letter issued by funding agency. These contingencies may be used for: Travel within the country for project work, for attending conferences/meetings, registration fee of conferences, typing, photocopying, stationary, membership fee of professional bodies, postage expenses, computer peripherals and software, hiring of vehicles, hiring of casual labour for project work, purchase of minor equipment, repair of equipment related to the project, charges on advertisement of posts, travel of outside experts for work related to the project etc. Foreign travel may only be allowed if specifically provided in the project by the funding agency. The procedure as prescribed by the university for similar expenditures shall apply.
- III. Normally 15%, and in no case less than 10%, of the annual recurring costs of the project shall form “overhead charges” for each financial year. P.I. must make provisions for this while submitting a proposal. As a matter of principle, overhead charges are meant to offset the cost of electricity, equipment, university staff and other university facilities used in operating the project and shall therefore be added to “Overheads Scheme” to be maintained by the university. If there are no provisions made for overhead charges in the project, university may deduct 10% of the recurring contingency for the purpose.
- IV. It will be the responsibility of the P.I. to seek release of grants from funding agencies. For the purpose P.I. shall ensure timely preparation of Utilisation Certificate, Statement of Expenditure, Progress Reports and other documents that may be required by the funding agency from time to time.
- V. Any unspent grant shall be returned by the university to funding agency on completion of the project.
- VI. The “Assets” acquired out of the externally funded projects shall become the assets of the university after the completion of the

project, unless required by the funding agency otherwise, but these will remain with the P.I. for his research work at CUPB.

- VII. The Principle Investigator shall be allowed to exercise administrative and financial powers equivalent to COC for the project under his charge.
- VIII. The Principle Investigator shall submit project completion report within three months of the completion of the project or in accordance with the requirements of the funding agency. A copy of the completion report must be submitted to the Dean Academic Affairs for records and verification of financial details.
- IX. In all the matters not covered above, rules of the funding agency/clarifications provided by the funding agency shall apply.

## **7. Purchases**

- i. Purchases of stores (consumable and non-consumable) machinery etc. will be made according to the rules of the university. The In-charge of the scheme will exercise the powers of the Centre Coordinator for purchases under the scheme provided all the expenditure on the purchases is met from the scheme funds only.
- ii. Supply orders will be signed and issued by the In-charge of the scheme after scrutiny of the tenders/quotations obtained from various suppliers. The order will normally be placed with the supplier whose quotation is the lowest, unless, for reasons to be recorded the lowest or other lower tenders/quotations are not acceptable.
- iii. The orders placed will be subject to scrutiny by finance department or/and a committee constituted by the Vice-Chancellor.
- iv. The responsibility in respect of all such purchases and expenditure incurred as per the GFR applicable shall solely be that of the Principle Investigator.

## **8. Payment of Bills**

- (i) All bills in respect of the schemes (including bills for advances) will be signed by the in-charge of the scheme and sent to the Registrar's office duly completed in all respects, for payment. It will be the responsibility of the scheme in-charge to see that the bills are complete in all respects and are in order.
- (ii) Advances where necessary shall be made to the scheme in-charge who will be responsible for rendering the account of such advances.



- (iii) The investigator in-charge may be provided, with an impress not exceeding 10% of the contingency grant to meet the day-to-day contingent expenditure, according to the university rules.
- (iv) Payment of the bills will be made through the scheme in-charge by cheques drawn in favour of the parties concerned. He will keep a record of the cheques received/delivered.
- (v) The salary of the staff in the scheme will be drawn and disbursed by the scheme in-charge acting as the Centre Coordinator in the usual way.
- (vi) Where a part of expenditure on the purchase of articles for the scheme is shared by the university funds, the bills will have to be verified by the concerned Centre and approved also by the Centre Coordinator.
- (vii) T.A./D.A. in the scheme will be paid as per University Rules unless provided/approved otherwise in the scheme by the sponsors. For payment of charges for local conveyance, approval of the Investigator In-charge of the scheme as also The Centre Coordinator concerned will be necessary unless the scheme provides for such payments.
- (viii) In case the PI is to undertake travel himself/herself prior permission from the Vice Chancellor will be required that too subject to the conditions that: (a) it is not at the cost of teaching and/ or other duties of the university (b) it is not being clubbed with private work.
- (ix) The period spent by the Investigator in-charge or Investigators on field work relating to research work of the scheme should be treated as on professional duty, keeping in view their teaching assignments.
- (x) The project in-charge should be permitted to establish a field station, with the approval of sponsoring body.

## **9. Progress Reports**

The Principle Investigator shall prepare the technical and fiscal reports for each reporting period in accordance with the requirements of the scheme.

The following procedure may be followed in respect of the two reports :

- a. A six monthly report – both technical and fiscal shall be submitted by the PI to the Registrar.
- b. For fiscal reports, the statement of accounts and the estimates will be prepared by the scheme in-charge and sent to Registrar's office for checking with the records, maintained in Registrar's office. After due check and agreement of the figures, the fiscal reports will be signed by the Registrar and returned to the Principle Investigator for submission of the required number of copies to the sponsors.
- c. The technical reports duly prepared and signed by the Principle Investigator will be countersigned by the appropriate University

authority according to the provision of the scheme and submitted by the scheme-in-charge to the sponsors. A copy of the report shall also be sent to the Registrar's office and the concerned Centre Coordinator.

#### **10. Maintenance of Stock Registers**

- a. Each scheme should have separate stock Registers for consumable and non-consumable articles and these shall be registered with office of Registrar.
- b. Articles should be issued and properly entered in the stock Registers in accordance with the Guidelines laid down by the University for the departmental store.
- c. Balances should be worked out up-to-date every month.
- d. All entries in the stock books should be initialled by the scheme in-charge.
- e. Physical verification of stock should be done by two persons to be appointed by the Dean Academic Affairs at least, once in a year and the result thereof should be reported to the Dean Academic Affairs who will send it to the Registrar's office for record and action, if any.

#### **11. Closing of the Scheme/s**

A statement of final accounts showing the receipts and expenditure year-wise and a list of articles (consumable and non-consumable) left over at the time of termination of the scheme and purchased out of the scheme funds should be sent in triplicate to the Registrar's office in the prescribed proforma duly countersigned by the Centre Coordinator and verified by the **Resident Audit Section** of the university. These articles may be transferred to the stock Registers of the Centre except where the sponsoring bodies do not allow the concerned Centre to retain the articles without paying them the book value of the articles. The equipment transferred to the Centre shall be issued to the PI. In case the concerned Centre does not want these articles, the same will be auctioned through the Executive Engineer's office with sanction of the sponsoring bodies as well as the Centre Coordinator. The sale will be credited to the university. A report regarding the transfer of assets of the scheme to the concerned Centre and their disposal shall be made to the Vice-Chancellor through the Dean Academic Affairs, by the concerned Centre.

## **12. Publications and IPR Issues**

- I. The P.I. may publish results obtained in the project and acknowledge the funding agency for research grant.
- II. The Intellectual Property, royalties and commercial gains out of the research carried out in the project shall be subject to IPR policy of the university.

## **13. Disposal of Unserviceable Articles**

The University rules may be followed in the disposal of unserviceable articles purchased from scheme funds.

## **14. Power to Interpret & Implement Rules**

The Vice-Chancellor shall have the power to interpret these rules and to grant relaxation as may be necessary in any case and issue such administrative instructions as may be necessary to give effect to them.

### *Workshops*

National workshop on "**Training the Trainers: Water Quality and Health**" 11 February, 2015.

### *Training Programmes*

The Computer Literacy Programme for senior citizens was organised in 6 batches and 49 senior citizens participated in the programme. It consisted of six modules that were administered in 6 days. Participants were provided notes of learning modules in English, Hindi and Punjabi.

### *Sensitization Programmes*

- Prof. Alam A; India's Politico-economic Relations with its South and Central Asian Neighbours, April 17, 2012
- Dr. Banerjee A., Global Food Crisis: Magnitude and Causes, April 20, 2012
- Dr. Singh G; Miranpuri, Spinal cord injury and cervical degenerative myelopathy, April 25, 2012.
- Prof. Gill S. S., Distribution of income in post-reform (post globalisation) period, May 08, 2012.
- Dr. Bhardwaj A., Polysubstituted Tetrahydropyrans and Nitric Oxide Releasing Prodrugs as Safe Anti-inflammatory and Anti-hypertensive Agents: Synthesis and *In-vitro/In-vivo* Biological Investigations, Sept 24, 2012.
- Prof. Kaushik C. P., Protecting our atmosphere for Generations to come, Sept 26, 2012.
- Dr. Ram B; Environment Issues and their Management, November 27, 2012.
- Prof. Singal A.K., Absolute Motion of the Earth in the Universe, 21-Dec-2012.
- Dr. Sharma S., Developing a Tool to Determine Potential Ligand Binding Sites on Macromolecules, Jan 10, 2013.
- Dr. Deeksha Bali, Glycogen Storage Diseases: Common Disease Types and Challenges in their Management, April 12, 2013.
- Prof. Moin Uddin, Application of ICT in Mobile Health Care System, May 13, 2013.
- Prof. S.K. Salwan, Nature is the best designer, May 13, 2013.
- Prof. A.P. Pathak, Ion Beam Studies of Nano Materials, May 17, 2013.
- Prof. Chakraborti A.K; Medicinal Chemistry Education and

Research: The Necessity and Pitfalls, April 4, 2014.

- Prof. Chakraborti A.K; Enriching the Medicinal Chemist's Tool Box: Emerging Trends and Paradigm Shift in Discovery Chemistry, April 4, 2014.
- Prof. Chakraborti A.K; Sustainable Chemistry for Novel Anti-inflammatory Scaffolds, April 4, 2014.
- Dr. Singh I.P; Isolation and structure elucidation of natural products, March 28, 2014.

International Biodiversity Day Celebration (May 22, 2013):

- Prof. Brar D.S; Utilization of Genetic Resources for Increasing Productivity and Sustainability of Crops.
- Prof. Jai Rup P, Biodiversity and Insects.
- Prof. Joshi P.K, Biodiversity: That Sustains Life.
- Dr. Gandhi B.M., Funding Opportunities and Effective Grant Writing, May 29, 2013.
- Prof. Bismillah A., The status of Hindi Language and Literature in India, 28-June-2013.
- Prof. Tikoo A; Taming of Self Penetrating Domain of HIV Tat Protein, December 05, 2013.

World Cancer Day Observed:

One day symposia on "Recent Trends in Cancer Therapy" was organised to mark the "World Cancer Day" on 4 February, 2014.

- Prof. Malhotra A.K; Positron Emission Tomography.
- Dr. Sekhon J.S; Advances in Targeted Therapies in Cancer.
- Dr. Kang N; Integrated Approach in Cancer Diagnosis and Therapy.
- Dr. Vashishta R; Prevention and Early Detection of Cancer.
- Dr. Bal M.S; Cancer Registry in Punjab.

Foundation day Lectures (28 Feb, 2014):

- Shri Chander A; Evolution of futuristic technologies which shall create new and unseen challenges for the national security.
- Prof. Salwan, S.K; The Philosophy Underlying Universities.

Recent Trends in Molecular Medicine (5 December, 2014)

- Dr. Bachhawa A; ER Stress, Apoptosis and Glutathione degradation connecting the dots.
- Prof. Tyagi R; Cellular Transcriptional Memory: Nuclear Receptors as Epigenetic Marks.
- Dr. Mahajan M.K; Understanding cancer-A Paradigm Shift.

- Dr. Dhar S; Unique properties of DNA replication and cell cycle regulation in human malaria parasite *Plasmodium falciparum*.
- Dr. Agrewal J; Challenges and solutions for a rational vaccine design for TB-endemic regions.

Second Innovators Day (22 January, 2015):

Dr. Marwaha S.S; Innovations in food and Safety Issues.

Faculty Seminars (October 2012- till date):

Interdisciplinary CUPB Faculty Seminar

- Dr. Singh S., Cell signalling and cancer, Human Genetics.12-Oct-2012.
- Dr. Arora H.R., Readressal Mechanism for Consumer Disputes, Centre for Environmental Law, 19-Oct-2012.
- Dr. Pathania V. K., Some development in Green Chemistry and Medicinal Chemistry (CNS active agents & anticancer compounds), Centre for Chemical and Pharmaceutical Sciences. 26-Oct-2012.
- Dr. Singla N. K., Inclusive fresh food retail chains in India: A case study from Punjab, Centre for Economic Studies. 02-Nov-2012.
- Prof. Jain A. K., Alternate Energy Technologies and their Current Status, Centre for Environmental Science and Technology. 12-Nov-2012.
- Dr. Brar A., Environment and Literature: A study of Balbir Parwana's select Fiction, Centre for Comparative Literature.16-Nov-2012.
- Dr. Arora P., Human Genetics. 23-Nov-2012.
- Dr. Chauhan D., Environmental Sustainability: The Emerging Discourse of Judicial Activism in India, Centre for Environmental Law. 28-Dec-2012.
- Dr. Holla H., Natural Products in Drug Discovery: Some Recent Results, Centre for Chemical and Pharmaceutical Sciences. 08-Jan-2013
- Dr. Kaushiki N., Japanese Foreign Aid: Role of JICA in India, Centre for South and Central Asian Studies. 11-Jan-2013
- Dr. Mantha A. K., Protection of Neurons from Oxidative Damage, Centre for Biosciences. 18-Jan-2013
- Dr. Pathak P., International human Rights Law: From Conceptualization to Realization, Centre for Environmental Law. 01-Feb-2013.
- Dr. Sen R., Dalit Discourse and Regional Novel in Hindi Literature, Centre for Comparative Literature. 08-Feb-2013
- Er. Sethi G., Computer Centre: Some Initiatives & Way Forward, Centre for Computer Sciences. 08-Mar-2013.

- Dr. Varghese V.J., Geographies of Mobility and Development: Migrations, Internal and International, Centre for South and Central Asian Studies. 15-Mar-2013
- Dr. Dhiman M., Role of Oxidative Stress and Inflammatory Responses in Cancer, Centre for Biosciences. 22-Mar-2013
- Dr. Singh B., Maritime Threats in Indian Ocean: Reciprocation of Indian Navy Centre for South and Central Asian Studies. 02-April-2013
- Dr. Bhardwaj P., Genomics and Biodiversity: A way ahead, Centre for Biosciences. 05-April-2013
- Dr. Singh K., Land Degradation Assessment: Application of Geospatial Information Technology, Centre for South and Central Asian Studies. 12-April-2013.
- Dr. Babu J.N., Semi volatile organic compounds monitoring in ambient air, Centre for Environmental Science and Technology. 19-April-2013.
- Dr. Thakur S., Stress or climate change: Current scenario of an orphan crop Centre for Biosciences. 26-April-2013.
- Dr. Pandey P., Urban Heat Island: Assessment Using Geospatial Technology. Centre for Environmental Science and Technology 03-May-2013.
- Dr. Saini A., Subjectivity, Indian Drama and Translation, Centre for Comparative Literature. 10-May-2013.
- Dr. Yogalakshmi K N., Membrane Bioreactors: A Key Technology for Wastewater Reclamation and Reuse, Centre for Environmental Science and Technology. 24-May-2013.
- Dr. Jaitak V., Evolving Role of Natural Products in Drug Discovery, Centre for Chemical and Pharmaceutical Sciences. 12-Jun-2013.
- Dr. Kumar R., Small Molecules and their Activities, Centre for Chemical and Pharmaceutical Sciences. 13-Jun-2013.
- Dr M. S. Dhanya, Sustainable Bioenergy Production by Biochemical Conversion Routes, Centre for Environmental Science and Technology. 17-Jun-2013.
- Er. Kaur A., Security issues in Networks, Centre for Computer Sciences. 27-Jun-2013.
- Er. Mittal M., Challenges and Security issues in VANET (Vehicular Ad-hoc Network), Centre for Computer Sciences. 28-Jun-2013.
- Dr. Sharma A. L., Nanostructured Plastic Separator for Renewable Energy Applications. Centre for Physical and Mathematical Sciences. 05-Jul-2013.
- Er. Seeker S., Cyber Security: Threats and Countermeasures, Centre for Computer Sciences. 12-Jul-2013.

- Dr. Prakash J., Effect of nano-materials on the electro-optical properties of ferroelectric liquid crystals and their applications. Centre for Physical and Mathematical Sciences. 19-Jul-2013.
- Dr. Devi S., Heavy Ion Fusion and Transfer Reactions around the Coulomb barrier. Centre for Physical and Mathematical Sciences. 26-Jul-2013.
- Dr. Giri K., Chemical Dynamics of Certain Small and Large Systems, Centre for Computational Sciences. 22-Aug-2013.
- Prof. Singh D.D., Unravelling the Systems Interactome: Are the Technologies there, Centre Genetic Diseases and Molecular Medicine. 20-Dec-2013.
- Dr. Gupta P., Computer Aided Drug Design and its Applications, Centre for Computational Sciences. 27-Dec-2013.
- Dr. Singh K., Sources of India's Export Performance during the Post Reforms Period: A Constant Market Share Analysis, Centre for Economic Studies. 03-Jan-2014.
- Prof. Chaman Lal, World Hindi Day: Hindi as a World language, Centre for Comparative Literature. 10- Jan-14.
- Dr. Kulharia M., Understanding Bioinformatics: Transforming Data - Information – Knowledge, Centre for Bioinformatics. 24-Jan-2014.
- Er. Sethi G., Computer Centre Marching Ahead, Centre for Computer Sciences. 31-Jan-2014.
- Dr. Chandra H., Novel Targets of Tumor Suppressor p53 Gene in Breast Cancer, Centre Genetic Diseases and Molecular Medicine. 07-Mar-2014.
- Er. Brar S., Low Power Very Large Scale Integration (VLSI) Design, Centre for Computer Sciences. 14-Mar-2014.
- Dr. Munshi A., Stroke: The Brain Attack, Centre for Human Genetics, 21-Mar-2014.
- Er. Sood N., Subversion Management Techniques, Centre for Computer Sciences. 28-Mar-2014.
- Dr. Kamlesh Yadav, Magnetic properties of doped Perovskite Manganites, Centre for Physical and Mathematical Sciences. 04-April-2014.
- Er. Navjot Kaur, Distributed Denial of Service Attacks: An Internet Disaster, Centre for Computer Sciences. 11-April-2014.
- Dr. Satvinderpal Kaur, Right to Education Act (2009) and School Dropout at Elementary Stage, Centre for Education. 25-April-2014.
- Dr. Atar Singh Yadav, Impact of Human Disturbances on Biodiversity, Centre for Biosciences. 02-May-2014.
- Dr. Ramanpreet Kaur, Human Language: Semiotic and Structural Components, Centre for Punjabi Language, Literature and Culture.



### Policy for visiting Professors

The following Committee constituted by the Executive Council during its fifth meeting, vide Item No. EC:5:2011:4.2.4.5, to rationalize the emoluments and other terms of appointment for the senior faculty/officials met on 28<sup>th</sup> May 2012 at 2:30 p.m. in the office of Prof. G.K. Chadha at Akbar Bhawan, New Delhi:

1. Prof. Dr. Jai Rup Singh, Vice Chancellor, CUP, Bathinda
2. Prof. G.K. Chadha, President, South Asian University, New Delhi
3. Prof. Seyed E. Hasnain, Indian Institute of Technology, New Delhi

The Committee noted that, the Academic Council vide Item No. AC:1:2009:5, the Executive Council vide Item Nos. EC:2:2010:7 and EC:4:2011:3, and the Finance Committee vide Item No. FC:2:2011:8 have all resolved that all kinds of incentives including higher emoluments and other facilities be offered by the University to attract senior and experienced faculty. It also took note of the recommendations of the two Committees constituted by the university to frame rules for pay fixation.

Considering the resolutions of various Statutory Bodies, the recommendations of university committees, the difficulties being faced by the University in attracting senior faculty, and also the prevalent shortage of senior faculty in India as such, the observations and recommendations of the Committee are as follows:

- The Committee strongly feels that for the healthy growth of the University, it is essential to have some senior academicians in the University. The presence of such members is a must to provide right direction and leadership in the different disciplines that have been initiated by the CUP.
- In order to attract senior professors, the Committee is of the strong view that the eminent and competent senior faculty would need to be invited by the university by offering them an attractive designation and a reasonably decent consolidated pay package. The amount of pension received by the incumbents should not be deducted from the fixed emoluments being offered. Without such incentives, it will be almost impossible to persuade senior people to join the University at Bathinda on contractual basis.
- Distinguished Professors: The Committee recommends that persons who have made significant contribution in academics in a particular area and have held high academic positions like those of Vice Chancellor, Pro-Vice Chancellor, Directors of national level Institutes, Emeritus Professors of U.G.C., C.S.I.R., I.C.A.R., I.C.M.R. or any other National level body be invited by the university and designated as Distinguished Professors. They be offered a consolidated amount of Rs. 1,25,000/- per month. The

university may also consider offering them some additional facilities in kind.

- Invited Professors: It is recommended that the other senior professors, with appreciable contributions in their fields, who have retired from universities/national level institutions be persuaded to join the university as “Invited Professors” and offered consolidated emoluments of Rs. 1,00,000/- per month. The university may also consider offering them some additional facilities in kind.
- Visiting Professors: The committee feels that the ‘Visiting Professors’ be appointed following the existing guidelines of the U.G.C.
- Associate Professors or Equivalent: The Committee feels that retired academicians may not be normally appointed as Associate Professors on contractual basis. However, if there is need for such persons in the university, then they may be suitably designated such as Museum Coordinator; Museum Curator; Incharge Computer Centre, Incharge Library, Associate Economist, etc. Such academicians/professionals be offered consolidated emoluments of Rs. 70,000/- to Rs. 75,000/- per month.
- The rationale followed for working out the emoluments is as given below: -
  - a) A Senior Professor at the time of retirement at Bathinda would be receiving about Rs. 1,45,000/- per month [Band Pay (Rs. 67,000/-) + Grade Pay (Rs. 10,000/-) + DA @ 65% (Rs. 50,050/-) + HRA @ 20% (15,400/-) + TA (Rs. 2640/-) = Rs. 1,45,090/-]. The Fellows of National Academies and those retiring from Class ‘A’ cities would be receiving still higher emoluments at the time of their superannuation.
  - b) Similarly, a senior Associate Professor at the time of retirement at Bathinda would be receiving about Rs. 1,43,000/- per month [Band Pay (Rs. 67,000/-) + Grade Pay (Rs. 9,000/-) + DA @ 65% (Rs. 49,400/-) + HRA @ 20% (15,200/-) + TA (Rs. 2640/-) = Rs. 1,43,240/-].

Therefore, in order to attract the senior academicians to come to Bathinda to join the Central University of Punjab, the emoluments being proposed are fully justifiable.

- Appointments be made against existing positions: The appointment of “Distinguished Professors” and “Invited Professors” can be made against the existing vacant positions of Professors as their emoluments do not exceed than that of a regular Professor. Similarly, the appointment of Associate Professor and equivalent positions can be made against the existing vacant positions of Associate Professors.

**Annexure 3.4**

<b>S. No.</b>	<b>Name of Student</b>	<b>Batch</b>	<b>Achievement</b>
<b>Centre for Biosciences</b>			
1.	Shweta Thakur	2010-11	ICMR JRF 2012
2.	Sarabjeet Kour Sudan	2011-12	DBT JRF 2012
3.	Aijaz Ahmad John	2011-12	CSIR JRF (June 2012)
			CSIR NET (Dec.-2012)
4.	Navgeet	2011-12	CSIR UGC NET (Dec-2012) GATE 2012 & 2013
5.	Satej Bhushan	2011-12	CSIR UGC NET (Dec. 2012)
6.	Navrattan Kaur	2012-13	ICMR JRF (2012)
			GATE-2012
			CSIR-NET 2013
7.	Amandeep	2012-13	DST INSPIRE 2012
			GATE 2013
8.	Rashmi Saini	2012-13	GATE 2012
			ICMR-JRF 2013
9.	Shishir Upadhyay	2012-13	GATE 2012
			CSIR-NET 2013
			ICMR-JRF 2014 (15 <sup>th</sup> Rank)
			CSIR-JRF 2014 (61 <sup>st</sup> rank)
10	Balraj Singh Gill	2011-12	MANF 2011
			GATE 2011
			CSIR-NET 2011
11.	Richa Mehra	2012-13	GATE 2012
			CSIR-NET 2013
			ICMR-JRF 2014 (37 <sup>th</sup> Rank)
12.	Renu	2012-13	GATE 2013
			ICAR-NET March 2014
			ICAR-NET June 2014
			CSIR-NET 2014
13.	Sapna Thakur	2012-13	GATE 2013
			ICAR SRF 2012
			ICMR-JRF 2013
			ICAR-NET June 2014
14.	Shruti Chaudhary	2012-13	CSIR-UGC-JRF 2013
15.	Raooof Ahmad Najjar	2012-13	ICAR-NET March 2014

16.	Pushpendu Kundu	2013-14	ICAR-NET March 2014
17.	Aasim Majeed	2013-14	CSIR JRF 2014 (54 rank)
18.	Kunj Bihari Gupta	2013-14	CSIR-NET 2014
19.	Arindam Adhikary	2012-13	ICAR-NET June 2014
<b>Centre for Environment Sciences &amp; Technology</b>			
1	Upma Vaid	2009-10	UGC NET SET (June and Dec. 2012)
2	Gajendra Singh Viswakarma	2009-10	JRF DST (Project)
			UGC NET (June. 2012)
3	Anamika Das	2009-10	UGC NET Dec. 2012
4	Gurpreet Kaur	2010-11	UGC NET June 2012
5	Nandini Gautum	2010-11	UGC NET Dec. 2012
6	Amita Bhatti	2011-12	CSIR-UGC NET June 2012
			RGNF 2012
			GATE 2012
7	Navneet Kaur	2011-12	UGC Dec.2012
8	Annu Sharma	2011-12	UGC-NET
9	Disha Mishra	2011-12	UGC JRF Dec. 2011
10	Rishikesh Singh	2011-12	UGC JRF June 2012
11	Harmandeep	2012-13	DST Inspire 2012-13
12	Gulam Nazar		ICAR-NET 2013
13	Amit Kumar		ICAR-NET 2013, UGC-JRF 2013
14	Shashi Ranjan		UGC-JRF December, 2013
15	Vijay Jaswal	2013-14	ICAR-NET 2014
16	Gini Rani	2013-14	UGC-NET, RGNF 2015
<b>Centre for South Central Asian Studies</b>			
1	Maninderjit Singh	2010-11	UGC NET (Dec-2012)
2	Kovid Kumar	2010-11	UGC-JRF (2011)
3	Mohammad Arif	2011-12	UGC NET (June 2012)
4	Amandeep Kaur	2012-13	MANF (2012), UGC-NET
5	Mohd. Hussain Naik		UGC-NET December, 2013.
6	Amritpal Singh		UGC-NET
<b>Centre for Comparative Literature</b>			
1	Yeshpal	2009-10	UGC NET June 2012
2	Barjinder Singh	2010-11	UGC-JRF- JUNE 2013
3	Chitra	2011-12	UGC NET Dec. 2013

4	Vandana Bathla	2011-12	UGC NET Dec. 2012
5	Rajpal	2011-12	UGC NET Dec. 2012
<b>Centre for Economic Studies</b>			
1	Harmeet Kaur	2014-15	UGC-JRF 2014
2	Ramandeep Kaur		UGC-NET 2014
3	Vinish	2013-14	UGC-NET 2014
4	Nadeem	2013-14	UGC-NET 2014
<b>Centre for Environment Law</b>			
1	Ramandeep	2011-12	UGC NET (Dec. 2012)
2	Abhishek	2011-12	UGC NET (Dec. 2012)
<b>Chemical and Pharmaceutical Sciences</b>			
1	Arvind Negi	2011-12	GATE2013
2	Ramit Singla	2011-12	GPAT 2011
3	Monika Chouhan	2011-12	GPAT 2011
4	Yashika Bhalla	2011-12	GPAT 2011
5	Jimi Marin Alex	2011-12	GPAT 2011
			MANF
6	Prakriti Monga	2011-12	GPAT 2011
7	Deependra Kumar	2011-12	GPAT 2011
8	Vinay Kumar Gupta	2011-12	GPAT 2011
9	Archna Khyap	2013-14	GPAT 2013
10	Shevani Sharma	2013-14	GPAT 2013
11	Jagpreet Singh	2013-14	GPAT 2013
12	Sapna Kumari	2013-14	GPAT 2013
13	Bhupender Kumar	2013-14	GPAT 2013
14	Vivek Parkash Gupta	2013-14	GPAT 2013
15	Pankaj Kumar Singh	2013-14	GPAT 2013
16	Joyti Dandriyal	2014-15	GPAT 2014
17	Manavendra Bhatt	2014-15	GPAT 2014
18	Harmeet Kaur	2014-15	GPAT 2014
19	Gaurav Sharma	2014-15	GPAT 2014
20	Gaurav Joshi	2012-13	GPAT 2012
21	Ashish Ranjan Dwivedi	2012-13	GPAT 2012
22	Sheetal	2012-13	GPAT 2012
23	Vijayinder Saini	2012-13	GPAT 2012
24	Mayank	2012-13	GPAT 2012
25	Gagandeep Kaur	2012-13	GPAT 2012

<b>Centre for Computer Science and Technology</b>			
1	Deepika Dhiman	2012-13	GATE 2013
2	Khushmeet Singh	2012-13	GATE 2012, 2013
3	Amandeep Kaur	2012-13	GATE 2012
4	Ruby Goel	2012-13	GATE 2012
5	Kanika	2012-13	GATE 2012
	Shifali Hans	2012-13	GATE 2012
6	Mandeep Singh	2012-13	GATE 2012
7	Amandeep Kaur		GATE-2014
8	Kanika		GATE-2014
9	Siddharth Kumar		GATE-2014
10	Rinku		GATE-2014
11	Amita Get	2013-14	GATE-2013
12	Dharamveer	2013-14	GATE-2013
13	Gaurav Kumar	2013-14	GATE-2013
14	Pankaj Kumar	2013-14	GATE-2013
15	Vicky Kumar	2013-14	GATE-2013
16	Suchismita Mahato	2013-14	GATE-2012, 2013
17	Saurav Kr. Gupta	2013-14	GATE-2013
18	Komal Rani	2013-14	GATE-2013
19	Rohit Goyal	2013-14	GATE-2013
20	Meenu Singh	2013-14	GATE-2013
21	Rajshree Purohit	2013-14	GATE-2013
22	Rajiv Kumar	2013-14	GATE-2013
23	Shrikant Saini	2013-14	GATE-2013

CSIR = Council of Scientific and Industrial Research

UGC = University Grants Commission

GATE = Graduate Aptitude Test

GPAT = Graduate Pharmacy Aptitude Test

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)  
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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
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Ref. No: CUPB/CC/15/EC-15/33

Dated: 06-8-2015

### NOTIFICATION

In pursuance to Item No. EC:15:15.:40 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:35) is hereby conveyed for establishment of **Intellectual Property Right Cell (IPR Cell)**. The Ordinance Governing **Intellectual Property Right Cell** is enclosed for reference and records.

Further to the above approval of the Competent Authority is conveyed for the constitution of the Intellectual Property Cell (IPR Cell) comprising of members as detailed hereunder:

1. Prof. R.G. Saini, Invited Professor, **Chairperson**
2. Prof. A. K. Jain, Dean SEES
3. Dr. Sunil Mittal, Assistant Professor
4. Dr. Jai Prakash, Assistant Professor
5. Dr. Preeti Khetarpal, Assistant Professor - **Convener**

This is issued with the approval of the Competent Authority

## ORDINANCE GOVERNING INTELLECTUAL PROPERTY RIGHTS POLICY

### 1. Preamble

The **Central University of Punjab** (hereinafter referred to as University) is dedicated to teaching, research and transfer of knowledge to public for their betterment and taking appropriate measures for promoting innovations in teaching-learning process, interdisciplinary studies and research. The University is committed to provide encouraging atmosphere to researchers and to reward them for their efforts.

Therefore, in order to establish the respective rights and obligations regarding Intellectual Property of the University, its students, faculty and employees, the University is adopting this ordinance governing Intellectual Property (hereinafter referred to as the “Policy”).

### 2. Commencement of the Ordinance:

The ordinance shall come into effect from the date of its approval by the competent authorities, but it shall cover all the intellectual property generated at the University since its inception in 2009.

### 3. Definitions:

<b>Central University of Punjab or University</b>	Central University of Punjab established under the Central Universities Act, 2009
<b>Intellectual Property (IP)</b>	Property generated out of the intellectual effort of the creator and it includes patents, copyrights, trademarks, industrial designs, service marks, logos and any other form.
<b>Creator (s)</b>	The faculty, staff and other persons employed by the University whether full or part-time; visiting faculty and researchers; and any other persons, including students, who create intellectual property using University resources.
<b>Student</b>	All candidates registered for courses leading to a degree, diploma or certificate
<b>Externally funded project staff</b>	Shall include all research staff appointed in the externally funded projects
<b>University – Supported Resources</b>	Shall include all facilities, equipment, funds and intellectual property already owned by the University
<b>Technology transfer activities</b>	Shall include assignments, disclosure, licensing or any other activity which results in financial gain to the University



#### **4. Scope of the Ordinance:**

The ordinance governing Intellectual Property Policy shall apply to all faculty members, staff, externally funded project staff and students of the university as well as all others involved in generation of intellectual properties at the University. Students and other staff working on research projects at the University requiring university assistance or utilization of University resources shall be required to agree in writing to recognize and adhere to this policy.

#### **5. Application:**

This policy as amended from time to time shall be deemed to be a part of the conditions of employment for every employee and a part of the conditions of enrolment and attendance at the University for students.

#### **6. Creation of Intellectual Property:**

Intellectual Property can be created in the University in the following ways:

- i) Creator may develop Intellectual Property during the course of his/her research or as a specific project.
- ii) A student may develop intellectual property in order to earn a degree, a diploma or a certificate course in the University.
- iii) University undertaking an assignment either from an external agency or by its own decision assign a team of its researchers to accomplish it.
- iv) An external agency may enter into a specific agreement with the University or its researchers to develop some specific intellectual property.

#### **7. Ownership of Intellectual Property:**

##### **7.1 General statement of ownership.**

Subject to the exceptions mentioned hereinafter in clause 7.2, all Intellectual Property (in both tangible and intangible forms) created by the use of University facilities or University- supported resources shall be owned by the University and the creator of intellectual property jointly. Any copyrightable work generated as a work for hire will belong to the University as per the terms of the contract. Intellectual Property Rights of which the university is the co-owner shall be managed by the Intellectual Property Cell of the university as per provisions of this policy.

## **7.2 Exceptions to the general statement of ownership:**

The University will not own the right of Intellectual Property in the following situations:

- i) Books, articles, monographs, lectures, speeches and other communications produced by the staff in the course of research and teaching in the University.
- ii) All copyrights in term papers, research papers, thesis and dissertations written by a student to earn a degree shall belong to the student.
- iii) All Intellectual Property developed by the creator without the use of University resources.

## **8. Responsibilities of the University**

The University administration shall:

- i) at its discretion assign management including registration of intellectual property, negotiations, assignment and licensing for commercial use of such intellectual property in which it has stake/share.
- ii) educate faculty members, staff and students regarding University's intellectual property, provide support to creators to obtain legal protection in which University has its stake/share, facilitate the transfer of such Intellectual Property for commercialization, and share income derived from such Intellectual Property.
- iii) provide legal support as it deems necessary and desirable for the enforcement of its intellectual property and to defend the interest of the University against third party claims on intellectual property in which university has its stake/share.

## **9. Responsibilities of the creators of Intellectual Property**

The creator of the intellectual property shall

- i) make disclosure in a thorough and timely manner of all inventions, discoveries and other works that can constitute Intellectual Property and in which University has stake/share as described in this ordinance.
- ii) provide such assistance as may be necessary throughout the assignment process to protect and transfer of Intellectual Property.
- iii) provide all records and documents that are necessary to the protection of the Intellectual Property.
- iv) abide by the agreements made in respect of the sponsored research and licensing in accordance with this ordinance.

- v) have further responsibility to properly consider, disclose and manage any conflicts of interest arising in the ownership of Intellectual Property in which the University has stake/share.

#### **10. Administration of Intellectual Property**

- i) Intellectual Property generated through University projects or sponsored projects will be governed by the terms of agreement between the University and the sponsor.
- ii) Handling of the rights of Intellectual Property generated during the course of the externally funded projects shall be governed by the terms of contract between the funding agency of the project and the University.

#### **11. Intellectual Property Rights Cell (IPR Cell)**

- i) There shall be an Intellectual Property Rights Cell (IPR cell) for the management of the Intellectual Property in which the University has stake/share, technology transfer activities and for the implementation of the Intellectual Property Rights Policy. The IPR cell shall also look after the registration, protection, management, budget and division of intellectual property income between creators, University and external funding agency if any. The IPR Cell shall make recommendations to the competent authority that will be final authority to decide on its sharing among stake holders.
- ii) The IPR Cell shall lay down the procedure for conduct of its business and meeting of the IPR Cell shall be convened by the Chairman.
- iii) The University shall provide adequate space, funds and secretarial staff for the smooth functioning of the cell.

#### **12. Share of University, creator and others if any**

- i) The moral rights associated with Intellectual Property shall always remain with the inventor. These rights include the right of fair attribution of creation and right to prevent usage of the Intellectual Property in such a way that it harms the reputation of the creator.
- ii) Royalty accruing or any type of payment received from the commercialization of University owned intellectual property will be shared between the University and the creator as per schedule I.

#### **13. Dispute Resolution**

Any disputed issue related to the intellectual property or the interpretation of this ordinance, shall be decided by as follows:

- i) the matter can be resolved by calling a joint meeting with all the members of the IPR Cell, creator, funding agency if the intellectual property has been created by using its resources or any third party.

- ii) Any disputed issue that cannot be resolved with the assistance of the IPR Cell shall be referred to a tribunal of arbitration at the instance of the competent authority of the university or at the request of the creator or any third party. The tribunal shall consist of one member appointed by the Vice-Chancellor, one member nominated by the grieved party and the Dean faculty of law or his/her nominee.

**14. Right to regulate policy**

The University Intellectual Property Rights Cell shall have the responsibility for interpreting the IPR policy, resolving disputes concerning the interpretation and application of these policies and recommending changes to the policy. All changes to this policy shall have to be ratified by the competent authority.

**15. Amendments**

The University reserves the right to amend this ordinance at any time as required. The Executive Council upon recommendation of the Intellectual Property Rights Cell may amend these ordinances.

**16. Logo and Emblem of University**

The logo of the university is the exclusive property of the university. No person can utilize the logo and of the University for any commercial purpose without prior permission of the competent authority.

## Schedule I

The revenue generated from the Intellectual Property and technology transfer activities shall be distributed as follows:

- i) When University is the creator, the income from commercial economic use of Intellectual property shall be shared amongst the University, research team members or creators and support staff as 60%, 35% and 5% respectively.
- ii) When the individual researcher or a team of researchers is the creator and has used substantial university resources, the revenue shall be shared amongst the individual researcher/team of researcher, the University and support staff as 60%, 35% and 5%, respectively.
- iii) When the creation is the result of funded research, the sharing of income from commercial use shall be as per the agreement with the funding agency.
- iv) When the creation is the result of sponsored research by a company, industry or commercial undertaking other than the government funding agencies, the income receivable from the commercial use shall be as provided in the licensing agreement with that company, industry or commercial undertaking.
- v) The shares as mentioned above shall be determined after deducting the direct expenses if any from the total income received by the University.
- vi) The creator share would be declared annually and disbursement shall be made to the creator or their legal heir, whether or not the creators associated with the University at the time of disbursement.

### GUIDELINES TO CHECK PLAGIARISM

These guidelines are developed for faculty, students, researchers and all others associated with generation of Intellectual property at Central University of Punjab, Bathinda (CUPB), and aim at promoting originality and checking plagiarism.

- All cases of plagiarism at CUPB, no matter how minor, will be viewed seriously.
- For definition of plagiarism and related issues, the document circulated by turnitin.com (**Annexure-IX**) will be followed in CUPB.
- The students and faculty will be made aware of the information on Plagiarism as contained in this document.

Other guidelines related to plagiarism policy are as below:-

1. Plagiarism reports must be generated by available software at the time of submission of Ph.D. thesis/ research reports/ credit assignments and other documents claimed as original.
2. The exclusion at the time of performing the check should be limited to the following:
  - a) Quotes
  - b) Bibliography/References/Citations
  - c) Phrases
  - d) Small matches upto 10 words
  - e) Format
  - f) Ideas/works or language of the lab/team/group or the supervisor(s)
  - g) Small similarity less than 1%
  - h) Mathematical Formula
  - i) Name of Institutions, Departments etc.
3. In case of self-plagiarism or cases where published work of a researcher from the lab/group etc. is shown by Plagiarism check, a certificate (Plagiarism Self Exclusion Certificate, Annexure) has to be issued by the Supervisor specifying and attaching the articles that have been published by the student from thesis work. Only these articles should be excluded from the check. No other article of the Supervisor or the student should be excluded from the check. This will be for reference of the library which will perform the final check.
4. The final Plagiarism check from the library is essential so that the correct report is submitted at the time of submission of thesis/ other documents.

5. For Ph.D. thesis, the University library will issue the final certificate of Plagiarism Check called the Plagiarism Verification Certificate (Annexure), certifying and authenticating the check performed by the student/Department. This certificate has to be submitted to the Exam Branch at the time of submission of thesis along with certificate from the students, signed by Supervisor (Annexure)

### **Guidelines for action when Plagiarism is reported**

When a case of plagiarism is reported the following procedure will apply:

- The Vice Chancellor of CUPB will form a committee of experts, from within or outside the university, who will establish whether there is a plagiarism or not, if it is then there, what is the level. This committee will submit its report to the competent authority for a final decision in this regard.
- The committee will use the best possible software provided by UGC, INFLIBNET or National Knowledge Commission or specified or made available by the university for detecting the plagiarism.
- The onus of plagiarism shall rest with the student in case of PhD thesis and on the first author in case of a research paper.
- Depending on the severity of crime a student may be awarded any of the following punishments:
  1. Fine or warning or both.
  2. Rustication for a limited period or permanent removal from CUPB.
  3. Withdrawal of degree awarded on plagiarized work.
- Depending on the severity of crime a supervisor/ teacher may be awarded any of the following punishments:
  1. Warning or stoppage of increments or both.
  2. Removal from CUPB.
  3. Any other punishment as decided by the committee

The quantum of punishment will be decided by the Vice-Chancellor based on the recommendations of the committee and confirmed by the Executive Council based on the recommendations of the Academic Council.

## पंजाब केन्द्रीय विश्वविद्यालय

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## Central University of Punjab

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Ref No: CUPB/CC/15/EC-15/27

Dated:05-8-2015

### NOTIFICATION No 27

In pursuance to Item No. EC:15:15:29 of the Minutes of the 15th Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:24) is hereby conveyed to the guidelines of implementation of Counsultance Projects as enclosed with this notification.

Futher to the above the Competent Authority has approved the constitution of the following committee for implementation of Consultancy Projects:

1. Prof. P. Ramarao, Dean Academic Affairs
2. Dr. Pankaj Khare, Registrar
3. Prof. A. K. Jain, Professor
4. Dr. Sunil Mittal, Assistant Professor
5. Dr. Shireesh Pal Singh, Assistant Professor

This is issued with the approval of the Competent Authority.



## **GUIDELINES FOR IMPLEMENTATION OF CONSULTANCY PROJECTS**

1. Each Consultancy Project will have a Principal Consultant who will be responsible for
  - i. Formulating the project proposal which may include (a) planning of the work to be done, (b) estimating costs according to guidelines provided in a later section, and (c) identifying other consultants, if necessary.
  - ii. Execution of work.
  - iii. Handling all communications with the clients after the project has been accepted.
  - iv. Writing of intermediate and final reports according to the project proposal.
  - v. Making recommendations to the Vice Chancellor regarding expenditure from the project funds and disbursement of funds to participants in the consultancy project.
2. Appointment of Principal Consultant: Industrial organizations usually approach the Institute for consultancy work through a faculty member or a functionary of the Institute (i.e. CoC, Dean or Director). When a faculty member is approached for the work, he will be the Principal Consultant. If he does not wish to be the Principal Consultant or if the project is referred to a functionary, Principal Consultant would be identified through appropriate discussions and appointment will be made by CUPB.
3. The project proposal prepared by the Principal Consultant will be forwarded to the client.
4. The cost of the project shall be deposited by the client, in full, before the work commences. However, based on needs of the client and circumstances, CUPB may permit commencement of work with payment to be made as per agreed upon milestones.

All payments from clients will be received and expenditure and disbursements made through normal University procedures.

5. After the initial deposit has been made by the client, CUPB will assign a job number to the project and inform the same to the client, Principal Consultant and the CoC of the concerned Department. This completes the process of initiation of a consultancy project. The above job number must be quoted in all subsequent correspondence. The Project file will be closed with the submission of the final project report and disbursement of fees to consultants and others.
6. Each Project under Consultancy Service will be given a Registration Number by the Consultancy Division.
7. Utilisation of the resources generated.

The resources earned by a teacher through consultancy should be divided between the university and the teacher in the manner give below.

The ratio for sharing of the money between the university and the teacher will be:

- a) 60:40, where CUPB facilities have been used.
- b) 50:50, if no facilities of the university have been used.

### ***SERVICE TAX ON CONSULTANCY FEES***

Service Tax is compulsory on all consultancy services. The rate of service Tax in force as per rules of state/centre/UT or any other government rules will be applicable on the consultancy fees. Service Tax is to be paid by the party which obtains the services i.e. the clients. So, it is essential that the coordinators of the consultancy projects inform the clients the amount payable by the clients as Service Tax in addition to the consultancy charge.

### **ADDITIONAL POINTS OF THE GUIDELINES FOR ROUTINE AND TIME BOUND CONSULTANCY PROJECTS INVOLVING THE WHOLE DEPARTMENT**

1. For consultancy works a Faculty in-charge shall be selected by the concerned Departments for a tenure of 6 months.
2. The client shall first approach the CoC with a letter detailing the requirement who will indicate in writing the Fee and Service charge for the work. The client will deposit the fee.
3. The Department take over the materials and samples deposited by the client (if any) and give a tentative date of handing over the final recommendation.
4. CoC or Faculty in-charge of Consultancy will then assign the appropriate group of faculty (on rotation basis) for the job. The Technical Officer will be responsible for scheduling and conducting the laboratory tests under the direction of the faculty assigned. The Technical Officer will assign the Technical Assistants as required.
5. The Technical Officer shall sign the laboratory test reports.
6. The Faculty assigned will analyse the results, make the recommendations and prepare the final report. A Synopsis of the report will also be prepared by the faculty assigned in consultation with the Faculty in-charge of the Consultancy. He/She will sign the final report and the synopsis and submit them to the CoC.
7. The Faculty in-charge of Consultancy will inform the client about the completion of the job assigned and deliver the report.
8. The break-up of the revenue earned from the consultancy services will be as follows :
  - 25% to the University.
  - 25% to the concerned Departments (This will include the cost of consumables, labour, travel and other expenditure incurred for the work).
  - 50% to the consultant group.
9. Separate Bank accounts shall be opened to be operated by the CoC of the concerned Departments and Deputy Registrar (Finance) jointly.

10. The distribution of the Consultancy share amongst the faculty and laboratory staff involved is as follows :

- 10% of the Consultancy share shall be equitably distributed amongst the Technical Assistants involved in the work.
- The balance 90% of the share shall be equitably distributed amongst the faculty involved including Technical Officer.

**CRITERION-IV**

**INFRASTRUCTURE  
AND LEARNING  
RESOURCES**

## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

The University has state of the art infrastructure facilities which includes air conditioned fully loaded lecture rooms with projectors, state of the art laboratories, library, computer centre, faculty rooms, play grounds, fitness centre, hostels for students, faculty transit housing, health centre etc.

#### **4.1.1 How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?**

The University houses different schools and centres. Each centre is well equipped with physical infrastructure such as air conditioned class rooms, teaching and research laboratories with sophisticated instruments. The Central University of Punjab has well-established procedures to ensure the availability of physical facilities for its various functions and makes systematic efforts to upgrade its facilities and ensure their optimal use, as below:

- (a) The Coordinators of various Centres, Incharges of administrative units and Campus Manager submit their requirements for the forthcoming academic year. The Academic committees plan ahead for all requirements regarding classrooms, laboratories, furniture and other equipment. Based on these recommendations, the University makes plan for the year; purchase section then invites quotations and purchases them. Many other steps are involved:
- The computer centre reviews its computer status and replaces the obsolete systems and servers with new ones.
  - Infrastructural facilities such as furniture and air conditioners are serviced, replaced and augmented as the need arises.
  - A faculty member is made the lab in-charge for each lab to ensure that the labs are maintained and utilized properly. The University makes optimal utilisation of the available space.
  - To facilitate the purchase of the infrastructure requirements, many committees are made with 2-3 faculty members and a senior professor as Chairman. Maintenance of equipment is done through the Annual Maintenance Contract while minor repair works are carried on request.

- All efforts are made to ensure complete maintenance of the infrastructure and facilities such as campus up keeping committee, seminar hall committee, Auditorium committee, Mess and canteen committee are few of them to be mentioned. The office of the executive engineer takes care of the problems associated with electrical lines, water supply lines etc.
- (b) CUPB ensures optimal utilization of its facilities by engaging students and faculty to use these and by calculating occupancy rate of the various equipments. The central instrumentation lab incharge maintains the record of the usage of the sophisticated instrument in a register and the hours of usage is then reported regularly to the competent authority. Sometimes, the CIL facility is also open for students of other Universities. The classrooms are fully engaged and have 100% occupancy rate.

**4.1.2 Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.**

Yes, CUPB has a very systematic approach for creation and enhancement of infrastructure. Indeed, for major decisions and planning, there are three committees with outside experts: Building Advisory Committee, Library Committee and Sports Committee. The suggestions of these committees are assessed, analysed and taken through the approval procedure of University's Governing bodies.

Some recent initiatives include:

- Since the planning of new Campus was at final stage, the Building Advisory committee had very frequent meetings this year to ensure proper planning and prompt decisions.
- In order to ensure 24 hr electricity supply to the campus the University has installed four diesel generating sets with a total capacity of 655 KVA: one of 315 KVA, two of 125 KVA and the forth of 90 KVA capacities. The University has got installed two 5KW Solar-Wind Energy Hybrid Systems. In addition, the University has replaced stand by UPS units with on-line ones for better performance of the computers

- The University has been enhancing its Audio visual resources. A basic multi-conferencing facility has been established as the first phase of a futuristic ICT-enabled teaching-learning.
- The Central Instrumentation facility is continuously updated with new instruments.
- The Library committee keeps planning for upgradation of knowledge resources: books and national and international journals, internet facility and subscription to electronic databases are all updated to ensure effective support for teaching-learning. The library organizes book exhibitions so that faculty and students can suggest books.
- The University aims at making the campus a zero waste campus. Good waste management practices are practiced in the campus. Two sewage treatment plants of 50000 L/d are installed in the campus to treat the wastewater generated within the University. The treatment technology used is Fluidized Aerobic Bioreactor. The treated water is used for landscaping of the University.

#### **4.1.3 How does the university create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?**

The University gives top most priority to the creation and maintenance of physical facilities proportionate with its requirements.

- The university has a central instrumentation centre with state of the art sophisticated instruments (Scanning Electron Microscope (SEM) with EDS, ELISA plate reader, FTIR, HPLC, GC-MS, Atomic Adsorption Spectrophotometer, Confocal Microscope, Thermogravimeter, Gas chromatograph to benefit and serve the research needs of the faculty. The University is now in the process of procuring more sophisticated instruments such as ICP-MS, LC-MS, MALDI-TOF TOF, Spectrofluorimeter, Next Gen Sequencer etc.
- In addition to the instruments the University has procured many software to facilitate the faculty and students research. GeneMapper®, SeqScape®, BioTrekker™, SigmaPlot® with Systat, PAWS, Chem. Bio, Origin 8.1, SPSS, MATLAB, Arc GIS are some of them.

- The Centres are provided with sufficient well equipped laboratories for teaching and research purposes.
- Each faculty member is provided with air conditioned office rooms with 24h power supply and power back up. A Desktop/ laptop with internet connection, printer and storage cabinets have also been provided. A central printing and scanning facility is also available.
- Photocopying and binding facilities are provided through central library for submission of project proposals and reports etc.
- The University through its library has subscribed to many online journals to update faculty and students with recent research. Plagiarism software has also been purchased.
- Transport facilities for research purpose such as sample collection, data collection are provided.

Thus CUPB has put in place all the required facilities and systems for a conducive research environment.

**4.1.4 Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?**

Yes, the University provides all facilities, as far as possible, in all the schools and centres. Each member of teaching faculty has adequate and comfortable office room/cabin facility with computers, printers and storage units. Separate rest rooms for women students and staff are available in both science and humanities block.

**4.1.5 How does the university ensure that the infrastructure facilities are disabled-friendly?**

The University has taken up the construction of disable-friendly facilities on a priority basis. The infrastructure of the university is on ground floor; hence ramp/lifts are not required. However, the specially designed toilets facilities are provided for use by disabled. Moreover, wheelchair is available for use. Physically challenged students are given special preference in seating during classes and examinations, if required.



#### 4.1.6 How does the university cater to the requirements of residential students? Give details of:

The city campus of CUPB has residential area, as also, the academic buildings of the university thereby ensuring that students are not far away from any academic facilities. The student hostels are within accessible distance from the academic block, library, health centre and laboratories. The fitness centre too is on the same campus primarily for resident students. Central geyser facility, RO water units and water coolers are provided in each hostel block. A collection of books are also provided in girls and boys hostel reading rooms. The reading rooms are fully air conditioned with 24 h water and power supply. Hostel rooms are semi-furnished and each student is provided with a cot, a mattress, a table, a chair and a cupboard.

- Capacity of the hostel and occupancy: The University has nine hostels five for boys and four for girls with total 384 rooms. Single, double and triple occupancies are available in the hostel. Ph.D. students are generally provided with single seater rooms. Details of the rooms and occupancies are provided in the *Table 4.1* and *Table 4.2*.

The recreational facilities provided in hostels for the students include

- Air conditioned reading room with desktop and Internet connection
- T.V. Room
- Indoor game, Table Tennis and badminton facilities
- Gymnasium facility
- Fitness centre
- Broadband connectivity / wi-fi facility in hostels.
- BSNL broadband connectivity with high speed Wi-Fi facility is available in reading rooms. A separate Wi-Fi facility is also available at in all hostels.

**Table 4.1: Occupancy of Boys hostel**

<b>Sr. No.</b>	<b>Name of the Hostel</b>	<b>No. of rooms</b>	<b>Present Occupancy</b>
1.	Hostel 1	35	35 (single occupancy)
2.	Hostel 2	17	34 (double Occupancy)
3.	Hostel 3	41	41 (single occupancy)
4.	Hostel 4	17	51 (Triple Occupancy)
5.	Hostel 5	69	69 (single occupancy)

**Table 4.2: Occupancy of Girls hostel**

<b>Sr. No.</b>	<b>Name of the Hostel</b>	<b>No. of rooms</b>	<b>Present Occupancy</b>
1.	Hostel 1	60	55 (single occupancy)
2.	Hostel 2	19	38 (double Occupancy)
3.	Hostel 3	18	36 (double Occupancy)
4.	Hostel 4	108	96 (single occupancy)

- Recreational facilities in hostel/s like gymnasium, yoga etc.

#### **4.1.7 Does the university offer medical facilities for its students and teaching and non-teaching staff living on campus?**

Yes. The University has a health centre with a medical consultant, two full time nurse and medical attendant. A fully-equipped Health Centre has been established to provide OPD, indoor, emergency, referral and other services to its employees and students. First Aid is provided in case of minor ailments. In case of emergency, services of nearby hospital including civil hospital are utilized. The University owns an ambulance to commute students and faculty in case of emergency. The ambulance is Winger High Roof Ambulance: It has a single stretcher, bench seats for paramedics, special doctor's seat, single oxygen cylinder cage, 4 bottle holding hooks, first aid box, electric plug point, overhead revolving beacon, wide 180° opening rear door, anti-skid flooring, factory-fitted dual AC, 2 cabin lights, 2 co-driver seating, and 5 attendant seats. Very reputed doctors have been included in the University medical panel to ensure excellent health care for the students and faculty (*Insert 4.1*). ECG and biochemical analyzers are available in the health centre to facilitate the faculty, students and staff of the University.

In addition the University is under the process of formulating its medical policy through group insurance for faculty, staff and students. A committee has been constituted for the formulation of the policy.

#### **4.1.8 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?**

Sports facilities like physical fitness centre /Gymnasium, athletic tracks (200 m), indoor badminton courts, basketball and volley ball courts, Boxing gloves and punching bags, cricket pitch and many indoor games (chess, carom, table tennis) are available on Campus to promote students interests in sports. In addition, yoga, aerobic and self-defence boxing classes are also conducted every day. Every year on the occasion of the foundation day the University conducts Annual sports and athletic meet in the month of February to encourage sports activities among students and faculties.

Similarly, the various students groups including the students union carry out cultural activities on campus with the full support of the University administration. On the occasion of the foundation day celebrations, a series of cultural events are organized. Salvadoria (cultural event), musical evening, skits conveying social and environmental message, poetry, song, dance competitions, traditional dress competitions are some of the events organized to encourage cultural events among the students. Women's day, Hindi pakhwara, International mother tongue day are few of the events to be mentioned. (*Table 4.3*)

**Health Centre**

1. The University greatly values the health services for its students and staff. A fully-equipped Health Centre has been established to provide OPD, indoor, emergency, referral and other services to its employees and students. Fifty two authorized Medical doctors have been empanelled for providing specialist services. The health centre also looks after the social, preventive and environmental health of the campus.
2. The University Health Centre functions round the clock. A nurse and university vehicles are employed for emergency purposes. The University is already in process of procuring its own ambulance.
3. The faculty and the non-teaching staff are also provided with the facility of reimbursement of medical expenses.

**1. Activities**

- During all the university events such as cultural programmes, sports etc. the nurse is available for any kind of assistance in case of emergency or any first aid.
- All the basic tests during the employees/students joining the university are conducted in the university health centre.
- University health centre actively participates with the Civil Hospital, Bathinda, in the annual blood donation camps organized during the foundation day celebrations.

**2. Authorized Medical Specialists**

The Central University of Punjab has nominated 52 authorized medical Specialists located in Bathinda City, the details of which are given as under:

<b>S. No.</b>	<b>Name of Doctor</b>	<b>Qualification</b>	<b>Consultation address</b>
1	Dr. Amrit Gupta	MS(Ortho)	Power House Road, Bathinda
2	Dr. Amit Gupta	MD(Psychiatry)	Power House Road, Bathinda
3	Dr. Bant Singh Khippal	MS (ENT)	Ajit Road, St No.2, Bathinda
4	Dr. D.S. Dhillon	MS (ENT)	Ajit Road, Bathinda
5	Dr. Jagpal Singh	MS (Surgery)	Opp. DAV College, Bathinda
6	Dr. H.S. Sodhi	MS (Eye)	G.T. Road, Bathinda
7	Dr. Narinder K. Singla	MD (Eye)	Main road, Minocha Colony, Bathinda
8	Dr. Ashok K. Goyal	MD (Med)	Ajit Road, St No. 1,

9	Dr. H.S. Narang	MBBS, MD, DCH	Bathinda Bibiwala Road, North Estate, Bathinda
10	Dr. Rajesh Maheshwari	MD (Skin & VD)	100 Ft Road, Bathinda
11	Dr. (Mrs.) Shelly Gupta	MBBS, DGO, MD (Obgyn)	100 Ft Road, Bathinda
12	Dr.(Mrs.) SuneetaChahal	MD (Gynae&Obst.)	Opp. DAV College, Bathinda
13	Dr. (Mrs.) RekhaMaheshwari	MBBS, DGO, MD (Obgyn)	100 Ft Road, Bathinda
14	Dr.(Mrs.) GaganLata	MBBS, DGO (Gynae&Obst.)	Near Bhana Mall Trust, Bathinda
15	Dr. Parminder Singh	BAMS, MD	Bhagu Road, Bathinda
16	Dr. Kuldip K. Garg	BAMS	Bhatti Road, Bathinda
17	Dr. J.L. Bansal	DHMS	Model Town, Bathinda
18	Dr. O.P. Garg	DHMS	Aggarwal Colony, Bhatti road, Bathinda
19	Dr. Manjit Singh Sidhu	MBBS, MD, DNB	Shant Nagar, Bathinda
20	Dr.(Mrs.) AnupmaSingla	BHMS	Singla Homeopathic Clinic, GoleDiggi, Bathinda
21	Dr. Anil Singla	MBBS, MD	Vandana Hospital, GT Road, Bathinda
22	Dr. VandanaSingla	MBBS, MD (Psy.)	Vandana Hospital, GT Road, Bathinda
23	Dr. Dhiraj Jindal	BAMS (Ayn)	Jindal Hospital & Maternity Centre, Dhobinna Road, Bathinda
24	Dr. Baljindersingh	GAMS, MD (Med. Alt.)	Sushrat Hospital, near GhoreWalaChowk, near Gurudwara, Bathinda
25	Dr. Jagjit Singh	MD (Med.), MBBS	Lifeline Hospital, Kidney & Dialysis Centre, Bathinda
26	Dr. Ravinder Kumar	MD (Med.)	Ravinder Hospital, Agarwal Colony, Bhatti Road, Bathinda
27	Dr. Rajinder Kumar	MBBS	St. No. 18. Partap Nagar, Bathinda
28	Dr. Sanjay Garg	MS	Delhi Store Clinic, Bibiwala Road, Bathinda
29	Dr. Ashwani Mittal	MD (Med.)	100 Ft Road, Bathinda
30	Dr. Gulsharan Singh Sethi	MBBS(GP & Skin)	Sirki Bazar, Bathinda
31	Dr. Preetinder Kaur	MBBS, DGTO(AFMC)	Shant Nagar, Bathinda

	Sidhu		
32	Dr. J.L. Bansal	MBBS, Skin Specialist	Opp. Canara Bank, Mall Road, Bathinda
33	Dr. Bharat Bhushan Jindal	MD (Med), Chest Diseases spl.	Dr. Bharat Bhushan Jindal's , Power House Road, Bathinda
34	Dr. H.S. Bakshi	MS, Ortho	Barnala Road, Bathinda
35	Dr. Shivani Gupta	MBBS, (Gynae&Obst.)	Gupta Hospital, Power House Road, Bathinda
36	Dr. Abhinandan Gopal	BAMS(pb.), MD	Aarogyam Clinic, Backside Punjab Clinical Laboratory, NaiBasti, GT Road, Bathinda
37	Dr. Neera Gupta	MD, Gyn. & Obs.	40 Ft Road, Namdev Marg, Bathinda
38	Dr. Aman Gupta	MBBS, MS(Surgery)	40 Ft Road, Namdev Marg, Bathinda
39	Dr. Anita Jindal	MD, (Gyn. &Obst.)	Power House Road, Near Bus Stand, Bathinda
40	Dr. Aman Jindal	MBBS, MD(General Surgery)	Power House Road, Near Bus Stand, Bathinda
41	Dr.(Mrs.) MandeepChitkara	MBBS, (Gynae. &Obst.)	St. No. 13, Bhagu Road, Bathinda
42	Dr. P.C. Sharma	MBBS, MS (Eye)	Opp. Pokhraj Cinema, near Wadi Hospital, Bathinda
43	Dr. M.L. Garg	MBBS, MD	The Mall, Bathinda
44	Dr. BaljinderJaura	DHMS (Homeopathic)	Ajit Road, GhoraChowk, Bathinda
45	Dr. Kashish Gupta	MS, Eye &Phaco Surgeon	The Mall, Bathinda
46	Dr. Shveta Grover	MBBS, MS (Eye)	The Mall, Bathinda
47	Dr. Sameer Grover	MBBS, MS, Mch Urology	The Mall, Bathinda
48	Dr. Sanjeev Kumar	MBBS, MS Surgey	Bhatti Road, near Namdev Marg, Bathinda
49	Dr. Amita	MBBS, MS, (Gynae. &Obst.)	Bhatti Road, near Namdev Marg, Bathinda
50	Dr. Deepak Bansal	MBBS, MS, Ortho	Bhatti Road, near Namdev Marg, Bathinda
51	Dr. Manmohan Singh Deol	MS, Ortho	Power House Road, Bathinda
52	Dr. Devinder Jindal	MBBS, MS, ENT	Jindal ENT Hospital, Opposite St. No 18, near GhoraChowk, Ajit Road, Bathinda.

### **3. Development plan proposed**

- Health insurance plan for the students and the staff.
- The process to procure an ambulance is already going on so that a full time ambulance service is available in the campus.

**Table 4.3: Cultural and sports activities conducted by CUPB**

<b>S.No</b>	<b>Name of the Function</b>	<b>Date</b>
1.	Hindi Diwas and Hindi Pakhwara	14 <sup>th</sup> September 2011
2.	First Foundation Day (2010)	March 27, 2010
3.	Foundation Day (2011)	May 14, 2011
4.	First External Inspection by Rajbhasha Unit	23-24 September 2011
5.	Working knowledge of Hindi among CUPB employees	
6.	Foundation Day (2012)	February 28, 2012
7.	Extension Lecture on Hindi	April 9, 2012
8.	Hindi Diwas	14 <sup>th</sup> September 2012
9.	Hindi Pakhwara	September 14-28, 2012
10.	Hindi Calligraphy Competition	September 17, 2012
11.	Second External Inspection by High Level “Official Language Implementation Committee” of UGC	September 17, 2012
12.	Poetry Recitation Competition	September 21, 2012
13.	Essay, Poem and Story Writing Competition	September 24, 2012
14.	Elocution Competition	September 25, 2012
15.	Debate Competition	September 27, 2012
16.	Hindi Pakhwara Samapan Samaroh	September 28, 2012
17.	First Hindi Karyashala	February 5, 2013
18.	First Annual Sports Meet	February 14, 2013
19.	Poetry recitation and music competitions	February 20, 2013
20.	Dance and Indian Traditional Dress Competitions	February 21, 2013
21.	1 <sup>st</sup> Blood Donation Camp	February 22, 2013
22.	Sufi Evening	February 22, 2013
23.	Foundation Day (2013)	February 26, 2013
24.	Computer Literacy Programme for Senior Citizens	June 20, 2013
25.	Hindi Karyashala on the Use of Computer in Official Language Implementation,	June 26, 2013
26.	Hindi Diwas and Hindi Pakhwara Udghaatan Samaroh	September 16, 2013
27.	Nibandh, Kavita and Kahaani Lekhan Pratiyogita	September 17, 2013
28.	Kavita Uchchaaran Pratiyogita	September 18, 2013
29.	Hindi Laghu Kahaani/Nibandh Lekhan Pratiyogita	September 18, 2013
30.	Sulekh Pratiyogita	September 19, 2013
31.	One Day’s Hindi Karyashala on Hindi	September 19, 2013
32.	Hindi Bhashan Pratiyogita	September 23, 2013
33.	Hindi Vaachan Pratiyogita	September 24, 2013



34.	Hindi Anuvaad Pratiyogita	September 25, 2013
35.	Hindi Vaktritva Pratiyogita	September 26, 2013
36.	Hindi Pakhwara Samapan Samaroh	September 30, 2013
37.	Vishva Hindi Diwas	January 10, 2014
38.	Second Annual Sports Meet	February 19, 2014
39.	Membership of Nagar Rajbhasha Karyanvayan Samiti,	February 24, 2014
40.	2 <sup>nd</sup> blood donation camp	February 26, 2014
41.	Hindi Karyashala on Implementation of Official Language	March 28, 2014
42.	One Day's Hindi Karyashala on Implementation of official language	June 30, 2014
43.	Hindi Diwas and Hindi Pakhwara Udaghatan Samaroh	September 15, 2014
44.	Hindi Anuvaad Pratiyogita	September 16, 2014
45.	Kavita Paath Pratiyogita	September 17, 2014
46.	Note Lekhan Pratiyogita	September 19, 2014
47.	Hindi Bhashan Pratiyogita	September 22-24, 2014
48.	Hindi Tankan Pratiyogita	September 25, 2014
49.	Hindi Vaad-Vivaad Pratiyogita	September 26, 2014
50.	Hindi Pakhwara Samapan Samaroh	September 29, 2014
51.	First Innovators Day	November 17, 2014
52.	Second Innovators Day	January 22, 2015
53.	Sensitization Programme for Teachers of Elementary, Primary, Secondary and Senior Higher Secondary Education on Water Quality Profile.	February 12, 2015
54.	Third Annual Sports Meet	February 24-25, 2015
55.	Foundation Day 2015	February 28, 2015
56.	Good governance day	
57.	World Earth day celebrations	April 22, 2015
58.	Extension Lecture on the 'Contribution of Dr. B.R. Ambedkar in Social Justice'	April 28, 2015
59.	Labour day celebrations	May 1, 2015
60.	Awareness Camp on Human Rights organized at Village Gurchari	May 17, 2015
61.	Fascination of Plants day	May 18, 2015
62.	Biodiversity day celebrations	May 22, 2015
63.	World Environment day	June 5, 2015
64.	Yoga week	June 15-21, 2015
65.	International yoga day	June 21, 2015
66.	International day against drug abuse and illicit trafficking	June 26, 2015
67.	Kids fest	July 2, 2015

68.	World Population day	July 11, 2015
69.	Massive plantation drive at Main campus	July 18-18, 2015
70.	NSS Camps organised at Main campus	July 24-25, 2015
71.	International mother tongue day	July 31, 2015
72.	Ground Breaking Ceremony	August 17, 2015

## 4.2 Library as a Learning Resource

### 4.2.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?

Yes, a local library committee consisting of the following members has been constituted.

- Chairperson: Professor In-Charge Library
- Members: 7 members (Faculty members from various Schools/ Departments, with Library staff)

The present composition of Library Committee is as below:

<b>Members</b>	<b>Designation</b>
Prof. S.K.Bawa	CoC for Education
Prof. Anjana Munshi	CoC for HGMM
Dr. Sanjeev Kumar	Assistant Professor, Plant Sciences
Dr. Felix Bast	Assistant Professor, Plant Sciences
Dr. Anil Kumar Mantha	Assistant Professor, Animal
Dr. Deepak Kumar	Sciences
Dr. Kiran Singh	Assistant Professor, Environmental
Dr. Bhupinder Singh	Law
	Assistant Professor, Geography
	Professional Assistant

The Library Committee meets regularly and has held seventeen meetings so far, as per details in **Table 4.4**.

**Table 4.4: List of Library committee meetings**

<b>S.No.</b>	<b>Library committee meeting</b>	<b>Date of Meeting</b>	<b>Chairperson and Members of committee</b>
1	1 <sup>st</sup> local library committee meeting	15-Jan-2014	Prof. Chaman Lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak,
2	2 <sup>nd</sup> local library committee meeting	22-Jan-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak, Ms. Prerana
3	3 <sup>rd</sup> Local library committee meeting	29-Jan-2014	Prof. Chaman Lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak,
4	4 <sup>th</sup> Local Library committee meeting	4- Feb-2014	Prof. Chaman Lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak,
5	5 <sup>th</sup> Local Library committee meeting	13-Feb-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak, Ms. Prerana
6	6 <sup>th</sup> Local Library committee meeting	26-Feb-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak,
7	7 <sup>th</sup> Local Library committee meeting	11-mar-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. V.J. Varghese, Dr. Puneet Pathak, Ms. Prerana
8	8 <sup>th</sup> Local Library Committee meeting	10-Apr-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Ms. Prerana
9	9 <sup>th</sup> Local Library Committee meeting	7-May-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Ms. Prerana
10	10 <sup>th</sup> Local Library Committee meeting	4-5-june-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Mr. Bhupinder Singh,
11	11 <sup>th</sup> Local Library Committee Meeting	12-june-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Mr. Bhupinder Singh,
12	12 <sup>th</sup> Local Library Committee Meeting	02-jul-2014	Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Mr. Bhupinder Singh
13	13 <sup>th</sup> Local Library Committee Meeting	15-jul-2014	Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder

			Singh Khurana, Mr. Bhupinder Singh,
14	14 <sup>th</sup> Local Library Committee Meeting	21-Aug-2014	Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Mr. Bhupinder Singh
15	15 <sup>th</sup> Local Library Committee Meeting	11-Sep-2014	Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Mr. Bhupinder Singh
16	16 <sup>th</sup> Local Library Committee Meeting	16-Oct-2014	Prof. Chaman lal (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Dr. Bhupinder Singh
17	17 <sup>th</sup> Local Library Committee Meeting	13-Apr-2015	Prof. P. Rama Rao (Chairperson) Dr. Anil K. Mantha, Dr. Puneet Pathak, Dr. Naresh Kumar Singla, Er. Surinder Singh Khurana, Dr. Bhupinder Singh
18	18 <sup>th</sup> Local Library Committee Meeting	19-August-2015	Prof.S.K.Bawa (Chairperson) Dr.Sanjeev Thakur, Dr. Felix Bast, Dr. Anil K. Mantha, Dr. Deepak Kumar, Dr. Kiran K Singh

The significant initiatives taken by the committee to render the library student friendly include:

- *Extension of Library Timings*

To facilitate the students' access, the library timings have been extended from 8.30 am to 10.00 pm. However, reading rooms alongwith computers remain open overnight and students can pick up books at 10 p.m. and continue reading through the night.

- *Separate Section in the Library*

The books in the library are segregated into three major sections – Text books, General books and Reference books. This might increase the accessibility to students.

Library is stocked with multiple copies of Text books and general books, if suggested in the syllabi.

- *Library issue-return Timing Extended*

Issue-return hours of the library from 10.00 am to 4.00 pm extended to 9.00 am to 5.30 pm. Overnight issue is also available for reading

- *New Section*

Two sections has been added to facilitate students (i) Thesis/dissertation section (ii) Digital Media Section

- *Open source data base*

A collection of open source materials are established in the University

The library staffs conduct workshops and training programmes as part of Current Awareness Service (CAS) for the faculty and students of the University to facilitate effective access to the resources. Workshops on Web of Science, Scopus and Grammerly have been conducted for the faculty and students of the University.

- *Selective Dissemination of Information (SDI)*

Provides information and updates to the interested users on specific theme/area/topic as required.

- *Inter-library Loan (ILL)*

Assistance to access materials and resources from the networking libraries through DELNET

- *Computer facility*

Ten computers with internet facility is provided for students to study and browse in the library

- Purchase of books

The University has framed guidelines for the procurement of books. The faculty and students shall recommend books and a team of faculty are sent to Delhi for the purchase of the the books as per the guidelines

#### 4.2.2 Provide details of the following:

- Total area of the library (in Sq. ft.) 5772 Sq. ft
- Total seating capacity 212
- Working hours (on working days, on holidays, before examination, during examination, during vacation) Round the clock in working days  
9 am to 5.30 pm on holidays
- Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources) Layout provided in **Figure 4.1**
  - Individual Reading Carrels No
  - Lounge for browsing and relaxed reading Yes
  - Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection Yes

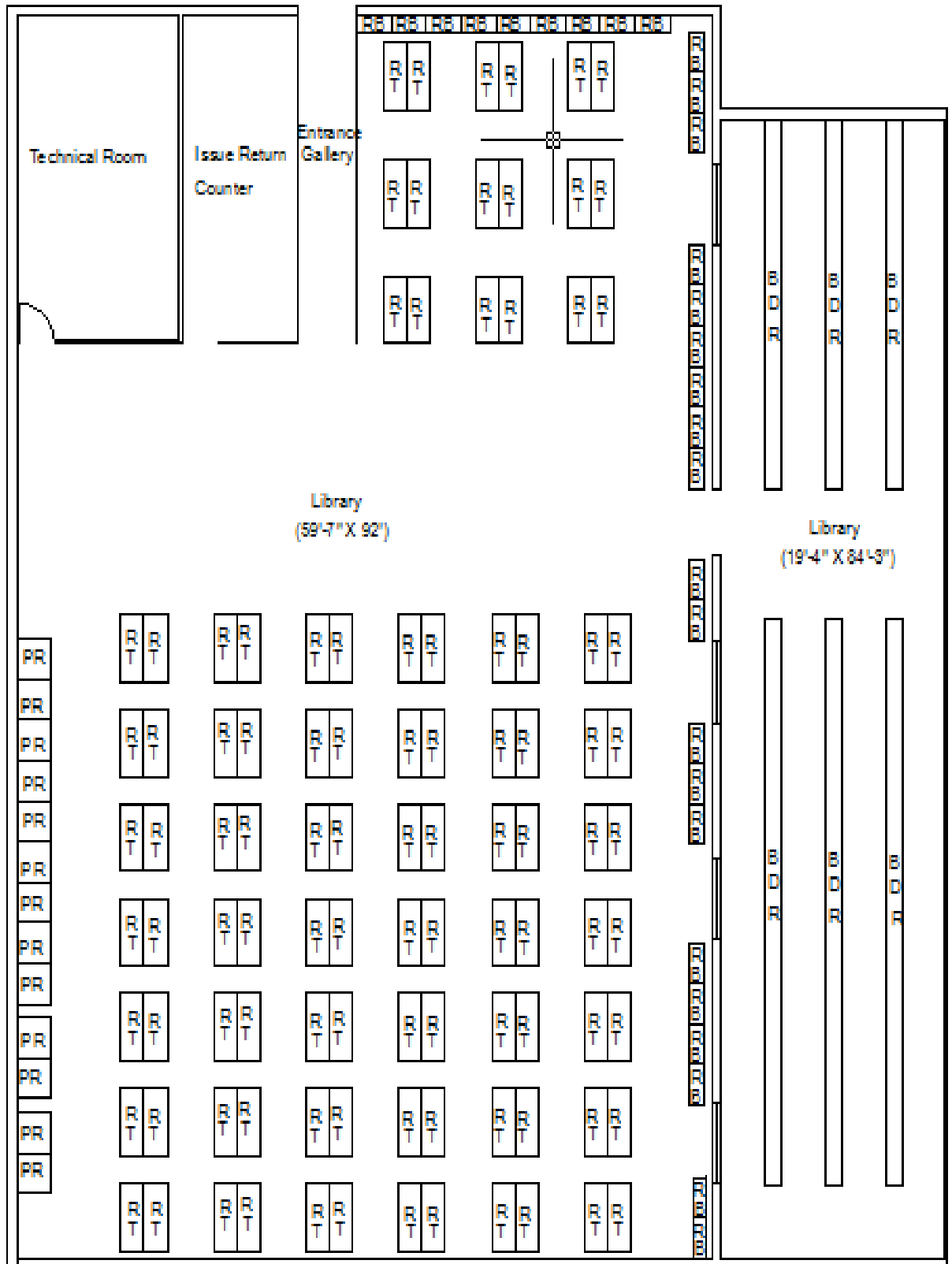


Figure 4.1 Library Layout Plan



#### 4.2.3 Give details of the library holdings:

- Print (books, back volumes and thesis) 25,070
- Average number of books added during the last three years 3964
- Non Print (Microfiche, AV) 378
- Electronic (e-journals) 9030
- Special collections (e.g. text books, reference books, standards, patents) A special section has been created for donated books. 3200 books are available in this section
- Book Banks Efforts are being made to create a book bank.
- Question Banks Initiatives are under way to create a Question bank with questions from previous years question paper and objective questions to facilitate students in clearing NET and other competitive exams

#### 4.2.4 What tools does the library deploy to provide access to the collection?

CUPB library is well organized and user friendly. The following approaches ensure access of users to various resources:

- Online Public Access Catalogue (OPAC) University Library is enabled with SLIM21 which allows cataloguing of diverse resources such as books, journals, articles, slides, maps, Audio/video, films, cassettes, texts, drawings, clippings, serial publications, softwares and so on
- Electronic Resource Management package for e-journals Yes
  - American Chemical Society <http://pubs.acs.org>
  - American Physical Society <http://publish.aps.org/browse.html>
  - Annual Reviews <http://www.annualreviews.org>
  - Cambridge University Press <http://journals.cambridge.org>
  - Economic & Political Weekly <http://www.epw.in>

-Institute of Physics	<a href="http://iopscience.iop.org/journals">http://iopscience.iop.org/journals</a>
-JSTOR	<a href="http://www.jstor.org">http://www.jstor.org</a>
-Oxford University Press	<a href="http://www.oxfordjournals.org">http://www.oxfordjournals.org</a>
-Project Muse	<a href="http://muse.jhu.edu/browse">http://muse.jhu.edu/browse</a>
-Royal Society of Chemistry	<a href="http://www.rsc.org">http://www.rsc.org</a>
-Science Direct (10 Subject Collection)	<a href="http://www.sciencedirect.com">http://www.sciencedirect.com</a>
-Springer Link	<a href="http://link.springer.com">http://link.springer.com</a>
-Taylor & Francis	<a href="http://www.tandfonline.com">http://www.tandfonline.com</a>
-Wiley-Blackwell	<a href="http://onlinelibrary.wiley.com">http://onlinelibrary.wiley.com</a>
-Science Online	<a href="http://www.sciencemag.org">http://www.sciencemag.org</a>
-Sage	<a href="http://online.sagepub.com">http://online.sagepub.com</a>
-Economic Outlook	<a href="http://economicoutlook.cmie.com">http://economicoutlook.cmie.com</a>
-Prowess	<a href="http://prowess.cme.com">http://prowess.cme.com</a>
-States of India	<a href="http://statesofindia.cmie.com">http://statesofindia.cmie.com</a>
-Indiastat.com	<a href="http://www.indiastat.com">www.indiastat.com</a>
-DELNET Online	<a href="http://delnet.nic.in/">http://delnet.nic.in/</a>
-Possum Web	<a href="http://www.possum.net.au/">http://www.possum.net.au/</a>
-ISID (The Institute for Studies in Industrial)	<a href="http://isid.org.in/">http://isid.org.in/</a>
-JCCC (J-Gate Custom Content for Consortium)	<a href="http://jccc-indest.informindia.co.in/">http://jccc-indest.informindia.co.in /</a>
-Hein Online	<a href="http://home.heinonline.org">http://home.heinonline.org</a>
-Manuparta	<a href="http://www.manupatra.com">http://www.manupatra.com</a>
-Westlaw India	<a href="http://www.westlawindia.com">http://www.westlawindia.com</a>
-SCOPUS	<a href="http://www.scopus.com/">http://www.scopus.com/</a>
-Web of Science	<a href="https://webofknowledge.com">https://webofknowledge.com</a>
• Federated searching tools to search articles in multiple data bases	No
• Library Website	<a href="http://cup.ac.in/library.asp">http://cup.ac.in/library.asp</a>
• In-house/remote access to e-publications	Yes, available on campus network but only two publishers are allowing individual access outside campus

#### 4.2.5 To what extent is ICT deployed in library? Give details with regard to:

- Library automation Yes. Library is fully automated with SLIM21 software. The University Library is equipped with Radio Frequency Identification (RFID) and Electro Magnetic Security System (EMSS) providing automated self-service facility for the users and high

end security. RFID system installed in the University Library is with the latest technology and configuration in this regard. It ensures efficient service delivery and security with minimum human input.

- Total number of computers for general access 10
- Total numbers of printers for general access 01
- Internet band width speed 1Gbps. University is using 1Gbps line from National Knowledge Network
- Institutional Repository Yes
- Audio-Video Repository In tune with the increasing importance of audio and video materials for learning and research, the Library is developing a separate Audio-Video Repository (AVR) for its users. 370 CDs of vital reference materials have been already procured to initiate the process. Library is keeping thesis/dissertation and project reports on IR
- Content management system for e-learning No
- Participation in resource sharing networks/ consortia (like INFLIBNET) The University has signed a MoU with INFLIBNET for making all the E-resources of INFLIBNET available in the library and making the Doctoral thesis from the university available online through their Shodhganga programme. Library is also a member of DELNET.

#### 4.2.6 Provide details (per month) with regard to

Average number of walk-ins	7500
Average number of books issued/returned	2400
Ratio of library books to students enrolled	46
Average number of books added during the last four years	3209
Average number of login to OPAC	400
Average number of login to e-resources	600
Average number of e-resources downloaded/printed	1100
Number of IT (Information Technology) literacy trainings	6

organized

#### **4.2.7 Give details of specialized services provided by the library with regard to**

Manuscripts	200
Reference	Yes. A separate section is allotted for reference materials such as reference books, encyclopaedia etc. It also provides the users with directional assistance in locating books and resources.
Reprography/Scanning	Yes. Reprographic facility is available at the issue and return counter to enable the users to get the photocopies of books and journals and other library materials. The Library also has a bookeye 4 scanner, state of the art high resolution scanner to preserve old manuscripts and archival resources.
Inter-library Loan Service	Yes. Assistance to access materials and resources from the networking libraries through DELNET
Information Deployment and Notification	Yes through Current Awareness Service (CAS) and Selective Dissemination of Information (SDI)
Current Awareness Service (CAS)	Updating the users with the latest information in the academic front and new arrivals to the library
Selective Dissemination of Information (SDI)	Provides information and updates to the interested users on specific theme/area/topic as required
OPACS	Yes. The Online Public Access Catalogue (OPAC) system in the University Library is enabled with LMS which allows cataloguing of diverse resources such as books, journals, articles, slides, maps, audio/video, films, cassettes, texts, drawings, clippings, serial publications, software and so on. OPAC enables searching through clusters like Author, Keyword, Subject, Class, Title, Publisher, Place of publication, Main entry, Material type, Place of conference, Subject name, ISBN / ISSN, Series titles, Serials title and Year of publication. It also supports circulation, acquisition, front desk

	operations, Serials Control and data entry in vernacular languages.
Internet Access	Yes. Wi-Fi enabled
Downloads	Yes. The library has the facilities to download Electronic Resources available in the internet and data can also be downloaded from various Search Engines.
Printouts	Yes. Printers are available.
Reading list/ Bibliography compilation	Yes, reading list and bibliographic compilations are periodically done by the library
In-house/remote access to e-resources	Yes access is provided to e journals and other e resources on each desktop/ laptop of CUPB.
User Orientation	Yes. Orientation is given to the newly joined students of the university by the Library Staff, at the beginning of every year
Assistance in searching Databases	Yes. Library staff is entrusted with the job of assisting the students and the faculty in searching the databases
INFLIBNET/IUC facilities	Yes. The University has signed a MoU with INFLIBNET for making all the E-resources of INFLIBNET available in the library and making the Doctoral thesis from the university available online through their Shodhganga programme.

In addition to above following services are also provided:

- Reference books, periodicals, newspapers and Journals can be accessed.
- Issue of books and reference books for teaching for the entire duration of the semester.
- Other study materials like CDs, VCDs are available to which the students & staff have access.
- INFLIBNET services provided to the students and staff.
- The library staff displays articles of relevance and interest on the notice board and clip set for students to read. These articles are then filed.

- The library staff provides assistance to both staff and students in utilizing the library facilities so that the optimum use is made of them. This ensures that the library is user friendly.
- E-Library: The University has fully computerized its library which has its own OPAC system. The students can browse for the available e-books, and journal from nationally subscribed repository. Moreover, student and faculty members deposite dissertation thesis, question papers, research articles and e-books for digital repository. Using database software D-space all are collected and organized for use of the students (Student database, Alumni database and scientific database)
- DVDs – Around 370 educational DVDs are available in the library for students’ access and usage. In addition, the power point presentations of the lectures are available in the library.

#### **4.2.8 Provide details of the annual library budget and the amount spent for purchasing new books and journals.**

Library budget is used to procure information resources and provide access to the resources. The present annual budget of the library has the following components:

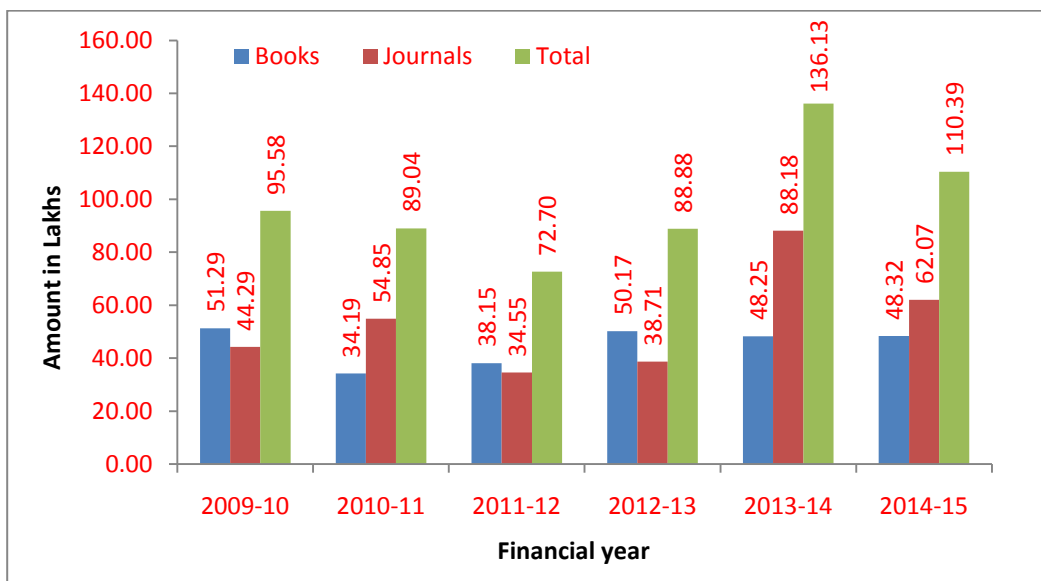
- UGC plan grants
- Budget also has contingency funds for binding and other stationery needed to process and maintain the books and journals.
- The budget details are as provided in *Table 4.5* and *Figure 4.2*.

**Table 4.5: Budget details for CUPB's University Library**

Financial Year (as on)	Number of Additions (Annual)	Cumulative Stock	Annual Spending (Rs. In Lakhs)	
			Books	Journal
2009- 10	2848	2848	51.29	44.29
2010- 11	4805	7653	34.19	54.85
2011- 12	2477	10130	38.15	34.55
2012- 13	4092	14222	50.17	38.71
2013- 14	3060	17282	48.25	88.18
2014-15	3318	20800	47.8	48.32

Books purchased under Project	480	480	4.77
Donated Books	3200	3200	Nil

\* For the year 2015-16 INR of 112 lakhs budget is allocated for the University Library



**Figure 4.2: Annual Expenditure for books and Journals**

#### 4.2.9 What initiatives has the university taken to make the library a ‘happening place’ on campus?

- Cleanliness and hygiene of the library premises with regular sweeping, cleaning and mopping of floors ensures neat physical ambience.
- It is ensured that essential support gadgets (photocopier, computers, AC-Fans in summer /Heater in winters etc.) in the library are working at all times and users would not be put to any inconvenience.
- Library has well designed floor plans, proper directions and guideposts for smooth and convenient access of the library.
- Prompt services are provided to the user and their problems, if any, are addressed immediately.
- CUPB library is E-library. The Wi-Fi access inside the library enables students to have access to online materials.
- Newly procured books and journals are screened in the LED display boards.
- Lectures and talks on new software (e.g. for plagiarism) are organized for faculty and students to ensure use of the software.
- An automatic Tea/Coffee vending machine is installed near the library at subsidized rate
- **Table 4.6** lists workshops, trainings and awareness programmes organized by the library:

**Table 4.6: Workshops, trainings and awareness programmes organized by the library**

S.No.	List of Lectures	Programme date
1.	Organized workshop cum Training programme to aware the library users about different online resources (i.e. Web of Science, End Note, SCOPUS etc).	07.05.2015
2.	Organized training programme on ‘Grammarly’ software for proofreading and plagiarism.	01.05.2015
3.	Organized one day training workshop on Plagiarism	12.09.2014



	detection web tools and also generation of faculty accounts on Plagiarism detection software.	
4.	E-Resource Awareness Programme.	19.05.2012
5.	Organized Science Direct User Awareness Programme.	19.09.2011

**4.2.10 What are the strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?**

The feedbacks forms are available online and the faculty and staff register their feedback online. Any user can send feedback to library.cup@cup.ac.in. The feedbacks are taken positively and action is taken quickly. The library committee discusses the issues and acts on it.

**4.2.11 List the efforts made towards the infrastructural development of the library in the last four years.**

The University Library is on a rapid and consistent path of expansion and development since its inception in 2009, catering to the learning and research requirements of teachers and students of the university. It is fully air-conditioned and well equipped with stacks and modular furniture. It is located at a central place in the Academic Block with ample seating and a quiet and restoring ambience. The interior of the library is enabled with Wi-Fi connectivity allowing the users to work within the library by accessing both offline and online resources.

The University Library has Radio Frequency Identification (RFID) and Electro Magnetic Security System (EMSS) providing automated self-service facility for the users and high end security. It is also equipped with an advanced Online Public Access Catalog (OPAC) and modern reprographic facilities. The library has around 20 CCTV cameras and is under camera surveillance.

*Awareness of E-Resources:*

The University Library has also taken initiatives to create awareness about e-resources among the users.

*Reference Resources:*

The University Library has a large collection of multivolume reference materials and encyclopaedias acquired over the last four years.

### *Thesis and Dissertations*

The University Library has a separate section for thesis and dissertations being submitted by the research scholars of the University for Ready Reference.

### *Audio-Video Repository:*

In tune with the increasing importance of audio and video materials for learning and research, the Library is developing a separate Audio-Video Repository (AVR) for its users. 370 CDs of vital reference materials have been already procured to initiate the process.

### *Newspaper Corner:*

Twenty one newspapers in English, Hindi and Punjabi are subscribed by the University Library. The library preserves an archive of the back issues of all newspapers subscribed right from its inception for ready reference by the users.

### *Maps and Atlas Section:*

The University Library has a substantial collection of geographical maps, political maps and atlases of the world and different countries and regions. The section also has a good collection of human atlases and anatomical sketches. Special drawing file cabinets have been purchased for safely storing such maps and posters

### *Reading Area:*

The University Library has a large reading area with comfortable seating facility and working tables and Wi-Fi connectivity. Currently over 212 users can sit and work in the reading area at a time. It is being expanded to a capacity of seating over 300 users.

The Online Public Access Catalog (OPAC) system in the University Library is enabled with SLIM21 which allows cataloguing of diverse resources such as books, journals, articles, slides, maps, audio/video, films, cassettes, texts, drawings, clippings, serial publications, software and so on.

The Radio Frequency Identification (RFID) system installed in the University Library is with the latest technology and configuration in this regard. It ensures efficient service delivery and security with minimum human input.

### *Book Exhibitions:*

The University Library organized five book exhibitions on the campus for readily procuring books by ensuring the participation of leading publishers and distributors in the country.

### *MoU with INFLIBNET:*

The University has signed MoU with the Information and Library Network (INFLIBNET) on 19 May 2012 for making all the E-resources of INFLIBNET available in the library and making the Doctoral thesis from the university available online through their Shodhganga programme.

The acquisition of books for the library over the last five years has been impressive, reaching a stock of over 21,000 titles presently on its shelves for open access. This includes 595 titles in Hindi, 1867 in Punjabi and 55 in Sanskrit.

The University Library has a large collection of multivolume reference materials and encyclopaedias acquired over the last four years. The number of books and periodicals etc., as well as, other teaching materials has increased over the years.

### *Security:*

Apart from the electro-magnetic security system which is integrated with RFID, the university has put in place additional security infrastructure inside the library. The interior of the library is under constant watch of close circuit cameras for the security of the library materials and that of the users. Fire extinguishers are placed in the library with sign boards indicating the exit route.

## **4.3 IT Infrastructure**

### **4.3.1 Does the university have a comprehensive IT policy with regard to IT Service Management**

Yes, CUPB has a comprehensive IT policy duly approved by the Executive Council of the University (*Annexure 4.1*). Accordingly:

- All IT resources are secured by strong password and password-protected screensaver with the automatic activation feature set to 10 minutes or less.

- Unauthorized access to information or facilities is strictly prohibited.
- The users are advised to be cautious while opening e-mail attachments received from unknown senders, which may contain malware.
- Blogging and social networking are not encouraged during the office hours in the University

### **Information and Network Security**

The University's IT policy clearly states the guidelines and rules related to Information and network security. Some of the prohibitions are:

- Violations of the rights of any person or company protected by copyright, trade secret, patent or other intellectual property, or similar laws or regulations, including, but not limited to, the installation or distribution of "pirated" or other software products that are not appropriately licensed for use by Central University of Punjab.
- Unauthorized copying of copyrighted material including digitization and distribution of photographs from magazines, books or other copyrighted sources, copyrighted music, and the installation of any copyrighted software for which the University or the end user does not have an active license.
- Accessing data, a server, an account or any IT equipment for any purpose other than academics, research and official work related to Central University of Punjab.
- Exporting software, technical information, encryption software or technology, in violation of international or regional export control laws.
- Introduction of malicious programs into the network or server (e.g., viruses, worms, Trojan horses, e-mail bombs, etc.).
- Revealing your account password to others or allowing use of your account by others including family and other household members while working at home.
- Using a Central University of Punjab computing asset to actively engage in procuring or transmitting material that is in violation of

sexual harassment or hostile workplace laws in the user's local jurisdiction.

- Making fraudulent offers of products, items, or services originating from any Central University of Punjab account.
- Effecting security breaches or disruptions of network communication.
- Circumventing user authentication or security of any host, network or account.
- Introducing honeypots, honeynets, or similar technology on the Central University of Punjab network.
- Using any program/script/command, or sending messages of any kind, with the intent to interfere with, or disable, a user's terminal session, via any means, locally or via the Internet/Intranet/Extranet.
- Electronic monitoring is also strictly prohibited except under special conditions.

### **Risk Management**

- The network devices in the university are configured with Access Control lists (ACL) to filter the packets that flow into or out of network interfaces. This significantly reduces the risk of network hacking.
- The websites with insecure contents are blocked for access to prevent the risk of access of untrusted websites.
- Attacks on the University network or systems are detected by University network and system administrators.

### **Software Asset Management**

- Common Purchase Committee is the authority to purchase Computers and network related equipments for the University.
- Adheres to the Terms & Conditions of licence agreements of IT resources software.

## Open Source Resources

- When purchasing new software, free and open-source software and proprietary software are to be considered on an equal footing.

## Green Computing

To reduce the electronic hazards (e waste) and improve the energy efficiency the University shall prefer to adopt buyback scheme where the computers will be purchased from those companies with the buyback scheme. Also, thin clients are encouraged instead of Desktops

### 4.3.2 Give details of the university's computing facilities i.e., hardware and software.

The University has well equipped and furnished computer centre. The layout of the computer centre is provided in *Figure 4.3*.

**No. of systems:** 511 computers, 10 high end workstations and 52 laptops  
(*Table 4.7*)

**Computer-Student Ratio:** 1:2

**Dedicated computing facility:** Yes

**LAN Facility:** Yes

**Proprietary software:** List of software are provided in *Table 4.8*  
below

**Number of nodes/ computers with internet facility:**

700 (including Faculty, Lab. & Admin)

**Any other (please specify)**

Whole Campus is Wi-Fi enabled with 12 Blade Servers and 10 High-end Workstations

# Existing Layout of Computer Centre

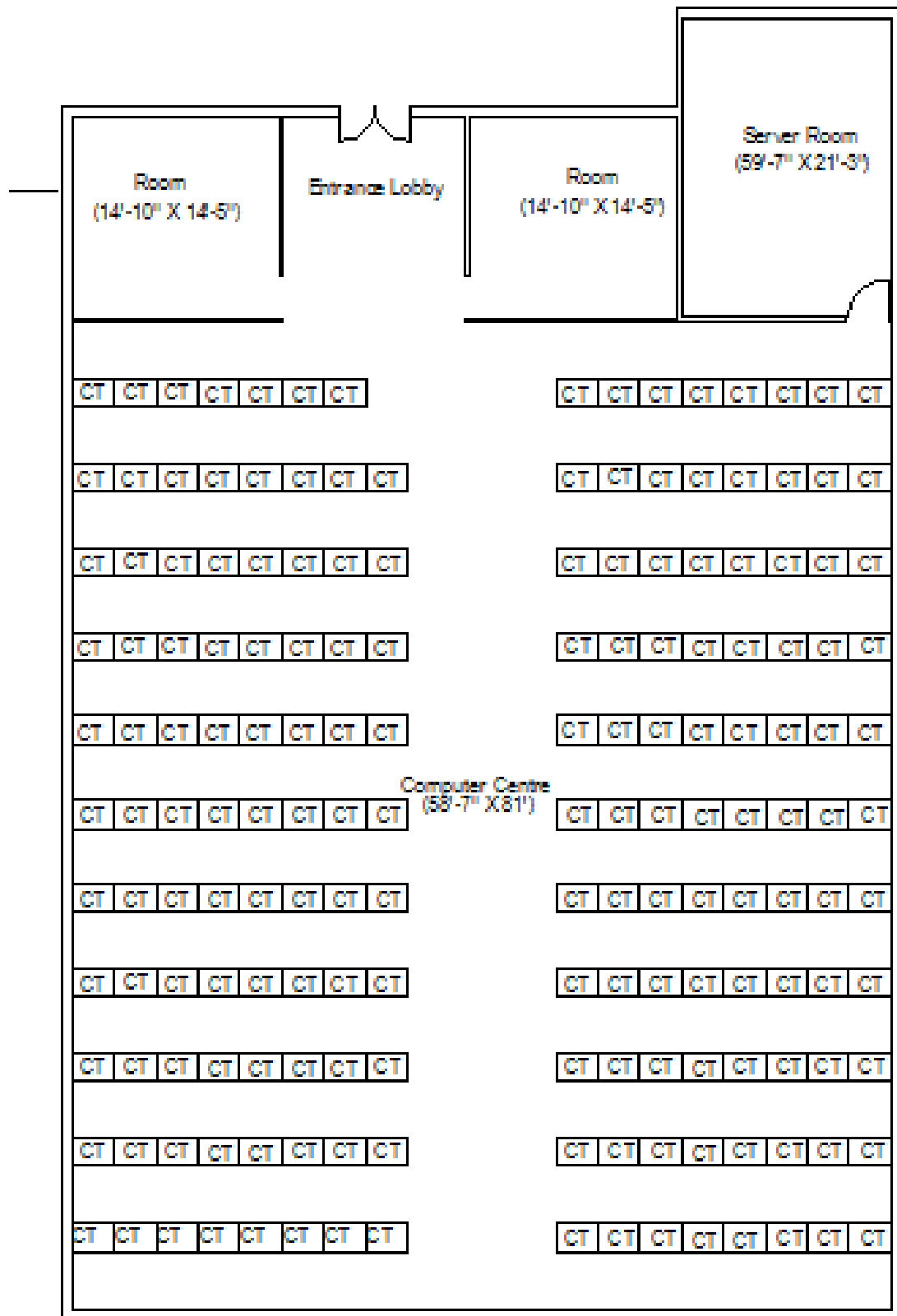


Figure 4.3 : Layout of Computer Centre

**Table 4.7 : Details of Computers**

<b>S.No.</b>	<b>Company name of the computer</b>	<b>No. of Computers</b>
1	HP	50
2	Wipro	20
3	DELL C2D	50
4	DELL 780	48
5	DELL 980	48
6	DELL 990 MT	40
7	DELL 9010	100
8	DELL 9020	105
9	APPLE MAC	30
10	HP i7	20
11	Laptops	
	Apple	1
	Sony C2D	6
	Sony I3	15
	HP	20
	Toshiba	10
12	HP Z800 Workstations	10
13	HP 2620	4
14	Blade Servers (HP 2.80 GHz processors)	12
15	SAN storage 30TB	1



**Table 4.8 : List of Softwares**

<b>S.No</b>	<b>List of proprietary Software</b>
1	Office standard 2010 and Office Professional Plus 2007+ MS office professional 2013
2	Adobe CS5 web premium
3	ChemBio Office
4	Sigma Plot
5	SPSS
6	Origin
7	Autodock
8	MEGA
9	PHYLIP
10	Image J
11	Viper
12	Photoshop CS5
13	Corel Draw X5
14	Symnatec End Point correction 12.1
15	Juniper Hardware Firewall – Junos
16	Trend Micro
17	BitDefender
18	Operating System – Windows 7 and 8, Cent OS, Windows Server 20B8R2
19	MATLAB + 13 toolboxes
20	Embarcadero C++
21	ArcGIS
22	Schrodinger
23	Tally ERP
24	Geomatica

#### **4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

- To make the University 100% Wi-Fi campus.
- To deploy e-governance throughout the institution through expansion of Information Management System and to create paperless office, using cloud computing technology.
- The University has developed an intranet that provides all the information about the activities and events of the university
- To upload the class lectures and power point presentations in the intranet for better understanding of concepts and fundamentals
- To increase the bandwidth of internet facility.
- Upgrade the old and outdated computers if any. They are either replaced or enhanced with respect to configuration. Intel Pentium 7, MAC machines are recently added to the computer centre. The university is planning to get into the agreement of 'buy back policy' with the suppliers. Addition of computers is made according to the requirement.
- To develop e-learning facilities.
- Fibre-optic cables for faster and efficient connectivity.
- High end work stations for research purposes such as Remote sensing and GIS applications, Environmental modelling, bioinformatics, chemical modelling etc.
- Annual maintenance contract (AMC) is made with the companies for the system servicing.

#### **4.3.4 Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research.**

- Audio-video lecture programmes – The computer centre arranges for live interactive audio video lecture through A-View software.
- The centre for Environmental Science and Technology has coordinated two outreach programme (13<sup>th</sup> and 14<sup>th</sup>) of Indian

Institute of Remote Sensing sponsored by NNRMS, Department of Space, Government of India.

**4.3.5 How does the university address issues such as authenticity and copyright with regard to online resources that lie outside the university?**

The computer centre assists the university library to provide access to anti-plagiarism and grammarly software. The University has an antiplagiarism policy and ensures strict abidance to the policy. An IPR (Intellectual property rights) cell is active in the University to provide IPRs protection information, orientation and facilities to university researchers and scientists. The university emphasises proper acknowledgement of the sources in thesis, papers and any other articles published.

**4.3.6 What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?**

- The University library provides access to E books and E journals and also has digital library.
- Display of new books and journals in the LED screen inside the library
- Ambient environment for the students to study inside the library
- Extended library timings to favour the student in continuing their study in the library for longer hours.
- The University is in the process of making the library open for 24x7
- Wi Fi enabled campus is also one another initiative to enhance the student learning.
- Video lectures using A-View software and Skype
- Screening of documentaries to facilitate better understanding
- Guest lectures of subject experts
- Trainings and workshops on software such as SPSS, Arc-GIS, Geomatica
- Training programme on Grammarly, web of science and scopus.

#### **4.3.7 What are the IT facilities available to individual teachers for effective teaching and quality research?**

- A desktop with internet connectivity has been provided to each faculty.
- Official email id (staff@cup.ac.in) & Wi-Fi connectivity/access to their electronic gadgets are provided.
- A ICT class room in each centre equipped with Whiteboard, Wi-Fi connected projector, Wireless Access point, and Necessary network & other accessories, which enable effective teaching
- Web-based audio/video educational Contents
- Online access to journals and e books with internet bandwidth of 1 gbps.
- E-Classroom using A View software
- High-end Computing Workstations with software for research eg. Arc GIS, SPSS, Mathlab, Sigma plot, Geomatica (5 user licence)

#### **4.3.8 Give details of ICT-enabled classrooms/learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?**

- ICT class rooms with well equipped interactive white board with Wi-Fi connected projector, Wireless Access point and Necessary network & other accessories are available in auditorium, seminar hall and three other centres of the University (Centre for Environmental Science and Technology, Centre for plant sciences and Centre for Education). In addition class rooms in all other centre have projector facility.
- E-Classroom using A View software
- High-end Computing Workstations with software for research eg. Arc GIS, SPSS, Mathlab, Sigma plot.

**4.3.9 How are the faculty assisted in preparing computer- aided teaching-learning materials? What are the facilities available in the university for such initiatives?**

- High bandwidth internet connectivity with a dedicated uninterrupted individual system paves the way to prepare and collect materials for teaching with online access to journals.
- A desktop with internet connectivity has been provided to each faculty.
- Antivirus is provided to all the faculty
- Round the clock library facility with a wide range of books
- The computer centre has a manager and technical assistants to attend to the issues related to the systems and software. Online complaint and e ticketing facility is available for the same.

**4.3.10 How are the computers and their accessories maintained?**

- The computers are maintained through AMC which is outsourced.
- The software AMC are maintained with the supplier.
- The computer centre has a manager and technical assistants to maintain the systems and to attend to the issues related to the systems and software.

**4.3.11 Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed of?**

- Yes, E-Classes through A View, Videoconferencing, other internet services
- NKN connectivity is available.
- Video conferencing facility.

**4.3.12 Does the university avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?**

University internet firewall policies allow access to Wikipedia, online dictionary and other educational and technical open source software

access/download. However it denies access to social networking, online trading, and other sites not suitable for educational environment.

**4.3.13 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university.**

The Computer Centre is provided funds for update, deployment and maintenance of computers on need basis.

**4.3.14 What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment?**

- The University plans to MOOC (open online courses) for transfer of knowledge from closed network to open environment.
- Further the power point presentations of the lectures would be uploaded in the intranet.
- University plans to create ‘Virtual’ learning labs
- The University has also planned to augment e learning resources available in the university website and in the library.

**4.4 Maintenance of Campus Facilities**

**4.4.1. Does the university have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.**

The university has an Estate office with an Executive Engineer, Assistant Engineer, Campus Manager and an Assistant Estate Supervisor. The University has also employed Electricians (4 Nos), Plumber, Carpenter, Gardener through outsourcing. In addition a campus up keeping committee with few Assistant Professors as members also exists to take care of the ambience of the campus. The Estate office maintains classrooms, laboratories and other building area. The initiatives to maintain the ambience include

- To provide 24 hr electricity supply to the campus, the University has installed four diesel generating sets, one of 315 KVA, two of 125 KVA each and the other of 90 KVA capacity. The University has already installed two 5KW Solar-Wind Energy Hybrid Systems with 75% subsidy from Ministry of New and Renewable Energy (MNRE), Government of India. The systems will ensure

uninterrupted power supply for tube lights, fans and computers. In addition, the Ministry of New and Renewable Energy (MNRE) has also approved 50% subsidy for the installation of 60 KW SPV Solar Roof Top System for the university. It is being installed and commissioned through Punjab Energy Development Agency (PEDA) with a total estimated cost of Rs. 150 lacs.

- All the street lights in its 35 acre city campus are on solar cells, making the campus environment friendly.
- To cater the salt free water needs, the university has installed a Desalination plant of 4000 LPH capacity.
- A fully air-conditioned modern auditorium well equipped with state-of-the-art remotely operated multimedia projectors, tablet PCs (Apple iPad) and 5.1 surround-sound theatre system with a sitting capacity of around 250 is available for the academic and cultural activities of the university.
- Maintenance of 15 classrooms.
- Lawns, garden, beautiful walking trails and bikeways around the campus.
- Four big parking slots for two and four wheelers.
- RO plants with water coolers at main places of the campus.
- 24 hour security is available at the main gate, entrance of the administrative, academic (science and humanities) and hostels (boys and girls). Female security guards are appointed for girls hostel.
- The University is under round the clock camera surveillance

**4.4.2. How are the infrastructure facilities, services and equipment maintained? Give details.**

- The Estate office has plumbers, electricians, carpenters and helpers through whom the maintenance of the buildings, class rooms and laboratories are carried out. A complaint register is placed at the estate office to attend to the various maintenance problems.
- The Estate office also looks into the logistics of the University.

- The air conditioners are serviced every year before the start of the summer season.
- Almost all equipment is under AMC for maintenance. In case of unavailability of AMC for any specific instrument/ equipment or software, the respective centre or school in charge can propose for necessary maintenance/repair to the Vice Chancellor through the Centre Coordinator and Dean.
- In the central instrumentation laboratory, engineers are hired from the companies as a part of AMC for 5 years to ensure proper handling and efficient working of the instrument.
- Cleaning of the building, laboratories and washrooms are done regularly by outsourced employees.
- The cleanliness of the campus and gardens are also maintained through outsourced employees.
- A 24 h security is available at the main gate and at the entrance of administrative, academic and hostels, outsourced a security agency.

#### **4.4.3. Any other information for infra-structure and learning resources**

Saving precious energy is of utmost concern to the university. Steps taken in this regard are:

- **Renewable Energy Systems**

In 2009-2010 a 5 kw Solar-Wind Energy Hybrid System was installed at the City Campus of the university through Punjab Energy Development Agency (PEDA) at a cost of Rs. 8,05,000 and around Rs. 17,00,000 were provided by the Ministry of New and Renewable Energy, Government of India. The university has 24 hours electric power supply and renewable energy systems have been installed to reduce the use of conventional sources of energy. A hybrid wind mill and solar photovoltaic system of 10 kw capacity fulfil the electricity requirement of the campus. Street lights in the campus work through standalone solar photovoltaic units. Solar water heaters are installed in the hostels meeting the hot water requirements of the students.

- **Wind Mills & Solar-Wind Energy Hybrid Units**

Keeping in view the dire needs of the university to have continuous electrical supply and to avoid the frequent power cuts, the University



is laying great importance to use solar energy. Already the University has got installed two 5KW Solar-Wind Energy Hybrid Systems with 75% subsidy from Ministry of New and Renewable Energy (MNRE), Government of India. The systems will ensure uninterrupted power supply for tube lights, fans and computers.

The Ministry of New and Renewable Energy (MNRE) has also approved 50% subsidy for the installation of 60 KW SPV Solar Roof Top System for the university. It is being installed and commissioned through Punjab Energy Development Agency (PEDA) with a total estimated cost of Rs. 150 lacs.

- **Diesel Generating Sets**

A hotline from the Punjab State Power Corporation Limited was obtained to ensure uninterrupted supply of electricity to the university. Four eco-friendly diesel generators with a total capacity of 655 KVA were also installed for the supply of electricity to important installations in the City Campus in case of breakdown of hotline. The diesel generators as purchased as per the Pollution Control norms (2013).

- **Genetic Heritage Park**

In order to preserve rare and endangered species of plants, a Genetic Heritage Park has been established in a 6.5 acre area near the residential area. Saplings of Imli (*Tamarindus indica*), Lasuda (*Cordia dichotoma*), Phalsa (*Grewia asiatica*), Phalahi (*Acacia modesta*), Banyan (*Ficus religiosa*), Neem (*Azadirachta indica*), Drek (*Melia azadirachta*), Guggul (*Commiphora wightii*) and Pomegranate (*Punicagranatum*) have been planted.

- **Waste Management Facility**

The University has pits for degradation and disposal of the food waste generated in the Canteen/Mess. Vermicomposting pits are also available inside the campus.

***Research Infrastructure developed by the university:***

- a) Well-equipped tissue culture laboratories for plant, animal, human and cell-lines culturing and a Molecular Genetics laboratory having 96 capillary 3730XL high throughput DNA sequencer, RT PCR, Gradient PCR, UV-Visual Spectrophotometer, automated karyotyping system,

Electrophoresis units, Gel documentation system, high precision water baths, Ultra-low temperature deep freezers, high speed cooling centrifuges, Vacuum Concentrator, NanoDrop 3000, CO2 incubators, and Millipore water purification systems have been established at the City Campus, to supplement the existing state of the art Biosciences, Chemical Sciences and Pharmaceutical Sciences laboratories.

- b) Walk in cold room facility with three different temperature regimes available for short and medium term storage of biological materials for periods up to ten years.
- c) A growth house and a screen house for multiplication and conservation of endangered plant species.
- d) Atomic Absorption Spectrophotometer, Gas Chromatographic Mass Spectrometer, Fourier Transform Infrared Spectrometer and Microvoltmeter have been added to the central instrumentation facility.
- e) Field-Emission Scanning Electron microscope, Confocal Laser Scanning Microscope with Fluorescence Correlation Spectroscopy and other sophisticated equipment being added as central facility.

**1. Aim and Objective Statement:**

The purpose of this policy is to sketch out the acceptable and ensure the legitimate use of IT resources at Central University of Punjab (CUPB). All CUPB's IT facilities and information resources shall be the property of the University and not of a particular individual School or Centre. The aim of the policy is to facilitate the safe, secured, effective, target oriented and lawful use based on spirit of co-operation in pursuance of Vision Statement of CUPB.

The policy shall cover all Information Technology facilities and services provided by CUPB. It shall govern the use of resources of information technology by all the stakeholders of CUPB.

**2. Scope of Application:**

This policy shall apply to the use of information, electronic devices, computing devices, and network resources of CUPB. All students, employees, consultants, temporary, and other workers at CUPB and its subsidiaries are responsible for exercising rational judgment regarding appropriate and judicious use of information, electronic devices, and network resources in accordance with followings:

- IT Act 2000 and its Amendment.
- Email Policy of the Government of India.
- Any other policy or standards issued by the Government of India from time to time.

**Note:** The above rules shall apply *with necessary modifications (mutatis mutandis)* to the users of CUPB network.

- Policies and standards issued by CUPB which shall be subject to modification from time to time.

**3. Date of Commencement:** This policy shall be brought into force from the date of its approval by the statutory bodies of the University.

**4. Definition Clause:** Unless the context requires otherwise, the expression defined hereinafter shall be construed in following sense-

- 4.1 **IT Resource:** The expression IT resource shall include the computer equipment/s, portable and mobile devices, and facilities including the network-internet and intra-net, wireless networks, external

storage devices, peripherals like printers and scanners and the software associated therewith in addition to information and data generated for official purpose and all electronic information and communication contained on the network.

- 4.2 **Network Resource:** It shall include any electronic/electrical and/or mechanical devices connected to computer network of CUPB.
- 4.3 **Users:** It shall include all students, employees, consultants, temporary, and any other person permitted by the Competent Authority using IT Resources/facilities at CUPB.
- 4.4 **Malicious Program:** It includes software that appears to perform a useful or desirable function, but actually gains unauthorized access to system resources or tricks a user into executing other malicious logic.
- 4.5 **Disruption:** It means a circumstance or event that interrupts or prevents the correct operation of system services and functions.
- 4.6 **Blog:** A discussion or informational site published on the World Wide Web.
- 4.7 **Competent Authority:** The expression in reference of Section 3 shall stand for statutory body and for section 4.3, it shall be any official designated for the above-said purpose.
- 4.8 **Proprietary Information:** It shall include any data, information that has been the part of official assignment and a password of resource, if any.

## 5. **General Use, Access to Network and Ownership:**

- 5.1 The proprietary information of CUPB stored on electronic and computing devices whether owned or leased by the university, the employees, and students or a third party, remains the sole property of Central University of Punjab.
- 5.2 The users of IT facilities and services of university shall be responsible to promptly report the theft, loss or unauthorized disclosure of CUPB proprietary information.
- 5.3 The users shall access, use or share CUPB proprietary information only to the extent it is authorized and necessary to complete the assigned job responsibilities
- 5.4 For connecting to a CUPB wireless, user shall ensure the following:
  - (a) A user shall register the access device and obtain one time approval from the competent authority before connecting the access device to the CUPB wireless network.
  - (b) Wireless client systems and wireless devices shall not be allowed to connect to the CUPB wireless access points or remote network without due authentication.

- (c) To ensure information security, it is recommended that users should not connect their devices to unsecured wireless networks.
- (d) The users shall be allowed to remotely access the services and resources of CUPB by adhering the procedure to be notified and specified by the competent authority from time to time.

## **6. Filtering and Blocking of Sites:**

- 6.1 CUPB, through its Competent Authority by issuing a Circular about the information, may block content over the Internet which is in contravention of the relevant provisions of the IT Act 2000 and other applicable laws or policy of CUPB or which may pose a security threat to the network or undermine the interests of CUPB.
- 6.2 CUPB may also block content which, in the opinion of the Competent Authority, is inappropriate or may adversely affect the productivity of the users.

## **7. Security and Password:**

- 7.1 All IT resources shall be secured by strong password including document as well as equipment password. The password should include a combination of lowercase & uppercase alphabets, numerical and special characters.
- 7.2 All computing devices shall be secured with a password-protected screensaver with the automatic activation feature set to 10 minutes or less. You must lock the screen or log off when the device is unattended.
- 7.3 No PC shall be left unattended without logging off and the user shall be responsible for any misuse of such a device.
- 7.4 The users shall use extreme caution while opening e-mail attachments received from unknown senders, which may contain malware.
- 7.5 Users shall be responsible for all activity performed with their personal user ID and/or passwords. Users shall not permit others to perform any activity with their user IDs and/or passwords or perform any activity with IDs and/or passwords belonging to other users. Permitting any other person to perform any activity with one's user ID and/or passwords shall be permissible with prior written approval from the competent authority with an undertaking that such a password shall be subsequently changed. These shall be treated as sensitive and confidential information.
- 7.6 No official of the University shall require, for whatever purpose, the password of other officials on any kind of questionnaire, in writing or oral, through phone or electronic message service unless

permitted by the competent authority in writing with an undertaking that such a password shall be subsequently changed.

- 7.7 Users shall refuse all offers by software to place a cookie on their computer such that they can automatically log on the next time that they visit a particular Internet site.

## 6. Electronic Monitoring:

- 8.1 CUPB shall have the right to audit networks and systems at regular intervals, from the point of compliance to this policy in the case of a specific alleged misconduct or to redress any fault in the functioning of the system.

Provided that above access shall be lawful only with the prior approval of competent authority and under intimation to the user.

- 8.2 CUPB or any person authorized on its behalf, for security related reasons or for compliance with applicable laws, may access, review, copy or delete any kind of electronic communication or files stored on CUPB provided devices by adopting the procedure given below:
- (a) The user must be intimated.
  - (b) Should such access be necessary without seeking the user's permission, it should, wherever possible, be approved by a competent authority prior to inspection.
  - (c) If it has not been possible to intimate the user, any access should be reported to the user or to an appropriate authority as soon as possible.

7. **Unauthorized Access:** Access to any system or its part/s, information or facilities shall be strictly prohibited and invoke disciplinary action.

8. **Unacceptable Use:** Under no circumstances, a user of IT resources and facilities of CUPB shall be authorized to engage in any activity that is illegal under Indian or international law.

Following activities shall be, in general, prohibited but the authorized users shall be exempted from these restrictions during the course of their legitimate job responsibilities. The lists below are by no means exhaustive, but this is an attempt to provide a framework of activities falling into the category of unacceptable use.

### 8.1 System and Network Activities:

- (a) Users shall not undertake any activity through any website or applications to bypass filtering of the network or perform any other unlawful acts which may harm the network's performance or security.

- (b) Violations of the rights of any person or company protected by copyright, trade secret, patent or other intellectual property, or similar laws or regulations, including, but not limited to, the installation or distribution of "pirated" or other software products that are not appropriately licensed for use by CUPB.
- (c) Unauthorized copying of copyrighted material including, but not limited to, digitization and distribution of photographs from magazines, books or other copyrighted sources, copyrighted music, and the installation of any copyrighted software for which CUPB or the end user does not have an active license.
- (d) Accessing data, a server, an account or any IT equipment for any purpose other than academics, research and official work related to CUPB.
- (e) Exporting software, technical information, encryption software or technology, in violation of international or regional export control laws.
- (f) Introduction of malicious programs into the network or server (e.g., viruses, worms, Trojan horses, e-mail bombs, etc.).
- (g) Revealing your account password to others or allowing use of your account by others including family and other household members while working at home.
- (h) Using a CUPB computing asset to actively engage in procuring or transmitting material that is in violation of sexual harassment or hostile workplace laws in the user's local jurisdiction.
- (i) Making fraudulent offers of products, items, or services originating from any CUPB account.
- (j) Making statements about warranty, expressly or implied, unless it is a part of normal job duties.
- (k) Effecting security breaches or disruptions of network communication. Security breaches include, but are not limited to, accessing data of which the user is not an intended recipient or logging into a server or account that the user is not expressly authorized to access, unless these duties are within the scope of regular duties. For purposes of this section, "disruption" includes, but is not limited to, network sniffing, pinged floods, packet spoofing, denial of service, and forged routing information for malicious purposes.
- (l) Executing any form of network monitoring which will intercept data not intended for the user's host, unless this activity is a part of the user's normal job responsibility.
- (m) Circumventing user authentication or security of any host, network or account.
- (n) Introducing honeypots, honey nets, or similar technology on the CUPB network.

- (o) Using any program/script/command, or sending messages of any kind, with the intent to interfere with, or disable, a user's terminal session, via any means, locally or via the Internet/Intranet/Extranet.

## **9. Email and Communication Activities:**

While using CUPB IT resources to access and use the Internet. Following points are to be followed:

- 9.1 the users must realize that they represent CUPB. Whenever users state an affiliation to CUPB, they must also indicate that "the opinions expressed are my own and not necessarily those of the CUPB".
- 9.2 E-mail service authorized by CUPB shall only be used for all official correspondence after the specific notification as to the implementation of this Clause.
- 9.3 For personal correspondence, users may use the name-based e-mail id assigned to them on the CUPB authorized e-mail Service.

The following activities are strictly prohibited:

- 9.4 Sending unsolicited email messages, including the sending of "junk mail" or other advertising material to individuals who did not specifically request such material (email spam).
- 9.5 Any form of harassment via email, telephone or paging, whether through language, frequency, or size of messages.
- 9.6 Unauthorized use or forging of email header information.
- 9.7 Solicitation of email for any other email address, other than that of the poster's account, with the intent to harass or to collect replies.
- 9.8 Creating or forwarding "chain letters", or other "pyramid" schemes of any type.
- 9.9 Use of unsolicited email originating from within the network of CUPB or from other Internet/Intranet/Extranet service providers on behalf of, or to advertise, any service hosted by CUPB or connected via network of CUPB.
- 9.10 Posting the same or similar non-business-related messages to large numbers of Usenet newsgroups (newsgroup spam).
- 9.11 Retiring or the employees being relieved and the students leaving the university shall surrender a mail Id allotted on CUPB domain name or CUPB email server before clearing their No Dues Certificate.



## 10. Blogging and Social Media:

In contrast to other traditional media, social media is more interactive, enables one-to-one conversation and facilitates instant response. However, CUPB is aware of the fact that on such platforms the perception of official and personal roles and boundaries is often blurred. Therefore, while using social media for official purposes, the following may be kept in mind to smoothen interaction. Blogging or access to social media is regulated. Limited and occasional use of systems of CUPB to engage in blogging is acceptable subject to the conditions specified hereinafter.

10.1 Social Media can be accessed only after office hours. If a user is required to use it for a part of his official assignment or collecting any information during office hours, it can be permitted by the competent authority.

**Exception:** Following shall be exempted from the application of this rule:

- (a) Users or any other official working for the Department of Public Relations.
- (b) Users or any other official working for community outreach under the Community Outreach Programme.

10.2 There shall be absolute prohibition on the users for making any discriminatory, disparaging, defamatory or harassing comments or bullying while blogging or using social media. The acts, omission or any statement resulting into instigation, abatement to commit any offence, creating communal hatred or apathy shall be strictly prohibited.

10.3 No user shall involve oneself in any kind of blogging resulting into compromise with the interests of the university including its employees.

10.4 No user shall attribute one's personal statements, opinions or beliefs to Central CUPB when engaged in blogging or accessing social media.

10.5 Apart from following all laws of the land pertaining to peace and order as well as the handling and disclosure of copyrighted or export controlled materials, the logos of CUPB and any other CUPB intellectual property shall also not be used in connection with any blogging activity.

10.6 Core Values for Users of Blogs and Social Media:

- (a) Identity: In official communications, user must reveal his identity and his role in the department and publish in the first person. Disclaimer may be used when appropriate.
- (b) Authority: Users shall not comment and respond unless authorized to do so especially in any of the following matters:
  - i. Recruitment;
  - ii. Examinations;
  - iii. Tenders;
  - iv. Quotations;
  - v. Matter sub-judice (pending);
  - vi. Draft Rules, Regulations, Notifications, Circulars;
  - vii. Injuring and damaging the reputation of any Colleague, student and CUPB.
- (c) Relevance: Users can comment on issues relevant to their area and make relevant and pertinent comments without compromising the interest of the CUPB. This will make conversation productive and help take it to its logical conclusion. However, CUPB shall not be responsible for any comments and it must be ensured by the user before making any comment or participating in the deliberation that the comments or idea expressed by him are his personal, not representing CUPB.
- (d) Professionalism: Users must be polite, discrete and respectful to all. They shall refrain themselves from making any personal comments for or against any individuals or agencies. They should be careful not to politicize any kind of professional discussions.
- (e) Compliance: Users shall be compliant to relevant rules and regulations. They should not infringe upon IPR, copyright of others.
- (f) Privacy: Do not reveal personal information about other individuals as well as do not publish your own private and personal details unless you wish for them to be made public to be used by others.

**11. Dissemination of IT Policy:** For dissemination, following measures shall be adopted:

11.1 Mandatory disclosure of policy on the CUPB Website.

11.2 Orientation session at the time of commencement for all Stakeholders.

11.3 One session during Orientation Programme for newly admitted students or all recruited Staff.

**Disciplinary and Legal Measures:**

11.4 Deliberated and serious breach of the policy statements in this section shall invoke disciplinary measures which may include, in addition to the penalties, person in conflict with policy/offender being denied access to IT services and facilities offered by CUPB. Nonetheless, if the act is covered with the meanings and definitions of offences defined under Indian Penal Code, 1860, Information Technology Act, 2000 (with Amendments) and any other allied laws, regulations, the legal proceedings against the person in conflict with policy or offender shall be initiated within the prior written approval of the Competent Authority.

11.5 Notwithstanding discussed above, the Competent Authority shall have the Authority to take appropriate action in case any act is not covered under the provisions referred hereinbefore if the act or omission affects national interest, interest of the CUPB or proves otherwise offensive.

**12. Power to Revise:** The rules under this IT Policy of CUPB shall be subject to revision by the Competent Authority from time to time.

## **CRITERION-V**

# **STUDENT SUPPORT AND PROGRESSION**

## CRITERION-V STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Mentoring and Support

Central University of Punjab has a strong mentor–mentee system in place, whereby, students are mentored by the faculty from the day of orientation to the day of graduation. The Mentor-Mentee peer groups, Programme Advisors, Research supervisors, Hostel wardens, Dean Students Welfare, Students Counseling Cell all organize mentoring and support to students.

Class room teaching apart, students are provided mental, physical and job-oriented training. Support services like library, internet, hostel, language laboratories, sports facilities, health centre and canteen are available. CUPB's facilities have attracted more and more students over the years. Also there is a continuous improvement in student's performance in curricular, co-curricular and extra-curricular aspects.

#### 5.1.1. Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

The University has academically sound and rewarding environment and considers student support as an essential and important component of its functioning.

##### *Structural characteristics of CUPB's Mentoring system*

CUPB has a unique system of student's mentoring. On the day of orientation the students are divided in groups of 5-8 and allotted a Faculty member as a mentor. In a rather unconventional procedure, an attempt is made to group students of a region together and allot a mentor of the same region. It is believed that this creates a comfort zone for the students in their mentor group and yet there will be plenty of opportunities for them to mix with students from other regions during various activities at CUPB. Students are provided with one opportunity to change the mentor group, if they like, and thereafter the group remains with the same mentor until graduation. Contact details of the mentors are provided to the parents and thus mentor is a single point source for the parents to seek all information academic, general or personal about the student's performance at the CUPB. Parents can also reach the mentor for any emergency. Each year more and more students join the mentor group: the seniors treat fresher's as their "siblings".

Apart from the Mentor-mentee groups, each academic programme in the university has a designated "Programme Advisor" for advising the students on Academic Matters. Again a unique feature of student's support system is that as per the Executive Council's decision, programme advisors can be held

accountable for students' progression and must ensure that the students are guided properly on choice of courses and other academic regulations. Wherever necessary, the programme advisors must advise the students in writing or through e-mails, particularly about the requirements for completing their degree programmes.

Students also have other support systems: Research supervisors, Hostel wardens, the Dean Students Welfare and Students Counseling Cell. All of them provide the necessary support for growth of students.

#### *Functional characteristics*

Mentor-Mentee groups are strong personally bonded peer groups for academic, residential, personal, adjustment problem, health and financial support. Programme Advisors are responsible for advising the students on choice of courses in order to complete their programme successfully. Research supervisors provide technical guidance and support for research; and wardens, DSW and Students Counseling Cell ensure comfortable stay and good mental health of the students.

Over and above the mentoring systems as above, CUPB also has support systems such as:

- (i) Soft Skill coordinator on campus is involved in enriching the soft skills with the support of in-house language laboratories in the campus.
- (ii) Computer Centre for IT services
- (iii) Medical facilities including an ambulance as per specifications
- (iv) Financial-Loan from the bank
- (v) Wi-fi Internet
- (vi) Sports
- (vii) University Cafeteria
- (viii) Reading room
- (ix) Gymnasium
- (x) Tuck Shop
- (xi) ATMs- Two (State Bank of Patiala and Punjab National Bank)

**5.1.2. Apart from classroom interaction, what are the provisions available for academic mentoring?**

In addition to class room interaction, mentor groups have regular meetings. Also, students are taken to the field trip and educational tours to visit the various institutions, and industries located in the various parts of the country. Besides, students are given Personal Counseling and remedial coaching is provided for students who require extra training. Special coaching classes for competitive examinations (UGC-CSIR) are provided for advanced learning. Tutorial classes are held as per timetable and teachers have face to face interaction with students individually for their academic problems.

Further, various research societies / associations at centre and faculty levels invite eminent scholars and scientists for interactive sessions with students and faculty.

**5.1.3. Does the university have any personal enhancement and development schemes such as career counseling, soft skill development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.**

University conduct various program required for personal enhancement and development of students.

*Personality and Language Development Cell:* Personality and Language Development cell of the university has been established to foster soft-skills and communication skills for the students. A 3-month short course on Soft skills is organized every semester and classes are held in the evening for interested students. The cell regularly organizes activities including soft-skill development workshops, communication skills training and general knowledge quiz competition. Students actively participate in these programs in view of today's highly competitive and stressful academic/career environment.

As part of the activities of this cell, a Japanese Language course is being conducted on every Saturday between 3-4 p.m. This elementary course introduces the students to Japanese alphabets (Hiragana, Katakana and elementary Kanji), basic grammar and commonly used spoken Japanese expressions.

*Career Counseling:* The University has a "Placement Co-ordination Cell" and then each centre has its own placement cell. These Cells offer very personalized career counseling in the Faculties of Arts, Science, Engineering

and Technology. With increasing strength of the students graduating from CUPB, Placement Cells are becoming more and more active.

*Orientation program:* Orientation programmes are held at various levels for the newly admitted students at the beginning of every academics year. At the University level, orientation led by the Vice-chancellor, CUPB is organized in the main auditorium. The Deans, Registrar, CoE, CoCs and all faculties are introduced with power point slides of their biodata. Orient about examination system, ragging, sexual harassment, academic system and grievance redressal is done and a virtual tour of University given.

Thereafter, the students are given orientation in their respective Centres, whereby the activities of the Centre and various programmes are introduced.

#### **5.1.4. Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?**

CUPB has raised a corpus “Students Financial Assistance Fund” to help the students in need. Also, CUPB has arrangement with four local banks for Education Loan Facility to students. Apart from this Rajiv Gandhi National Fellowship and Maulana Azad National Fellowship are two schemes where students are encouraged to apply with a proposal and mentorship from the university. A large number of students have Fellowships from National Agencies. University Fellowships are also provided to M.Phil. and Ph.D. students.

##### **1. *University Financial Assistance Scheme:***

Financial assistance is given to the economically weaker students equal to tuition fee/ hostel fee/ half hostel fee. The Financial Assistance Scheme was initiated in 2013 where a committee of COCs, OICs of the related centres screened the needy students and recommended suitable financial assistance. A sum of Rs 2,31,970/- and 3,95,850, respectively was given to the selected students in last two years.(*Table 5.1*)

##### **2. *Earn While You Learn Scheme:***

Central University of Punjab, Bathinda, takes an initiative to make the students self-reliant and develop their creativity and skills during their stay at university. The university encourages the students to take up part time jobs at the university to make them independent under the “Earn While You Learn” scheme on campus. (*Annexure 5.1*)



### 3. University Financial System

Central University of Punjab provide scholarships to the selected M.Phil, and Ph.D students (Table 5.2). There is facility of providing Interest free loan to the students.

### 4. CUPB Helping hand

- The students' of Central University of Punjab have formed a society named "CUPB Helping Hands" where the student volunteers collect voluntary money from members, staff and faculty and use it for noble causes like helping the needy students for paying their mess bills, fees etc. The CUPB Helping hand had collected approximately Rs 80,000/-, blankets, clothes, medicines and donated in person to J&K flood hit camps.

**Table 5.1: Number of students considered and given financial assistance**

Year	No. of applications received	Number of students recommended	Total amount disbursed from student aid
2013-14	42	29	2,31,970/-
2014-15	116	63	3,95,850/-

**Table 5.2 : Data showing University M.Phil. and Ph.D fellowship disbursed since 2009**

S.No.	Year	University Scholarships /Fellowships	
		M.Phil	Ph.D
1	2009-10	10	NIL
2	2010-11	38	NIL
3	2011-12	58	NIL
4	2012-13	70	21
5	2013-14	117	34
6	2014-15	135	55

Apart from the University fellowship, students get fellowship from AICTE for GPAT and GATE qualified M.Pharm and M.Tech students. Till today, 258.97 lacs have been disbursed to the students as fellowship.

S.NO	Year	Fellowship disbursed (Lacs)
1	2009-10	Nil
2	2010-11	8.83
3	2011-12	23.32

4	2012-13	43.68
5	2013-14	72.74
6	2014-15	110.40
	Total	258.97 Lacs

**5.1.5. Does the university publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?**

Yes, the University publish a Student's Manual/ Hand book in electronic version and with few print copies. These include information like degrees offered, structure of the programmes, number of semesters, duration, eligibility for admission, credit, marks and grading, requirement of attendance, examination pattern, evaluation and syllabi, student welfare activities, campus amenity, UGC schemes, teaching and non-teaching staff details. Students download their syllabi, various forms, applications through our university website also.

**5.1.6. Specify the type and number of university scholarships/ freeships given to the students during the last four years. Was financial aid given to them on time? Give details (in a tabular form) for the following categories: UG/PG/M.Phil./Ph.D./Diploma/others (please specify).**

CUPB grants fellowships to the students as per UGC rules. All scholars of M.Phil.- Ph.D. are given fellowship of Rs. 5,000 and Rs. 8,000 per month, respectively. Fellowship also includes a working contingency of Rs. 8,000 and Rs. 10,000 for Humanities and Science, respectively. (*Table 5.2*)

All the fellowships are disbursed on time directly to the bank account numbers of the students. There are no complaints from the students in this regard.

Also University has started a **Diploma in Green Farming Technology** under UGC scheme of Community Colleges. The students of the programme are given Rs. 1000/- per month as scholarship.

**5.1.7. What percentage of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow,etc.)?**

- University does not have undergraduate programs and therefore, no such financial assistance has been received so far.

- However, 6 students belonging to SC category have received post metric scholarship from Punjab Government under Ashirwad Scheme. A sum of rupees 40,045 was paid as 75% of the fee paid to the University by the students.
- Also, financial assistance in the form of fellowships from agencies like UGC, CSIR, ICMR is being received. No students of M.Phil. and Ph.D is without financial assistance.

**5.1.8. Does the university have an International Student Cell to attract foreign students and cater to their needs?**

University has established an International Collaborations Division (*Annexure 5.2*) that looks in to the international students admission, liaising and needs and other international activities. CUPB has a well defined and duly approved policy for admitting International students.

**5.1.9. Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?**

The question is same as 5.1.4.

**5.1.10. What types of support services are available for**

- **Overseas students**

University has established an International Student Cell as a part of International Collaborations Division, which caters to the eligibility, admission, hostel and other needs of the International students.

- **Physically challenged / differently-abled students**

University follows the reservation policy of Government of India. Also, the physically challenged / differently abled students are given preference in the hostel accommodation.

- **SC/ST, OBC and economically weaker sections**

Reservation policy of Government of India is followed for admission and hostel accommodation. Apart from these remedial coaching classes are conducted after the class hours to improve academic performance.

A proposal has been submitted to Ministry of Social Justice and Empowerment under the Central Scheme of Free coaching for SC and OBC students.

- **Students participating in various competitions/ conferences in India and abroad**

Students are encouraged to participate in various competitions and conferences in India and abroad. The Students Financial Assistance Scheme has specific provisions for supporting students for such activities. Apart from this students can use their contingent grant for attending the conferences.

- **Health centre, health insurance etc.**

A well-equipped Health Centre with 24 x 7 emergency care services, are available at Campus with 24 hrs staff, free analysis and free medicines. The students get good treatment free of cost. An ambulance and driver are available on Campus for any emergencies. In emergency conditions, patients are referred to civil hospital and on recommendations of the civil hospital, sometimes patients are taken to Private Superspeciality hospitals.

The ambulance is Winger High Roof Ambulance: It has a single stretcher, bench seats for paramedics, special doctor's seat, single oxygen cylinder cage, 4 bottle holding hooks, first aid box, electric plug point, overhead revolving beacon, wide 180° opening rear door, anti-skid flooring, factory-fitted dual AC, 2 cabin lights, 2 co-driver seating, and 5 attendant seats.

CUPB is working on the proposal to provide health insurance companies for providing health insurance to the students and Faculty.

- **Skill development (spoken English, computer literacy, etc.)**

Language for communication and basic computer course are included in the regular curriculum for the students to develop their communication skill and a separate computer lab is also available for computer knowledge development. Placement cell also provides skill development programmes. Details of value added Skill development courses such as Short term course in communication and soft skills development, Certificate course in Human Rights and Duties, Introductory Punjabi Language Course, Japanese Language

Course, Vermicomposting, Apiculture, Mushroom cultivation and Sericulture have been included in Section 1.3.4.

- **Remedial Classes in English**

Remedial classes in English are conducted for the students who are weak in English. These are voluntarily opted by the students.

CUPB has a Language laboratory established in the Centre for Languages, Literature and Culture. It started with eleven computers in the laboratory. In order to cater this facility to a large number of students the lab is being shifted to a bigger area which would accommodate 31 computers with a progressive software for English installed for accelerating the language learning process. The laboratory is used for language tutorials, in order to help students weak in English and aims at building their confidence.

With an aim of improving the reading, writing and speaking skills of students of the university, Communication and Soft Skills Development classes are held in the Language Lab every day. Course work includes English grammar, academic and technical writing and additionally students are groomed for facing interviews, group discussions, etc.

- **Performance enhancement for slow learners**

Special attention is given to the average and below average students. The Dean (A), CoCs and Faculty monitor the progress of slow learner and students with learning disabilities.

- **Exposure of students to other institutions of higher learning/corporate/business houses, etc.**

The students are taken to the field trips, educational tours to visit the various institutions, central and state research stations and industries located in the various parts of the country.

- **Publication of student magazines**

The students publish a wall magazine, which is a feature of the attraction for visitors. The wall magazine editorial board is comprised of four faculty members and five students.

**5.1.11. Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defense Services, NET/SET and any other competitive examinations? If yes, what is the outcome?**

Yes. The university conducts coaching classes for competitive examinations e.g. NET/SLET / JRF / ICAR / GATE.

A “Competitive Examination Cell” has been created to prepare the students to face different competitive examinations and help them acquire the requisite knowledge to excel in their studies. The cell conducts coaching classes for exams like UGC/CSIR-NET, ICMR, DBT, GATE, GPAT, Civil services examination, etc. Classes for these competitive examinations are held in the evening, so that the regular class schedule of the university is not disturbed. (*Table 5.3* and *Table 5.4*)

**Outcome:** Significant number of students has cleared CSIR JRF/NET/SLET/ ICAR-NET/ GATE/GPAT examinations in the recent years and joined World class Universities and Institutes (University of Oxford, University of Kent, JNU, IHBT etc.).

**5.1.12. Mention the policies of the University for enhancing student participation in sports and extracurricular activities through strategies / schemes such as**

- **Additional academic support and academic flexibility in examinations**

CUPB provides flexibility in the University examination system to sportsman. Also, supplementary and improvement examinations are conducted in the respective academic sessions to support students.

- **Special dietary requirements, sports uniform and materials**

A Centre for Sports as an independent academic Centre is being established in the University. Presently, university has a Sports officer who takes care of the Fitness and sports activities of the students. Yoga classes for the students and faculty are also held. Sports materials, that are consumed in the indoor as well as outdoor games are provided.

**Table 5.3 : List of NET/JRF/ GATE/ GPAT/ICMR qualified candidates registered in/attended classes of CEC**

S. No.	Centre	No of candidates qualified competitive examinations*	Whether registered in CEC/Attended classes
1	Centre for Biosciences	19	9
2	Centre for Environmental Science & Technology	16	3
3	Centre for South Central Asian Studies	6	2
4	Centre for Comparative Literature	5	1
5	Centre for Economic Studies	4	3
6	Centre for Environment Law	2	0
7	Chemical and Pharmaceutical Sciences	25	6
8	Centre for Computer Science and Technology	23	0
	Total	100	24

\*Name of competitive examinations L: CSIR = Council of Scientific and Industrial Research; UGC = University Grants Commission ; GATE = Graduate Aptitude Test; GPAT = Graduate Pharmacy Aptitude Test

**Table 5.4 : List of NET/JRF/ GATE/ GPAT qualified candidates registered in/attended classes of CEC.**

**Category wise data**

S. No.	Category	No of Students	Percentage
1	SC	3	13
2	OBC	5	21
3	General	16	66
	Total	24	

**Gender wise data**

S. No.	Category	No of Students	Percentage
1	Female	11	46
2	Male	13	54
	Total	24	

- **Any other (please specify)**
  - (a) University celebrates Foundation Day (28<sup>th</sup> Feb) every year. This weeklong celebration includes annual sports cum athletic week, Singing and Dancing competitions, literary activities and community service (Blood Donation Camp organized twice with 101 and 141 units donations to Civil Hospital Bathinda)
  - (b) University offers sports uniform and materials for the winning team members.
  - (c) The outstanding sportspersons are given University's Best Sports Men and Woman trophy with Track Suit.
  - (d) High altitude tracking club is proposed by a trained faculty who will conduct annual camp every year in order to develop a spirit of adventure, conquer the fear of altitude and to make them closer to nature.

**5.1.13. Does the university have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?**

To coordinate various placement activities, Placement Coordination Cell and Placement Cells with representatives from all the centres have been constituted. (*Annexure 5.3*): This Cell exposes students to job opportunities, prepare them for group discussion and interview and develop entrepreneurial skills. The constitution is as under

- ***Placement Coordination Cell***
  - Prof. P.Ramarao, Dean Academic Affairs
  - Prof. A.K. Dhawan, Dean School of Emerging Life Sciences
  - Dr. Tarun Arora COC for Law
  - Ms.Shweta Arora, Deputy Registrar

In Addition to above committee each centre of the University have a placement cell consisting of the following:

Centre of the University shall have a placement cell consisting of the following:

- COC as Chairperson
- One Professor



- Two Associate Professor
- Two Assistant Professor

The Placement coordination cell looks after the activities of the various placement cells of the University and responsible for generation of the reports / presentations etc.

- ***Placement Cell - Sciences:***
  - Prof. R.C.Sharma, School for Environment and Earth Sciences- Chairman
  - Dr. Pankaj Bhardawaj, Assistant Professor, Centre for Biosciences
  - Dr. Yogalakshmi K.N., Assistant Professor, Centre for EVST
  - Dr. Sandeep Singh, Assistant Professor, Centre for GDMM
  - Dr. Preeti Khetarpal, Assistant Professor, Centre for Human Genetics
  - Dr. Achche Lal Sharma, Assistant Professor, Centre for Physical & Mathematical Sciences
- ***Placement Cell - Engineering and Technology:***
  - Prof. Dr.A.K.Jain, COC for Computer Science & Technology- Chairman
  - Er. Meenakshi, Assistant Professor, Centre for Computer Science & Technology
  - Dr. Vinod Kumar, Assistant Professor, Centre for Chemical & Pharmaceutical Sciences
- ***Placement Cell - Humanities:***
  - Dr. Zameerpal Kaur, Assistant Professor, Centre for Comparative Literature- Chairperson
  - Dr. Kiran K. Singh, Assistant Professor, Centre for South & Central Asian Studies

- Dr. Deepak Kumar, Assistant Professor, Centre for Environmental Law

Personalized counselling and students' to students' relations has helped the students to get placement in companies of international repute.

**List of students placed at various organizations**

S.No.	Name of Student	Centre	Organisation/Institution where employed
1.	Mr. Rajiv Kumar	Centre for Biosciences	Scientific Assistant, Forensic Science Laboratory, Punjab Police Academy, Phillaur, Ludhiana.
2.	Mr. Devendra Meena	Centre for Biosciences	D.Lit. Student University of Oxford. U.K
3.	Mr. Shokit Amin Poswal	Centre for Biosciences	School Teacher, Department of Education, State of Jammu and Kashmir, Srinagar
4.	Mr. Ashish Kumar Pandey	Centre for Biosciences	Resident Engineer, Confocal Laser Scanning Microscope, Ms. DSS Imagetech, New Delhi, Placed at Imaging facility, CUPB
5.	Deependra Kumar	Centre for Chemical and Pharmaceutical Sciences	Data Analyst Innodata, New Delhi
6.	Vinay Gupta	Centre for Chemical and Pharmaceutical Sciences	Technical Analyst Evalueserve, Gurgaon, New Delhi
7.	Prakriti Monga	Centre for Chemical and Pharmaceutical Sciences	Chemical Analyst Ind Swift, Chandigarh
8.	Nidhi Singh	Centre for Chemical and Pharmaceutical Sciences	PGT teacher, Ghaziabad, UP
9.	Ramandeep Kaur	Centre for Chemical and Pharmaceutical Sciences	Lecturer, Mata Sahib Kaur, college Talwandi Sabo
10.	Ashish Ranjan Dwivedi	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi
11.	Anil Rana	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi
12.	Vijayinder Saini	Centre for Chemical and Pharmaceutical Sciences	Research Associate Integral Biosciences, New Delhi

13.	Gagandeep Kaur	Centre for Chemical and Pharmaceutical Sciences	Data Analyst Parexal (Heron), Chandigarh
14.	Mayank	Centre for Chemical and Pharmaceutical Sciences	Pharmacist, NRHM, Bathinda
15.	Gaurav Joshi	Centre for Chemical and Pharmaceutical Sciences	Project Fellow (UGC Major Project), Central University of Punjab
16.	Khushmeet Singh	Centre for Computer Science and Technology	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab
17.	Mandeep Singh	Centre for Computer Science and Technology	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab
18.	Amandeep Kaur	Centre for Computer Science and Technology	Junior Research Fellow (JRF) Terminal Ballistics Research Laboratory (TBRL) – Lab of Defence Research & Development Organization (DRDO)
19.	Krishan Singh	Development Economics	Researcher, Planning Commission, Chandigarh
20.	Rajpreet Kaur	Development Economics	Teacher, Govt. Sen. Sec. school, Pathrala, Bathinda
21.	Pushpinder Kaur	Development Economics	Teacher, Govt. Middle School, Mandi Khurd, Bathinda
22.	Disha Bains	Comparative Literature	Assistant Prof in English at K.M.R.D. Jain college, Malerkotla
23.	Manpreet Kaur	Comparative Literature	PGT-English Govt. Adarsh Sen. Sec. School, Bukan Khan Vala, Ferozpur.
24.	Rajbinder Singh	Centre for Environmental Science and Technology	Setia Paper Mill, Muktsar, Punjab
25.	Kirti Shrama	Centre for Environmental Science and Technology	Satluj Jal Vidyut Nigam Ltd. Jhabri, Shimla, Himachal Pradesh
26.	Parminder Singh	Centre for Environmental Science and Technology	ATMA Scheme, Govt. of India
27.	Tarandeep Kaur	Centre for	Akal College, Faridkot, Punjab

		Enviromental Science and Technology	
28.	Rimzim Gill	Centre for Enviromental Science and Technology	Food Inspector, Govt. of Punjab, Muktsar.
29.	Amita Bhatti	Centre for Enviromental Science and Technology	University of Birmingham, UK

**5.1.14. Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).**

The Placement Cells have been established, students are now completing the degrees from CUPB and placement cells are becoming more active.

**5.1.15. Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?**

University has an Alumni association which has been framed following a policy approved by the Executive Council of the University of CUPB (*Annexure 5.4*).

**5.1.16. Does the university have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?**

- ***Central University Grievance Redressal Cell:***

In order to attend to the students'complaints, a Grievance Redressal Cell has been set up in the university. It offers immediate and effective redressal to the problems reported by the students and work towards providing a safe and secure atmosphere for the holistic growth of the students.

Grievance Redressal of Employees and Students comprising of the members as detailed hereunder: Every CoC/OIC of the Centre is the Grievance Officer for Redressal.

**Appeals Committee:-**

- i. Prof. A. K. Dhawan, Dean, School of Health Sciences – Chairperson
- ii. Prof. S. K. Bawa, Dean, School of Education
- iii. Dr. Alpna Saini, Associate Professor

- iv. Dr. Tarun Arora, Associate Professor
- v. Dr. Harish Chander, Assistant Professor
- vi. Mr. Rajender Kumar, Assistant Registrar (Exams) – Convener

**Review Committee**

- i. Prof. P. Ramarao, Dean Academic Affairs – Chairperson
- ii. Prof. R. G. Saini, Invited Professor
- iii. Prof. R. C. Sharma, DSW
- iv. Prof. S. K. Bawa, Dean, School of Education
- v. Dr. Anjana Munshi, CoC for Human Genetics
- vi. Dr. Dhanya M.S., Assistant Professor
- vii. Dr. Pankaj Khare, Registrar – Convener

Mercy Appeals shall be considered by the Vice Chancellor

The above committee shall address the Grievance of Employees and Students, if any, as per the guidelines enclosed with the notification.

- ***Grievance Redressal Committee Members (Examinations)***

- Prof. P. Ramarao, Dean Academic Affairs
- Prof. R. C. Sharma, Associate Dean Students Welfare
- Prof. R. G. Saini, Professor In-charge Examinations
- Dr. Pankaj Khare, Registrar

- ***Grievance Redressal Committee (Infrastructure)***

- Prof. R. C. Sharma, Associate Dean Students Welfare
- Dr. Sanjeev Thakur, Boys Hostel Warden
- Dr. Sandeep Kaur, Girls Hostel Warden
- Er. Daljeet Singh, Executive Engineer

The university has a well-defined grievance redressal mechanism. These are Grievances Committees, Appeals Committee, Review Committee and Mercy Appeals Committee (*Annexure 5.5* ).

**5.1.17. Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.**

- ***Central University Sexual Harassment Cell and Anti Discrimination Cell:***

The CUPB community comprises of individuals from different regions, religions, caste affiliations, linguistic backgrounds and financial status. Therefore, discriminations based on caste/sex/appearance/state of domicile etc. is dealt with extreme seriousness.

The university puts in best efforts to ensure that the no community faces incidents of discrimination on the campus. As per the guidelines given by UGC and Supreme Court of India, the university has set-up a separate cell with the purpose of making the university a gender sensitive institution, where all the women employees and students could achieve their full potential. A special women grievance cell is operating, to deal with women related problems / issues and to solve all the gender related problems including sexual harassment

- ***Complaints Cell for Sexual Harassment***

Complaint Committee to deal with the complaints regarding Sexual harassment/abuse in Central University of Punjab, Bathinda: There is online provision of form for filing the complaint.

1.	Dr. Surinderjit Kaur Bawa Professor, Centre for Education CUP, Bathinda	Presiding Officer
2.	Dr. Sushil Kumari Gupta Officer on Special Duty (Academic & Admin)	Member
3.	Dr. Satwant Kaur Bhullar Principal, RBDVA Senior Secondary School, Bathinda	Member
4.	Mr. Jagmohan Kaushal Founder & President Teachers Home Trust, Bathinda	Member (NGO)

5.	Mrs. Shweta Arora (Member) Deputy Registrar, CUP, Bathinda	Member Secretary
6.	Dr. Deepak Kumar Assistant Professor CUP, Bathinda	Member
7.	Dr. Anil Kumar Mantha Assistant Professor CUP, Bathinda	Member
8.	Dr. Kiran Kumari Singh Assistant Professor CUP, Bathinda	Member

On the top of all this, CUPB has a very active Human Right Club (*Annexure 5.6*), which organizes awareness about human rights.

**5.1.18. Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?**

The university has a zero tolerance policy towards ragging-related matters. CUPB emphasizes with the senior students that fresher's are their siblings and future friends and must be treated with affection. Also, an anti ragging committee is in operation to prevent ragging and create harmony among the fresher's and senior students. In the first 30 days of the academic sessions, the committee members inspect the hostels during evening and night hours and submit the reports to the Registrar, everyday. No ragging instances have been reported during the last four years because of the strict monitoring of the anti ragging committee.

All issues in this regard are dealt with utmost urgency and stringent action is taken against those who are involved. A copy of UGC regulations on curbing the menace of ragging have been distributed to all students upon admission and have procured undertakings and affidavits from the students as well as parents in this regard.

**Not even a single case of ragging has come to light or reported in last four years because of the strict monitoring of the anti ragging committee.**

In compliance with the Directions of University Grants Commission, the competent authority has constituted Anti-Ragging Committee, Anti Ragging Squad/Cell and Nodal Officer at Central University of Punjab for the year 2015-16.

**5.1.19. How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?**

The views and suggestions of various stakeholders that emanate during the students industrial visits, experiential learning, etc. are considered for the development of students. Apart from this, there are two independent bodies to establish a strong link with industries relevant to its domain areas:

- (a) A University-Industry Forum has been set up to include important industries in domain areas of CUPB.
- (b) A University-Industry Council consisting of five industries selected from the forum members for a closer interaction.

Industry Forum and Council are the policy advisory bodies of CUPB in the matters related to Teaching, Research, Consultancy, Skill Development, Entrepreneurship Development and Students placements etc.

**5.1.20. How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.**

The university ensures and provides adequate funds to support the women's student activities. International women's day is celebrated by conducting competition and by having invited talks. Women are encouraged to participate in all sports and cultural activities. They are given special attention and consideration, with the motivational support of women faculty members.

**5.2 Student Progression**

**5.2.1 What is the student strength of the university for the current academic year? Analyze the Programme-wise data and provide the trends for the last four years.**

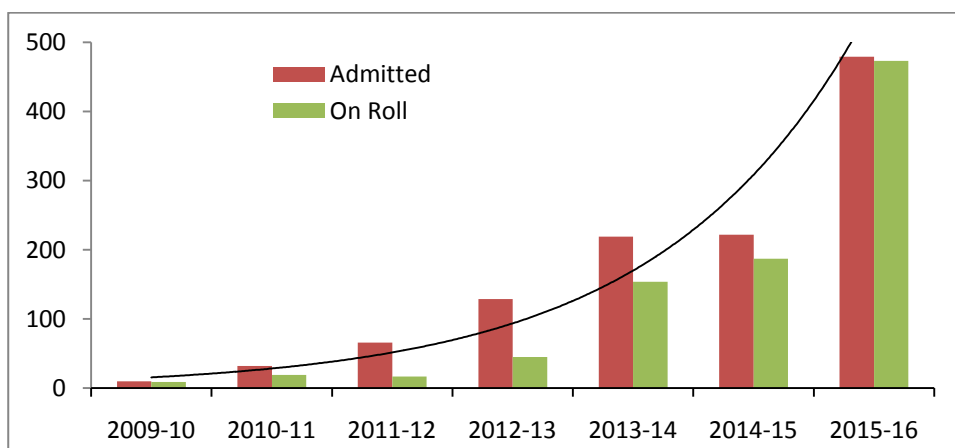
The present total strength of the University is 904 for the Academic year 2015-16 as given in *Table 5.5*.

There was no direct progression of the students from one to another course except M.Phil-Ph.D. Integrated program.

<b>Student Progression</b>	<b>%</b>
UG to PG*	NIL
PG to M.Phil.*	1



PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
• Campus selection	NIL



**Fig: Trend of students progression in last five years 2009-2015**

**Table 5.5 Student strength of the university**

Year	Intake	Admitted
2009-10	20	10
2010-11	32	32
2011-12	110	66
2012-13	295	129
2013-14	474	219
2014-15	290	192
2015-16	685	405

**5.2.2 What is the programme-wise completion rate during the time span stipulated by the university?**

Student Progression	%	Time span
UG	NA	NA
PG	100%	Two Years
M. Phil.	100%	18 Months
M.Phil-Ph.D.	NA as the first batch of M.Phil. Ph.D interated program is about to pass out.	4.5 Years

**5.2.3 What is the number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.?**

There is no official record of students who appear in the various national level exams but university keep record on the students who qualify various competitive examinations.

**Table 5.6.: Centre wise list of the Students who have qualified National level exams in last four years:**

Centre Name	S. No.	Name of Student	Batch	Achievement
Centre for Biosciences	1.	Shweta Thakur	2010-11	ICMR JRF 2012
	2.	Sarabjeet Kour Sudan	2011-12	DBT JRF 2012
	3.	Aijaz Ahmad John	2011-12	CSIR JRF (June 2012) CSIR NET (Dec.-2012)
	4.	Navgeet	2011-12	CSIR UGC NET (Dec-2012) GATE 2012 & 2013
	5.	Satej Bhushan	2011-12	CSIR UGC NET (Dec. 2012)
	6.	Navrattan Kaur	2012-13	ICMR JRF (2012) GATE-2012 CSIR-NET 2013
	7.	Amandeep	2012-13	DST INSPIRE 2012 GATE 2013
	8.	Rashmi Saini	2012-13	GATE 2012 ICMR-JRF 2013
	9.	Shishir Upadhayay	2012-13	GATE 2012 CSIR-NET 2013 ICMR-JRF 2014 (15 <sup>th</sup> )

				Rank) CSIR-JRF 2014 (61 <sup>st</sup> rank)
	10.	Balraj Singh Gill	2011-12	MANF 2011 GATE 2011 CSIR-NET 2011
	11.	Richa Mehra	2012-13	GATE 2012 CSIR-NET 2013 ICMR-JRF 2014 (37 <sup>th</sup> Rank)
	12.	Renu	2012-13	GATE 2013 ICAR-NET March 2014 ICAR-NET June 2014 CSIR-NET 2014
	13.	Sapna Thakur	2012-13	GATE 2013 ICAR SRF 2012 ICMR-JRF 2013 ICAR-NET June 2014
	14.	Shruti Chaudhary	2012-13	CSIR-UGC-JRF 2013
	15.	Raof Ahmad Najar	2012-13	ICAR-NET March 2014
	16.	Pushpendu Kundu	2013-14	ICAR-NET March 2014
	17.	Aasim Majeed	2013-14	CSIR JRF 2014 (54 rank)
	18.	Kunj Bihari Gupta	2013-14	CSIR-NET 2014 ICMR JRF- 2015
	19.	Arindam Adhikary	2012-13	ICAR-NET June 2014
	20.	Rashpal Kumar	2013-14	RGNF 2015
	21.	Sukhchain Kaur	2013-14	RGNF 2015
	22.	Sumandeep Juneja	2013-14	MANF 2015
	23.	Prabhat Kumar	2014-15	RGNF 2015
	24.	Praveen Shrama	2014-15	CSIR-NET
	25.	Bibekanand Sarkar	2010-11	CSIR-NET, 2012
	26.	Sharanjot Kaur	2014-15	ICMR-JRF, 2015
<b>Environment Sciences &amp; Technology</b>	27.	Upma Vaid	2009-10	UGC NET SET (June and Dec. 2012)
	28.	Gajendra Singh Viswakarma	2009-10	JRF DST (Project) UGC NET (June. 2012)
	29.	Anamika Das	2009-10	UGC NET Dec. 2012
	30.	Gurpreet Kaur	2010-11	UGC NET June 2012
	31.	Nandini Gautum	2010-11	UGC NET Dec. 2012

	32.	Amita Bhatti	2011-12	CSIR-UGC NET June 2012 RGNF 2012 GATE 2012
	33.	Navneet Kaur	2011-12	UGC Dec.2012
	34.	Annu Sharma	2011-12	UGC-NET
	35.	Disha Mishra	2011-12	UGC JRF Dec. 2011
	36.	Rishikesh Singh	2011-12	UGC JRF June 2012
	37.	Harmandeep	2012-13	DST Inspire 2012-13
	38.	Gulam Nazar		ICAR-NET 2013
	39.	Amit Kumar		ICAR-NET 2013, UGC-JRF 2013
	40.	Shashi Ranjan		UGC-JRF December, 2013
	41.	Vijay Jaswal	2013-14	ICAR-NET 2014, UGC_NET 2014
	42.	Radhe Shyam Yadav	2013-14	UGC_NET 2014
	43.	Gini Rani	2013-14	UGC-NET, RGNF 2015
	44.	Sangita Singh	2014-15	GATE
	45.	Ranjit Kumar	2015-16	UGC-JRF
	46.	Shilpa Sharma	2012-13	ICMR JRF-2015
<b>South Central Asian Studies</b>				
	47.	Maninderjit Singh	2010-11	UGC NET (Dec-2012)
	48.	Kovid Kumar	2010-11	UGC-JRF (2011)
	49.	Mohammad Arif	2011-12	UGC NET (June 2012)
	50.	Amandeep Kaur	2012-13	MANF (2012)
	51.	Mohd. Hussain Naik		UGC-NET December, 2013.
	52.	Gaurav Kumar	2012-13	UGC-NET June 2014
	53.	Kuldip Singh	2013-14	UGC-NET June 2014
	54.	Manpreet Kaur	2012-13	MANF
	55.	Amritpal Singh	2014-15	UGC-NET
	56.	Meenakshi	2014-15	RGNF 2015
	57.	Davinderpal Singh	2015-16	UGC-JRF Dec 2013
	58.	Rajendra Prasad	2015-16	UGC-NET
<b>Comparative Literature</b>				
	59.	Yeshpal	2009-10	UGC NET June 2012
	60.	Barjinder Singh	2010-11	UGC-JRF(June 2012, Dec-2012)
	61.	Chitra	2011-12	UGC NET Dec. 2013
	62.	Pradeep Kaur	2010-11	UGC NET June 2014
	63.	Vandana Bathla	2011-12	UGC NET Dec. 2012
	64.	Rajpal	2011-12	UGC NET Dec. 2012

	65.	Devendra Gora	2012-13	RGNF 2013
	66.	Rakesh Kumar	2013-14	RGNF 2014
<b>Economics</b>				
	67.	Mumtaz Ahmed	2012-13	RGNF 2012
	68.	Ramandeep Kaur		UGC-NET 2014
	69.	Vinish Prakash	2013-14	UGC-NET 2014
	70.	Nadeem	2013-14	UGC-NET 2014
	71.	Mohammad Fayaz	2013-14	UGC-NET 2014
	72.	Noushaad A.P.	2013-14	UGC-NET 2014
	73.	Bishwajeet Pakash	2013-14	UGC-NET 2014
	74.	Harpreet Kaur	2013-14	UGC-NET 2014
	75.	Paramjeet Kaur		RGNF 2015
	76.	Manpreet Kaur		RGNF 2015
	77.	Harmeet Kaur	2014-15	UGC-JRF 2014
	78.	J Vinish Prakash		UGC-NET-2015
	79.	Mohammad Fayez		UGC-NET-2015
	80.	Noushad AP		UGC-NET-2015
	81.	Bishwajit Prakash		UGC-NET-2015
<b>Environment Law</b>				
	82.	Ramandeep	2011-12	UGC NET (Dec. 2012)
	83.	Abhishek	2011-12	UGC NET (Dec. 2012)
	84.	Tripta	2015-16	UGC-NET
<b>Chemical and Pharmaceutic al Sciences</b>				
	85.	Arvind Negi	2011-12	GATE2013
	86.	Ramit Singla	2011-12	GPAT 2011
	87.	Monika Chouhan	2011-12	GPAT 2011
	88.	Yashika Bhalla	2011-12	GPAT 2011
	89.	Jimi Marin Alex	2011-12	GPAT 2011 MANF
	90.	Prakriti Monga	2011-12	GPAT 2011
	91.	Deependra Kumar	2011-12	GPAT 2011
	92.	Vinay Kumar Gupta	2011-12	GPAT 2011
	93.	Archna Khyap	2013-14	GPAT 2013
	94.	Shevani Sharma	2013-14	GPAT 2013
	95.	Jagpreet Singh	2013-14	GPAT 2013
	96.	Sapna Kumari	2013-14	GPAT 2013
	97.	Bhupender Kumar	2013-14	GPAT 2013
	98.	Vivek Parkash Gupta	2013-14	GPAT 2013
	99.	Pankaj Kumar Singh	2013-14	GPAT 2013
	100.	Joyti Dandriyal	2014-15	GPAT 2014
	101.	Manavendra Bhatt	2014-15	GPAT 2014
	102.	Harmeet Kaur	2014-15	GPAT 2014
	103.	Gaurav Sharma	2014-15	GPAT 2014

	104.	Gaurav Joshi	2012-13	GPAT 2012
	105.	Ashish Ranjan Dwivedi	2012-13	GPAT 2012
	106.	Sheetal	2012-13	GPAT 2012
	107.	Vijayinder Saini	2012-13	GPAT 2012
	108.	Mayank	2012-13	GPAT 2012
	109.	Gagandeep Kaur	2012-13	GPAT 2012
<b>Computer Sciences</b>				
	110.	Deepika Dhiman	2012-13	GATE 2013
	111.	Khushmeet Singh	2012-13	GATE 2012, 2013
	112.	Amandeep Kaur	2012-13	GATE 2012
	113.	Ruby Goel	2012-13	GATE 2012
	114.	Kanika	2012-13	GATE 2012
	115.	Shifali Hans	2012-13	GATE 2012
	116.	Mandeep Singh	2012-13	GATE 2012
	117.	Amandeep Kaur		GATE-2014
	118.	Kanika		GATE-2014
	119.	Siddharth Kumar		GATE-2014
	120.	Rinku		GATE-2014,
	121.	Amita Get	2013-14	GATE-2013, UGC-NET 2014
	122.	Dharamveer	2013-14	GATE-2013, UGC-NET 2014
	123.	Gaurav Kumar	2013-14	GATE-2013
	124.	Pankaj Kumar	2013-14	GATE-2013
	125.	Vicky Kumar	2013-14	GATE-2013
	126.	Suchismita Mahato	2013-14	GATE-2012, 2013
	127.	Saurav Kr. Gupta	2013-14	GATE-2013
	128.	Komal Rani	2013-14	GATE-2013
	129.	Rohit Goyal	2013-14	GATE-2013
	130.	Meenu Singh	2013-14	GATE-2013
	131.	Rajshree Purohit	2013-14	GATE-2013
	132.	Rajiv Kumar	2013-14	GATE-2013
	133.	Shrikant Saini	2013-14	GATE-2013
	134.	Shailesh Kumar	2014-15	GATE 2014
135.	Marut Jindal	2014-15	GATE 2014	
136.	Ankit Padhak	2014-15	GATE 2014	
137.	Gursewek Singh	2014-15	GATE 2014	
	138.	Siddharth	2014-15	GATE 2014
	139.	Sukhwinder Singh	2014-15	GATE 2015
	140.	Amita	2014-15	GATE 2014
	141.	Shweta Sharma	2014-15	GATE 2015
	142.	JAskaran Singh	2014-15	GATE 2015
	143.	Sajja Hari Krishna	2014-15	GATE 2014
<b>Geography</b>	144.	Amanpreet Singh	2015-16	UGC-JRF 2014

<b>and Geology</b>	145.	Virendra	2015-16	UGC-JRF 2013
<b>Centre for Education</b>	146.	Richa Arora	2015-16	UGC-JRF
	147.	Kiranjit Kaur	2015-16	UGC-JRF
	148.	Igona	2015-16	UGC-JRF
	149.	Sushma Kumari	2015-16	UGC-JRF
<b>Centre for Physical Science</b>	150.	Anil Arya	2015-16	UGC-NET
<b>Centre for Plant Science</b>	151.	Radheshyam Yadav	2015-16	UGC-NET Dec 2014
<b>Centre for Mathematics and Statistics</b>	152.	Sonu Ram	2015-16	CSIR-JRF
<b>Centre for Genetic Diseases and Molecular Medicine</b>	153.	Karmjot Kaur	2015-16	DBT-JRF
	154.	Kunj Bihari Gupta	2015-16	NET
	155.	Parveen Sharma	2015-16	NET
	156.	Prabhat Suman	2015-16	RGNF 2015
<b>Centre for Classical &amp; Modern Languages</b>	157.	Gurpreet Kaur	2015-16	
<b>Centre for computational Science</b>	158.	Preetleen	2015-16	CSIR-JRF
<b>Centre for Human Genetics</b>	159.	Sourav Kalra	2015-16	GPAT

CSIR = Council of Scientific and Industrial Research

UGC = University Grants Commission

RGNF = Rajiv Gandhi National Fellowship

MANF = Maulana Azad National Fellowship

GATE = Graduate Aptitude Test

GPAT = Graduate Pharmacy Aptitude Test

**5.2.4 Provide category-wise details regarding the number of Ph.D./D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/rejected in the last four years.**

The first batch of University M.Phil Ph.D Integrated program for four courses e.g. Biosciences, Environment sciences and technology, South and Central Asia and Comparative literature is about to complete. Till date no Ph.D thesis is submitted. However, 228 dissertations have been submitted in the last four years. (*Table 5.7*)

**Table 5.7 : Number of dissertations submitted since 2010 till 31<sup>st</sup> July 2015**

Academic Year	M.Phil.	M.Pharm.	LLM	M. Tech.	M.Sc.	Total
2010-11	10	NIL	NIL	NIL	NIL	10
2011-12	26	NIL	NIL	NIL	NIL	26
2012-13	34	8	4	NIL	11	57
2013-14	50	8	9	17	13	97
2014-15	33	0	3	0	2	38
Total	153	16	16	17	26	228

**5.3 Student Participation and Activities**

**5.3.1 List the range of sports, cultural and extracurricular activities available to students.**

- ***Range of Sports Activities***

Sports events are organized every year in the university with the help of the sports officer and CUPB is also going to start academic program in sports sciences.

Annual Sports cum Athletic meet is a part of academic calendar. Also, university is managing Intra-University sports competitions from last three year for Boys, Girls and Faculty. (*Table 5.8*)



**Table 5.8 : Total number of Games and Medals in 2014 and 2015 sports**

<b>S. No.</b>	<b>Games</b>	<b>Medals</b>	
1.	<b>Indore games 2014</b>	Badminton (Single, Doubles, Mix Doubles for Men, Women, Faculty)	29
		Table Tennis (Single, Doubles, Mix Doubles for Men, Women, Faculty)	26
		Carom (Single, Doubles, Mix Doubles for Men, Women, Faculty)	21
		Chess (Men, Women, Faculty male female)	09
2.	<b>Outdoor games 2014: Track and field events</b>	50m (for girls and female faculty only)	06
		100m (Men Women Faculty)	04
		200m (Men Women Faculty)	09
		400m (Men)	09
		800m (Men)	03
		Relay Race (Men Women )	03 (one team with four athlete, three teams 6*4=24 medals)
		Discus throw (Men Women Faculty staff)	12
		Long jump (Men Women Faculty staff)	12
3.	<b>Major Games 2014</b>	Volleyball (Men teams only Three teams 1st 2nd 3rd)	36
		Basketball (men Teams only Three teams 1st 2nd 3rd)	36
		Cricket (Men teams only Three teams 1st 2nd 3rd)	36
4.	<b>Fun Games 2014</b>	Sack race, Three lag race, Thread and needle race, Back race, Brick race, Spoon race, Tug of war	
5.	<b>Indore games 2015</b>	Badminton (Single, Doubles, Mix Doubles for Men, Women, Faculty)	16
		Table Tennis (Single, Doubles, Mix Doubles for Men, Women, Faculty)	14
		Carom (Single, Doubles, Mix Doubles for Men, Women, Faculty)	14

		Chess (Men, Women, Faculty male female)	06
6.	<b>Outdoor games 2014</b>	50m (for girls and female faculty only)	06
	Track and field events	100m (Men Women (Faculty M/F))	12
		200m (Men Women )	06
		400m (Men)	03
		800m (Men)	03
		Relay Race (Men Women )	03 (one team with four athlete, three teams 6*4=24 medals)
		Discus throw (Men Women Faculty staff)	12
		Long jump (Men Women Faculty staff)	12
		Shot put (Men Women Faculty staff)	12
7.	<b>Major Games</b>	Volleyball (Men teams only Three teams 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> )	36
		Cricket (Men team's only three teams 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> )	28
8.	<b>Fun Games</b>	Sack race, Three lag race, Thread and needle race, Back race, Brick race, Spoon race, Tug of war	

After the completion of the Sports cum athletic meet, the best athlete 'Boy' and 'Girl' is declared. **Best sports person** in students and faculty is also declared after analysing the the overall participation and medals won by the individual.

**5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years.**

At university level the students are participating in several co-curricular, extracurricular and cultural activities but there is no participation at Inter University/ state/ Zonal / National and international level.

**5.3.3 Does the university conduct special drives / campaigns for students to promote heritage consciousness?**

- The university conducts special drives and campaigns for its faculty and students to promote heritage consciousness. Faculty and students are also exposed to dance and cultural heritage through participation and assistance in local festivals like Lohri, Holi, etc.
- Central university is a hub of national diversity, Punjabi language classes are conducted for students, faculty and staff hailing from different states.
- Central University Museum is a place of local heritage.
- Keeping in view of local language importance and to encourage local culture Central University has introduced a Masters level course in Punjabi Language and Literature.

**University Museum:**

- University museum houses vast collection of archaeological exhibits, including that of Harappan Civilization, excavated from Malwa region of Punjab. Exhibits also include a photo gallery on historical and cultural transformation of Bathinda City.
- The museum is being continuously expanded and more permanent galleries are scheduled to be opened for public.
- The museum reflects a true heritage picture of Punjab. Dr. Subhash Parihar, Centre for Museology, Archeology and Conservation was Chief curator of the Museum.

**5.3.4 How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/materials brought out by the students during the last four academic sessions.**

The University encourages creativity and freedom of thought among the students. CUPB publishes a wall magazine in which the major contribution is

of students even though four faculty members participate in the editorial team to guide them. There are many literary contests held in the University by the different departments where students get an opportunity to participate.

**5.3.5 Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.**

University has an association wherein students are nominated based on their merit and interest as President Vice President, General Secretary and Joint secretary. They are ably guided by teaching faculties. They look after various extracurricular and co-curricular activities and also represent students' problems. This association is funded by students' contribution as well as assistance from the University. University has made a Constitution for election and it's working. (Dean Student Welfare office for all notifications)

The first council elections were conducted in 2012 where Class Representatives of various centres elected President, Vice President, General Secretary and joint secretary unanimously on 23<sup>rd</sup> Sep 2012 (Notification on 27<sup>th</sup> Sep 2012),

**President:** Mr. Ravi Prakash Cholia, M.Phil. Ph.D Integrated Biosciences.

**Vice President:** Gajendra Singh, M.Phil. Ph.D Integrated EVS&T.

**General Secretary:** Amandeep Kaur, M.Phil.-Ph.D Integrated Development Economics.

**Joint secretary:** Pawneet Kaur, M.Phil. Ph.D Integrated Development Economics.

Same council is operating since 2013, the position of General secretary was replaced by Ms. Richa Mehra. M.Phil. Ph.D Biosciences.

The council takes care of the students and acts as a buffer between the authority and mass of students.

**President:** Mr. Ravi Prakash Cholia, M.Phil. Ph.D Integrated Biosciences.

**Vice President:** Gajendra Singh, M.Phil. Ph.D Integrated EVS&T.

**General Secretary:** Amandeep Kaur, M.Phil.-Ph.D Integrated Development Economics.

**Joint secretary:** Pawneet Kaur, M.Phil. Ph.D Integrated Development Economics. Same body remained active till the academic session 2014-15.

The Student Council in the academic session 2014-15 is as follows.

**President:** Mr. Satej Bhushan, M.Phil. Ph.D Integrated Biosciences.

**Vice President:** Mr. Sapinder Singh, M.Phil. Ph.D Integrated Comparative Literature.

**General Secretary:** Mr. Biswabhusan Bhuyan, M.Phil.-Ph.D Integrated Development Economics.

**Joint secretary:** Mr. Sukhwinder Singh (Computer Sciences and Technology)

The council takes care of the students and act as buffer between the authority and mass of students.

### **5.3.6 Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.**

The representatives in Class and Hostel are engaged in academic and administrative activities concerned as and when required. Each faculty has an association wherein students are nominated based on their merit and interest as Secretary. The following bodies involve students:

- Academic and Administrative committee
  - This committee monitors curriculum and reviews working of centre.
- Board of Studies (Co-opted/ Invited members)
  - The BOS review the structure and syllabus of various courses.
- Hostel Representatives
  - Hostel representatives are responsible for the general care of the hostel and deal as mediators to the warden.
- Mess Representatives
  - This committee measures the quality and service of the mess.
- IQAC member (Full members)
  - This committee operates the over all quality check on the university services and functioning.
- NAAC committee (Full members)
  - Students are assisting the NAAC members in generating data and helping in managing the NAAC report.
- Environment Audit and monitoring unit (Full members)
- University tender process (Mess cum canteen Tender)
  - Students participate in the mess cum canteen tender process for transparency of the prices and process.
- Annual Report, Newsletter  
As Student Editor

### **EARN WHILE YOU LEARN SCHEME (EWYL).**

The Secretary while presenting the item informed the Council regarding implementation of Earn While You Learn (EWYL) Scheme in the university.

The Chairman explained the House that the Central University of Punjab, Bathinda, supports to make the students self-reliant and develop their creativity and skills during their stay at university. The university encourages the students to take up part time jobs at the university to make them independent under the “**Earn While You Learn**” scheme on campus.

#### **Objectives**

1. Exploit the immense potential of students as a valuable human resource.
2. Involve the students in management and development of the institution.
3. Give students hands on experience and thereby prepare them for jobs in future.
4. Encourage young students to learn about dignity of labour.
5. Prevent students from avoidable distractions and engage them in meaningful, positive activities.
6. Enable meritorious and needy students to earn a reasonable amount every month to meet their expenses.

#### **Eligibility**

- Students who are registered in CUPB for any programme.
- The students should not be the recipients of fellowship/financial aid from any other funding agency, either private or public.
- All post graduate students (with above criteria) of the university departments can be considered for the assistants in library, laboratory, computer Centre and store.
- A supervisor may be nominated to monitor the progress work and maintain the attendance record under each category and he/she may countersign with the COC for forwarding the monthly claims.

**In order to keep vigil on the deployment of students and payments to be made to them the following restrictions/ rules are required to be imposed:**

1. Students may be assigned a task for maximum 1 hour per day during the weekdays and 4 hours/day during the weekends.

2. The working hours will be before or beyond the regular scheduled classes and studies should get affected due to working under EWYL scheme.
3. The EWYL committee shall make the recommendation for the selection of candidates.
4. Enrollment register is to be maintained by the concerned faculty/staff which may contain full particulars of the enrolled student and details of the work to be allocated to him mentioning therein actual working hours.
5. The concerned faculty/staff is to verify the work done and will record on the payment voucher that the student has actually worked for which the remuneration is being paid
6. The accounts section has to maintain the entire record and will produce the same for scrutiny as and when requested by the audit.
7. Any student claiming false payments will be immediately terminated from the EWYL scheme and disciplinary action will be taken against him.

**Under the Earn While You Learn (EWYL) scheme the students can be assigned various tasks as listed below in the university campus:**

**Laboratories:** In the labs/workshops the students can be engaged for making them responsible for handling the equipment/machinery, its maintenance and upkeep, storage of equipment and upkeep of Laboratories/Workshops. Senior students shall be useful for conduct of practicals.

- Preparing protocol handouts for practicals and research work.
- Helping the faculty in the purchase of essential laboratory accessories.
- Maintenance of stock registers and other record in the laboratory.

**Library:** The students engaged for library jobs such as cataloguing, re-shelving of the books and journals in shelves, display of books, repair and binding the books.

**Office:** The students can also be engaged for performance of various office jobs like preparation of statements, compilation and analysis of data, maintenance of student and faculty data and help in preparation of reports.

**University Stores:** Store inventory, data entry, maintaining registers.

**Hostel/Mess:** Maintenance of hostel records such as student's attendance, general cleanliness in the mess and hostel.

The above job descriptions are only illustrative and not exhaustive. Other jobs/areas may be added subsequently based on the feedback from university staff and students.

**Computer Centre**  
**Day Care Centre**

**How to Apply**

Interested students may apply in the prescribed application form available on the university website ([www.cup.edu.in](http://www.cup.edu.in)).

**Payment**

The accounts section of the university may be directed to maintain the entire record and budget head. For doing the above jobs the students may be paid @ Rs. 40/- per hour (Minimum wages notice attached) and students would be permitted to work for maximum 1 hour a day during weekday and 4 hours/day during weekends and this ceiling on working hour is stipulated that the jobs are not pursued at the cost of study.

**Selection Procedure**

The applications from students would be invited any time a need of additional help is felt by any center/office of the university. The EWYL Committee shall select the students on the basis of students' interest, expertise (if any) and the knowledge/skills the applicant has



**ESTABLISHMENT OF INTERNATIONAL COLLABORATIONS  
DIVISION AT THE UNIVERSITY**

In view of the fast pace of university's growth and better research output, collaborations are essential. It would not be early to put in place an International Collaboration Division with the following objectives:

- Oversee and coordinate all international activities of CUPB such as students and faculty exchange visits abroad, international students admission and welfare and academic collaborations with foreign organizations
- To promote relationships between foreign universities and institutions and CUPB and to help define the scope of such relationships through appropriate Memorandum of Understanding (MoUs).
- To invite outstanding Scientists/academicians for lectures
- To partner with foreign universities and research institutes to enhance collaborative research.
- To interface with embassies and consulates of various countries to increase educational and cultural linkages between organizations in the foreign countries and CUPB.
- To recommend appointment of Adjunct/Visiting Faculty.

The activities of the division will include interfacing with the appropriate authorities at the collaborating institutions on all matters, establishing and fostering linkages between international researchers and experts in various areas and creating awareness about all such activities amongst the faculty and students of CUPB. It will promote participation of the students in course work and/or research work in partner institutions to give them international exposure and the opportunity to imbibe and learn global work cultures. The Division will facilitate and promote the internationalization of CUPB by setting up academic ventures in collaboration with global institutions and facilitate newer models of collaborations. The members of the cell in coordination with Dean, Academic Affairs and Dean, Students Welfare will decide policy matters affecting both outbound and inbound students participating in Exchange programmes.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)  
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## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
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Email: registrar@cup.ac.in  
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Ref. No: CUPB/CC/15/EC-15/18

Dated: 31.07.2015

### **NOTIFICATION-18**

In pursuance to Item No. EC:15:15:41 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No: AC:7:2015:36) is hereby conveyed for creation of Placement Cell of the university comprising of the members:

#### **Placement Coordination Cell:**

1. Prof. P. Ramarao, Dean, Academic Affairs
2. Prof. A. K. Dhawan, Dean, School of Emerging Life Sciences
3. Dr. Tarun Arora, COC for Law
4. Ms. Shweta Arora, Deputy Registrar - Convener

In addition to the above committee each Centre of the University shall have a placement cell consisting of the following:

1. COC as Chairperson
2. One Professor
3. Two Associate Professor
4. Two Assistant Professor

The Placement Coordination Cell shall look after the activities of the various placement cells of the university and shall be responsible for the generation of the reports/presentations/brochures in consultation with the Placement cells. The Placement Coordination Cell will report to the Vice Chancellor.

The Chairperson will coordinate with the Placement Coordination Cell of the University.

This is issued with the approval of the Competent Authority.

## पंजाब केन्द्रीय विश्वविद्यालय

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Ref. No: CUPB/CC/15/EC-15/17

Dated: 31/07/2015

### NOTIFICATION-17

In pursuance to Item No. EC:15:15:30 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:26) is hereby conveyed for establishment of **Alumni Association of Central University of Punjab (AACUP)** as per the guidelines enclosed with the notification.

This is issued with the approval of the Competent Authority

**ALUMNI ASSOCIATION OF CENTRAL UNIVERSITY OF PUNJAB  
(AACUP)**

**CONSTITUTION**

**1. Name of the Association**

The Name of the Association shall be “The Alumni Association of Central University of Punjab” Bathinda (AACUP)

**2. Office**

The Office of the Association shall be at the Central University of Punjab

**3. Aims and Objectives of the Association are to:**

- i. establish a link with the CUPB alumni and enroll them as members
- ii. establish liaison between The Alumni Association of Central University of Punjab (AACUP)
- iii. and similar other associations at the universities in the country and abroad;
- iv. raise various endowment funds and award stipends out of it to the deserving students on need-cum-merit basis;
- v. institute and disburse scholarships, fellowships, medals, awards, etc. to the meritorious students of the university out of the corpus of the Association;
- vi. impart identity to its members by issuing them with photo-identity cards;
- vii. seek donations from alumni and potential donors for promoting various righteous activities of the Association;
- viii. suggest ways and means for the participation of the Association in the working of the University;
- ix. arrange get together of the alumni and social/cultural functions of the alumni;
- x. send birthday greeting cards to its members to impart personal touch and interaction with them;
- xi. Honour distinguished alumni of CUP, who have brought national/global acclaim in their respective domains;

**4. Membership**

**a) Eligibility:**

The following categories of persons shall be considered to be enrolled as members of the Association:

A Graduate, diploma of at least one year duration after graduation, Post Graduate, M.Phil., Ph.D. from Central University of Punjab. Members of the teaching staff of the University even though they may not be graduates of this University.

Graduates of other Universities (Indian or Foreign) on whom membership is conferred by the Executive Council of the Association.

*All the present and former Vice-Chancellors and Registrars will be members of the Association.*

**b) Categories of membership:**

There will be the following categories of members:

- 1) Patron
- 2) Life Members
- 3) Honorary Members

**c) Subscription for membership:**

1. **Patron:** A person may become a patron of this Association by contributing a sum of at least of Rs. 11,000/- or more (NRI/Overseas: US\$ 1000 or equivalent with approval of the Chief Patron)
2. **Life Member:** Rs. 500/- (NRI/Overseas: US\$ 100 or equivalent).
3. **Honorary Member:** On whom membership is conferred by the Association. The E.C. is authorized to revise the membership fees every five years.

**5. Office Bearers**

The following shall be the office bearers of the Association.

- a) Chief Patron (Vice-Chancellor - Ex-officio)
- b) President: Dr. P. Ramarao
- c) Vice-President: Dr. A. K. Dhawan
- d) General Secretary (Dean, Alumni Relations - Ex - officio)
- e) Secretary: Registrar
- f) Joint Secretary-cum-Treasurer (Finance Officer - Ex-officio)

**6. Executive Council**

The Executive Council of the Association shall consist of 12 members, including the office-bearers. Three or more members of the Executive Council shall be nominated by the Chief-patron. The Executive Council shall frame the bye-laws of the Association. The term of the Executive will be three years.

**7. Duties and Functions of Office Bearers**

**a) CHIEF PATRON**

- i. The Chief Patron shall preside over the meetings of the Association, the meetings of the Executive Council and all other functions that may be organized by the Association.
- ii. The Chief Patron shall be the custodian of the property and interests of the Association.
- iii. He shall call special meetings of the Executive Council/General Body of the Association if a written

requisition signed by at least 7 members in case of Executive Council and 30 members in case of the Association is presented to him.

**b) PRESIDENT / VICE-PRESIDENT**

- i. The president shall perform the duties and functions of the Chief Patron in his absence. The Vice-President shall perform the duties and function of the President in his absence.
- ii. President/ Vice-President shall perform such other duties and functions as may be entrusted to him by the Chief Patron or the Executive Council.

**c) GENERAL SECRETARY**

- i. He will be the custodian of all the records and documents of the Association.
- ii. He will be responsible for the safe custody of the funds of the Association and will operate bank accounts jointly with either Secretary or Joint-Secretary-cum- treasurer on behalf of the Association.
- iii. He will call and arrange meetings of the Executive Council and the Association.
- iv. He will record the minutes of the meetings of the Executive Council and the Association.
- v. He will represent the Association in all legal proceedings and sign all legal documents on behalf of the Association.
- vi. He will maintain an up-to-date register of members and of all subscriptions and donations.
- vii. He will maintain a property register and all such registers as may be necessary in connection with the work of the Association.

**d) SECRETARY**

- i. He will assist General Secretary in the administrative matters
- ii. He will also assist General Secretary in conducting activities of the Association.

**e) JOINT SECRETARY-CUM-TREASURER**

- i. He will assist the General Secretary in the discharge of his duties and functions regarding finances/accounts of the Association.

He will perform such other duties and functions as may be entrusted to him by the Executive Council.

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Ref No: CUPB/Notification/15/15-EC/13

Dated: 23/07/2015

### NOTIFICATION-13

In pursuance to Item No. EC:15:15:37 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council is hereby conveyed for constitution of the committee for addressing the **Grievance Redressal of Employees and Students** comprising of the members as detailed hereunder:

Every CoC/OIC of the Centre will be the Grievance Officer for Redressal.

#### Appeals Committee:-

- i. Prof. A. K. Dhawan, Dean, School of Health Sciences – Chairperson
- ii. Prof. S. K. Bawa, Dean, School of Education
- iii. Dr. Alpna Saini, Associate Professor
- iv. Dr. Tarun Arora, Associate Professor
- v. Dr. Harish Chander, Assistant Professor
- vi. Mr. Rajender Kumar, Assistant Registrar (Exams) – Convener

#### Review Committee

- i. Prof. P. Ramarao, Dean Academic Affairs – Chairperson
- ii. Prof. R. G. Saini, Invited Professor
- iii. Prof. R. C. Sharma, DSW
- iv. Prof. S. K. Bawa, Dean, School of Education
- v. Dr. Anjana Munshi, CoC for Human Genetics
- vi. Dr. Dhanya M.S., Assistant Professor
- vii. Dr. Pankaj Khare, Registrar - Convener

Mercy Appeals shall be considered by the Vice Chancellor

The above committee shall address the Grievance of Employees and Students, if any, as per the guidelines enclosed with the notification.

## **POLICY FOR GRIEVANCE REDRESSAL OF EMPLOYEES AND STUDENTS**

A Grievance shall include any discontent or dissatisfaction, whether expressed or not, whether valid or not, arising out of anything connected with CUPB that a student or an employee thinks, believes, or even feels, is unfair, unjust or inequitable. This policy shall aim at redressing grievances of students and employees of CUPB in just and fair manner with the following objectives:

- a) Linking with a well-defined disciplinary system to make it acceptable to all.
- b) Providing prompt redressal of Grievance.
- c) To make the redressal process fair, impartial, consistent, with prior warnings and commensurate with gravity of misconduct.
- d) To prevent misconduct rather than controlling through punitive measures.

### **Measures to address the Grievance of Students and Employees:**

CUPB shall follow the following measure to redress the grievances of students:

- a) **Open Door:** General invitations to students/employees informally drop in the Concerned Officer's room and talk informally over their grievance. They may even present the grievance through the official contact numbers of the said officers.
- b) **Drop Boxes:** Students/employees can drop their anonymous complaints in the boxes.
- c) **Opinion Surveys:** Through mentor and other feedback schemes, the opinion surveys may be conducted for better understanding.
- d) **E-mails:** Through separate e-mails to COCs/OICs, Deans, Registrar or to an email created for grievances purpose [grievances\\_students@cup.ac.in](mailto:grievances_students@cup.ac.in) for students and [grievances\\_employees@cup.ac.in](mailto:grievances_employees@cup.ac.in) for employees

### **Grievance Redress Procedure for Students:**

- a) An aggrieved student shall first present his/her grievance in writing to the concerned COCs/OICs of the Centre. The COCs/OICs is required to furnish the answer within one week of the presentation of grievance.
- b) If the student is not satisfied with the answer, he/she can approach to the '**Appeals Committee**' appointed for that purpose, directly. The committee



must give his/her answer within 3 weeks of the presentation of the complainant(s).

Appeals Committee shall be constituted school-wise and shall comprise of:

1. Dean of the School
  2. Coordinators of Centres concerned
- c) If the student is not satisfied with the answer, he/she can approach to the '**Review Committee**' which shall evaluate the case and make its recommendations to the Vice Chancellor within three weeks of presentation of the case.

Review Committee shall comprise of:

1. Dean Academic Affairs
  2. Dean Students Welfare
- d) If the committee fails to take the decision within the stipulated time or the student is not satisfied with the decision, he/she can an appeal to '**Mercy Appeals Committee**'. The committee is supposed to communicate its decision within 40 days of student's revised petition.

Mercy Appeals Committee shall comprise of the Vice Chancellor

- e) If the student is unsatisfied with the decision of this committee also, he/she may approach the Ombudsman of CUPB.

#### **Grievance Redressal Procedure for employees:**

- a) An aggrieved employee shall first present his/her grievance in writing to the concerned CoC/ head of section where he/she is posted. The head is required to furnish the answer within 1 week of the presentation of grievance.
- b) If the employee is not satisfied with the answer, he/she can approach to the '**Appeals Committee**' appointed for that purpose, directly. The committee must give his/her answer within 3 weeks of the presentation of the complainant(s).

Appeals Committee shall comprise of:

1. Dean of the School
  2. Co-ordinator of Centre/Section or Department Heads
- c) If the employee is not satisfied with the answer, he/she can approach to the '**Review Committee**' which shall evaluate the case and make its

recommendations to the Vice Chancellor within 3 weeks of presentation of the case.

Review Committee shall comprise of:

1. Dean Academic Affairs
2. Registrar

- d) If the committee fails to take the decision within the stipulated time or the employee is not satisfied with the decision, he/she can submit an appeal for revision to '**Mercy Appeals Committee**'. The committee is supposed to communicate its decision within 40 days of student's revised petition.

Mercy Appeals Committee shall comprise of the Vice Chancellor.

- e) If the employee is unsatisfied with the decision of this committee also, he/she may approach the Ombudsman of CUPB.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)

नगर परिसर, मानसा मार्ग, बठिंडा-151001

ईमेल: registrar@cup.ac.in

वेबसाइट: www.cup.ac.in

दूरभाष: +91-164-2864106



## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)

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Ref. No: CUPB/CC/15/EC-15/32

Dated: 06-08-2015

### NOTIFICATION NO 32

In pursuance to Item No. EC:15:15:42 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:37) is hereby conveyed for establishment of **Human Right Club** as per the guidelines enclosed with the notification.

Further to eth above, approval of the Competent Authority is conveyed for the constitution of the committees comprising of members as detailed below under the **Human Right Club**:

#### **A. Executive Committee**

1. Dean Academic Affairs (**Chairman**)
2. Dr Tarun Arora, Associate Professor (Member)
3. Dr Puneeta Pandey, Assistant Professor (Member)
4. Dr Monisha Dhiman, Assistant Professor (Member)
5. Er Sruinder Khurana, Assistant Professor(Member)
6. Dr. Puneet Pathak, Assistant Professor (Member)
7. Dr Deepak Kumar, Assistant Professor (**Convener**)

#### **B. Organising Committee**

- i. Mr. Ramandeep Singh, Research Scholar
- ii. Mr. Bibekananda Sarkar, Research Scholar
- iii. Mr. Kovid Kumar, Research Scholar
- iv. Mr. Dinesh Bassi, Research Scholar
- v. Ms. Anamika Das, Research Scholar - Convener

This is issued with the approval of the Competent Authority

## **Human Rights Club.**

### **Vision:**

The key stone to human rights protection is through education and awareness. Education should not only aim at producing trained professional workers but also inculcating in them a sense of higher purpose. Human Rights education aims to provide students and people with the ability to accomplish and produce societal changes. Education and awareness is widely acknowledged and seen as a way to empower people to improve their quality of life and increase their capacity to participate in the decision making process, leading to desired transformation in the social, cultural and economic policies of the nation.

### **Mission:**

To create awareness regarding the basic human rights and duties. Rights and duties go hand with hand, right of one person is depends upon the duties of other person. The mission of the club is to first aware the people connected with the university about the human rights and duties and then make it to a larger platform i.e. at the level of society.

### **Activities:**

1. Organising awareness seminars/workshops/lectures/Panel discussions about human rights in the university and nearby areas.
2. Celebration of Human Rights Day and other related Days
3. Debate, essay writing, painting competition on the human rights
4. Collaboration with other organisations working on human rights
5. Organise awareness programmes outside the university campus
6. To help and support the needy persons whose human rights gets violated

### **Organisational structure:**

The organisational structure of the club shall consists of two committees, namely

#### **Executive Committee**

Executive Committee will have nine members. This committee shall be headed by a Chairman and one member designated as Coordinator. There will be two student members included in the nine members of the body. Executive Committee shall have the powers to take decisions on all important matters including financial decisions.

#### **Organising Committee**

Organising Committee shall have eleven members. This committee will be headed by the Secretary. Three members of this committee will be faculty members and

eight student members. One student member will be designated as student coordinator. The main responsibility of the organising committee will be to implement the programmes planned and approved by Executive Committee.

### **Membership of committees**

The members of both these committees shall be nominated by the Vice Chancellor, CUPB

### **Term of members**

Members of these committees shall be nominated by the competent authority for a period of two year, normally starting from the beginning of academic session.

### **Meetings**

Executive Committee shall meet at least twice a year and organising committee every three months. At least two days written notice is required for the ordinary meetings and in case of any emergency members can be informed by way of e-mail. Record of the meetings must be maintained in the written form by the committees.

### **General membership**

Any student enrolled in CUPB or Ex-student can become the member of this club. An outsider can become the member of the club if approved by the executive committee.

### **Financial and Physical requirements:**

The Human Right Club shall require space and financial assistance for meetings, organizing functions and other activities such as TA/ DA of speakers etc. These shall be provided by CUPB following procedures, as applicable

### **Patron**

Vice-Chancellor of Central University of Punjab is the patron of CUPB Human Rights Club.

The following Executive and Organizing Committees are suggested:

- A. Executive Committee
  1. Dean Academic Affairs (Chairman)
  2. Five Faculty Members
- B. Organising Committee: Six to ten students out of which the President of Student Union will be one of the members.

**CRITERION-VI**

**GOVERNANCE,  
LEADERSHIP AND  
MANAGEMENT**

## **CRITERION-VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### **6.1.1 State the Vision and the Mission of the University.**

##### *Vision of the University:*

- To uplift and upgrade the standards of teaching, learning and research to global levels of excellence
- To create international benchmarks in research, patents and consultancy services
- To strategize to become a global epicenter of knowledge, culture, skills and technologies
- To develop a scientific temper and a performance culture of proactive decision-making
- To act as a catalyst of change by setting high bench-marks in infrastructural growth, in academic and co-academic excellence, in learning and evaluation, in social interfacing with the stake-holders, in human resource development, in safety and security systems, in process management, and in seamless integration with the surrounding communities
- To cross-pollinate with new ideas, new technologies, new platforms and new world-views
- To continue expanding and exploring, locally, nationally and globally

##### *Mission of the University:*

- To offer a wide range of instructional and research facilities across integrated and cross-disciplinary studies
- To promote innovation in teaching, learning, evaluation, research and consultancy services
- To create an ignited workforce responsive to regional, national and global needs in tune with the requirements of academics, industry, business and administration

- To participate in the problems and concerns of the surrounding community and the civil society

**6.1.2 Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future.**

Yes, indeed. The vision and mission of the university clearly defines its participation in problems and concerns of the society. It lays focus on “Stake holders” “Surrounding communities” and “Regional national and global needs”. It focuses on innovative teaching and developing values based on academic and co-academic excellence. It is value oriented and futuristic in approach with special focus on quality of research and creation of knowledge.

**6.1.3 How is the leadership involved in:**

*Ensuring the organization's management system development, implementation and continuous improvement*

The Vice-Chancellor is the Head of the Institution, next only to the Chancellor of the University. He is assisted by the Dean Academic affairs, Registrar, Controller of Examinations and Deans of different schools. The University Court, Executive Council, the Academic Council, the Finance Committee, the Planning Board, the Building Advisory Committee and the Financial Investment Advisory Committee are the statutory bodies of the university. The Centre Coordinators (COC) fulfil the leadership role for the concerned Centre. The CoC is the chairperson of Board of Studies and the Academic and Administrative committees of the Centre.

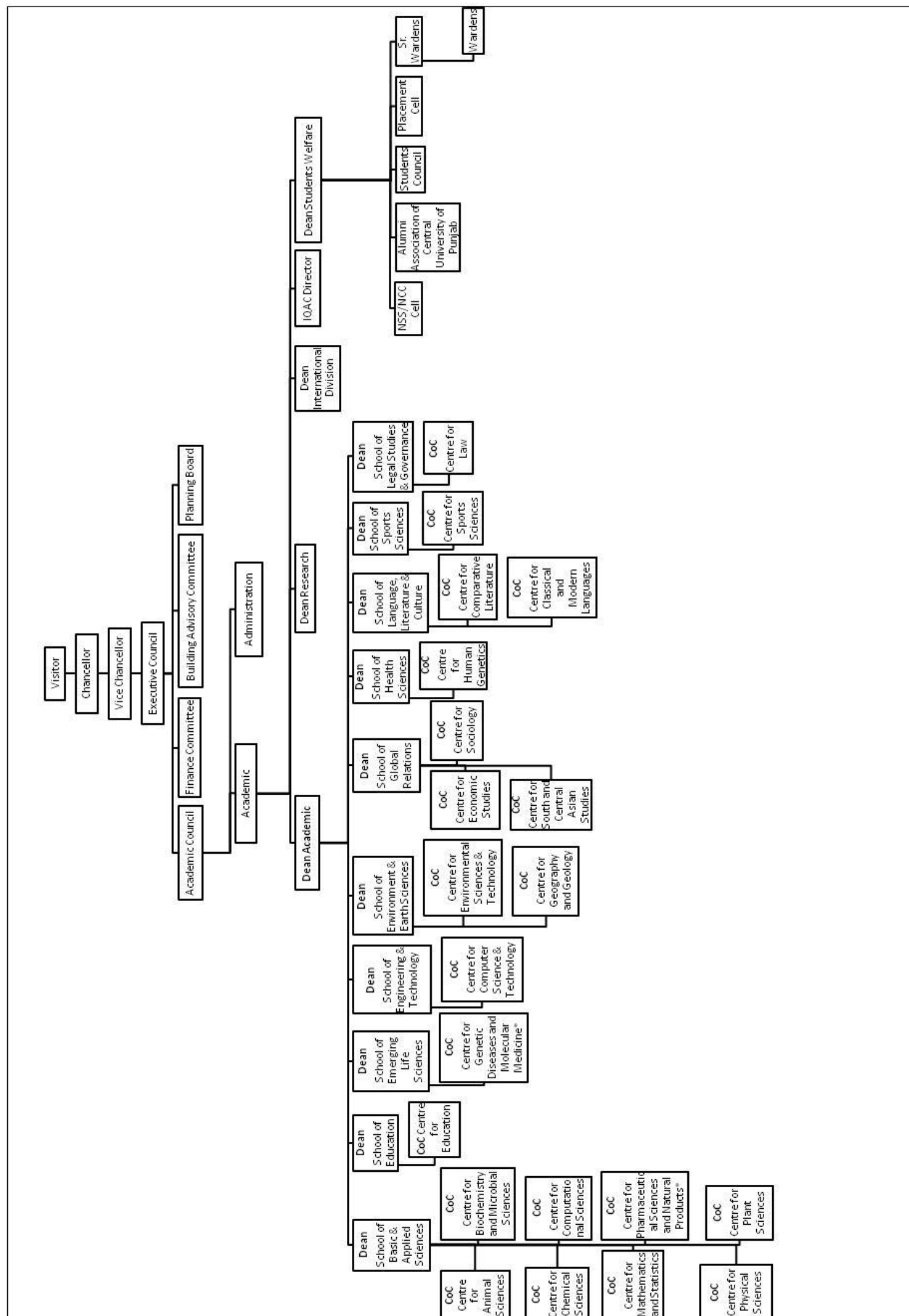
CUPB is highly democratized. As the chairperson of various statutory bodies, leadership of the Vice-Chancellor ensures a smooth functioning of the university. However, development of management systems, implementation of policies framed and improvement of the system are all continuous process, whereby every member of CUPB participates. The attached Chart of Governance makes it amply clear. (*Figure 6.1*)

At the beginning of every academic year, the Vice-Chancellor, constitutes different committee in accordance to the interest and expertise. The Leadership team initiates its interaction with the student body with the orientation programme at the beginning of the academic programme. Concerted efforts are made by the administrative team to convey the value and ethos of the Institution and to make the student body feel as a part of the Institution.



The members of University court, Executive council and Academic council periodically interact with the faculty member and students. The chancellor also interacts with the faculty members and students time to time. The Vice Chancellor has monthly meeting with the faculty members, students and administrative staff of the university.

# Structural Governance

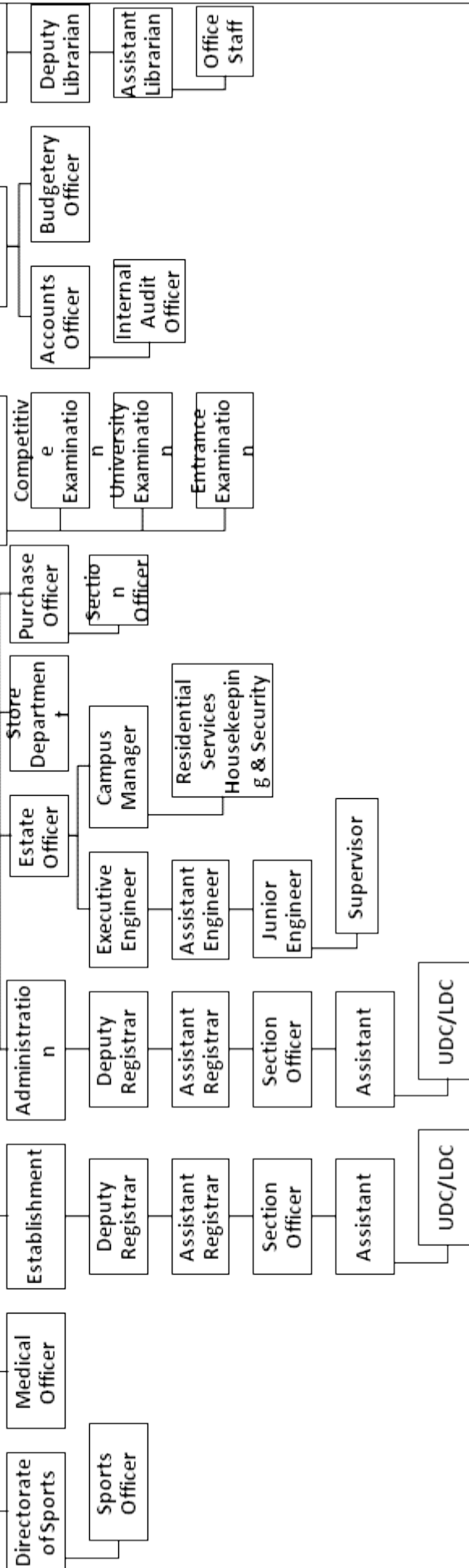


\* These Centres are proposed to move under School of Health Sciences

# Administration

Vice Chancellor

Registrar



### *In interacting with its Stakeholders*

The University has two important advisory bodies- the University Industrial Forum and the University Industry Council. Both include the representative of Industries from domain area of CUPB. Vice-Chancellor is the chairman of these bodies and Senior Faculty members, co-ordinates and participates in these. These processes ensure and involvement of its stakeholders in decision making process of the University in all levels.

The Dean students' welfare, students' supervisors, COCs, Deans and Vice-Chancellor, all meet the members of the Student Council to address any matter of concern pertaining to the student.

All this ensures that the management continuously interacts with the stakeholders.

### *In Reinforcing a Culture of Excellence*

All the senior functionaries of the university, from Vice-Chancellor to Centre Coordinators perform the leadership role in reinforcing a culture of excellence by giving their instinctive support to the faculty and students. CUPB leadership understands the importance of excellence in all its activities and emphasizes its value at all levels. Commitment to work, Team spirit, love for CUPB and innovative ideas are highly encouraged.

The university has the policy to ensure academic excellence and for that purpose it announces various prizes annually including: Best faculty Award, Best Student Award, Best non-teaching Award. The university also has the Chancellor and Vice Chancellor's Medals for two students (one male and one female) from Science and two students from humanities (one male and one female).

### *In Identifying Organizational Needs and Striving to Fulfil them*

The University leadership makes proactive efforts to identify organizational needs at all levels through regular meetings, discussions, feedback from Faculty and feedback from students. At departmental level the COCs identify the needs and strive to fulfil these. Plans for future expansion and arrangements for enhancing physical infrastructure as, well as, resource augmentations are prime focus of university leadership.

**6.1.4 Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.**

In spite of several advertisements, interviews for the post of librarian and finance officer could not be conducted due to lack of required number of applicants. No other posts remained vacant for more than one year.

**6.1.5 Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?**

Yes, the statutory bodies of the University have regular meetings conducted. The details of meetings conducted are given in *Table 6.1* to *Table 6.7*

### Details of the Meetings

**Table 6.1 : Meetings of the University Court**

S.No.	Meeting	Date	Place	Members
1.	<b>First Court</b>	09 .07. 2014	CUPB	12+1 Chancellor
2.	<b>Second Court</b>	24 .11. 2014	CUPB	13+1 Chancellor

**Table 6.2 : Meetings of the Executive Council**

S.No.	Meeting	Date	Place	Members
1.	<b>1<sup>st</sup> Executive Council</b>	20 .10. 2009	CUPB	06+1 VC
2.	<b>2<sup>nd</sup> Executive Council</b>	06 .02. 2010	New Delhi	07+1 VC
3.	<b>3<sup>rd</sup> Executive Council</b>	28 .10. 2010	New Delhi	04+1 VC
4.	<b>4<sup>th</sup> Executive Council</b>	25 .03. 2011	New Delhi	05+1 VC
5.	<b>5<sup>th</sup> Executive Council</b>	17 .09. 2011	New Delhi	07+1 VC
6.	<b>6<sup>th</sup> Executive Council</b>	25 .03. 2012	New Delhi	07+1 VC
7.	<b>7<sup>th</sup> Executive Council</b>	30 .06. 2012	NIPER Mohali	04+1VC
8.	<b>8<sup>th</sup> Executive Council</b>	16. 07. 2012	NIPER Mohali	05+1VC
9.	<b>9<sup>th</sup> Executive Council</b>	12 .10. 2013	CUPB	04+1VC
10.	<b>10<sup>th</sup> Executive Council</b>	22 .08. 2014	New Delhi	04+1VC
11.	<b>11<sup>th</sup> Executive Council</b>	25 .11. 2014	NIPER Mohali	04+1VC
12.	<b>12<sup>th</sup> Executive Council</b>	09 .12. 2014	NIPER Mohali	04+1VC
13.	<b>13<sup>th</sup> Executive Council</b>	14 .01. 2015	CUPB	04+1VC
14.	<b>14<sup>th</sup> Executive Council</b>	16.03.2015	INSA, New Delhi	04+1VC
15.	<b>15<sup>th</sup> Executive Council</b> (Conducted in 2 sessions)	24.05.2015 02.06.2015	INSA, New Delhi INSA, New Delhi	06+1VC 06+1VC
16.	<b>16<sup>th</sup> Executive Council</b>	25.07.2015	Panjab University, Chandigarh	05+1VC

**Table 6.3 : Meetings of the Academic Council**

1.	<b>1<sup>st</sup> Academic Council</b>	15 .11. 2009	CUPB	09+1 VC
2.	<b>2<sup>nd</sup> Academic Council</b>	04 .10. 2010	IISER, Mohali	09+1 VC
3.	<b>3<sup>rd</sup> Academic Council</b>	10 .03. 2012	CUPB	08+1 VC
4.	<b>4<sup>th</sup> Academic Council</b>	21 .07. 2012	CSIO, Chandigarh	10+1 VC
5.	<b>5<sup>th</sup> Academic Council</b>	15 .11. 2014	CUPB	05+1 VC
6.	<b>6<sup>th</sup> Academic Council</b>	05.03.2015	CUPB	07+1 VC
7.	<b>7<sup>th</sup> Academic Council</b>	23.05.2015	Panjab University, Chandigarh	11+1 VC & 1 Special Invitee Prof. A. K. Dhawan
8.	<b>8<sup>th</sup> Academic Council</b>	07.09.2015	CUP, Bathinda	Scheduled

**Table 6.4 : Meetings of the Finance Committee**

1.	<b>1<sup>st</sup> Finance Committee</b>	13 .08. 2010	New Delhi	05+1 VC
2.	<b>2<sup>nd</sup> Finance Committee</b>	12 .03. 2011	NIPER, Mohali	04+1VC
3.	<b>3<sup>rd</sup> Finance Committee</b>			
4.	<b>4<sup>th</sup> Finance Committee</b>	24 .03. 2012	New Delhi	05+1 VC
5.	<b>5<sup>th</sup> Finance Committee</b>	19 .08. 2013	New Delhi	04+1VC
6.	<b>6<sup>th</sup> Finance Committee</b>	22 .08. 2014	New Delhi	03+1 VC
7.	<b>7<sup>th</sup> Finance Committee</b>	25 .11. 2014	NIPER, Mohali	05+1 VC
8.	<b>8<sup>th</sup> Finance Committee</b>	16.03.2015	INSA, New Delhi	06+1 VC
9.	<b>9<sup>th</sup> Finance Committee</b>	01.06.2015	MHRD, New Delhi	04+1VC & 3 special invitees

**Table 6.5 : Meetings of Other Bodies**

S. No.	Name of body	No. of Meetings	Dates
1.	Finance Investment Advisory Committee	3	31 .10. 2011
			21 .09. 2012
			10 .04. 2013
2.	Expert Committee on Sports Infrastructural Requirements	2	12 .05. 2012
			06 .05. 2013
3.	Expert Committee for the Library Infrastructural Requirements	1	14 .05. 2012

**Table 6.6 : Meetings of Building Advisory Committee**

S. NO.	Committee	Date
1.	1 <sup>st</sup> Building Advisory Committee	05 .01. 2010
2.	2 <sup>nd</sup> Building Advisory Committee	18.02. 2010
3.	3 <sup>rd</sup> Building Advisory Committee	08.06. 2010
4.	4 <sup>th</sup> Building Advisory Committee	11.11. 2010
5.	5 <sup>th</sup> Building Advisory Committee	31.01. 2012
6.	6 <sup>th</sup> Building Advisory Committee	05.05. 2012
7.	7 <sup>th</sup> Building Advisory Committee	14.06. 2012
8.	8 <sup>th</sup> Building Advisory Committee	10.07. 2012
9.	9 <sup>th</sup> Building Advisory Committee	04.10. 2012
10.	10 <sup>th</sup> Building Advisory Committee	05.01. 2013
11.	11 <sup>th</sup> Building Advisory Committee	26.03. 2013
12.	12 <sup>th</sup> Building Advisory Committee	25.07. 2013- 0930h
13.	13 <sup>th</sup> Building Advisory Committee	25.07. 2013- 1130h
14.	14 <sup>th</sup> Building Advisory Committee	07.08. 2013
15.	15 <sup>th</sup> Building Advisory Committee	14.09. 2013
16.	16 <sup>th</sup> Building Advisory Committee	19.10. 2013
17.	17 <sup>th</sup> Building Advisory Committee	04.12. 2013
18.	18 <sup>th</sup> Building Advisory Committee	14.06. 2014
19.	19 <sup>th</sup> Building Advisory Committee	01 .07. 2014
20.	20 <sup>th</sup> Building Advisory Committee	19. 08. 2015
21.	21 <sup>st</sup> Building Advisory Committee	10. 01. 2015
22.	22 <sup>nd</sup> Building Advisory Committee	20.04. 2015
23.	23 <sup>rd</sup> Building Advisory Committee	17.08.2015
24.	24 <sup>th</sup> Building Advisory Committee	16.07.2015
25.	25 <sup>th</sup> Building Advisory Committee	17.08.2015
26.	26 <sup>th</sup> Building Advisory Committee	01.09.2015



**Table 6.7 : Sub –Committee Meeting of Building Advisory Committee:**

<b>S. No.</b>	<b>Committee</b>	<b>Date</b>
1.	1 <sup>st</sup> Sub –Committee BAC	1.08. 2013
2.	2 <sup>nd</sup> Sub –Committee BAC	03.10. 2013
3.	3 <sup>rd</sup> Sub –Committee BAC	14.10. 2013
4.	4 <sup>th</sup> Sub –Committee BAC	11.01. 2014
5.	5 <sup>th</sup> Sub –Committee BAC	11.02. 2014
6.	6 <sup>th</sup> Sub –Committee BAC	02.04. 2014
7.	7 <sup>th</sup> Sub –Committee BAC	23.04. 2014
8.	8 <sup>th</sup> Sub –Committee BAC	12.05. 2014
9.	9 <sup>th</sup> Sub –Committee BAC	04.06. 2014
10.	10 <sup>th</sup> Sub –Committee BAC	22.07. 2014
11.	11 <sup>th</sup> Sub –Committee BAC	12 .09. 2014
12.	12 <sup>th</sup> Sub –Committee BAC	15.10. 2014
13.	13 <sup>th</sup> Sub –Committee BAC	24 .10. 2014
14.	14 <sup>th</sup> Sub –Committee BAC	15.12. 2014
15.	15 <sup>th</sup> Sub –Committee BAC	27.12. 2014
16.	16 <sup>th</sup> Sub –Committee BAC	02.01. 2015
17.	17 <sup>th</sup> Sub –Committee BAC	10.01. 2015
18.	18 <sup>th</sup> Sub-Committee BAC	04.02. 2015
19.	19 <sup>th</sup> Sub-Committee BAC	18.04. 2015
20.	20 <sup>th</sup> Sub-Committee BAC	16.07.2015
21.	21 <sup>st</sup> Sub-Committee BAC	17.08.2015

**6.1.6 Does the university promote a culture of participative management? If yes, indicate the levels of participative management.**

Functioning of CUPB is participatory and democratized to the lowest level. Each Centre has an 'Academic and Administrative' committee with COC as the chairperson and the whole faculty as members. This committee identifies thrust areas, designs curriculum, proposes qualifications of teaching positions, reviews research proposal and also carries out the routine works like course allotment, timetable and academic calendar of the department etc. The Board of studies, the School Boards and other statutory bodies such as Academic council and Executive council have significant representation of faculty and other stake holders. Each centre has an independent budget to meet its needs.

Further, faculty members managing several auxiliary units such as library, laboratory, hostel, mess collectively participate in administration and decision making. CUPB believes in participative management, where the Vice-Chancellor is a facilitator rather than a bureaucratic executive.

**6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to them to become autonomous?**

CUPB is a central university and does not have the affiliated colleges as per the Act.

**6.1.8 Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?**

CUPB is a central university and does not have the affiliated colleges as per the Act.

**6.1.9 How does the university groom leadership at various levels? Give details.**

CUPB aims at producing leaders of tomorrow in all spheres. The younger members of faculty are involved in all committees and decision making to ensure their path to leadership. Senior teaching faculty are assigned different leadership positions like COCs, Dean of Students, Dean of Students Welfare, Warden, Deputy Warden, Placement cell officers, members of student grievances cell, office bearers of Research society, framing of time table, etc. to groom leadership at various levels. The Section Officer, even at the administrative level governs the supporting staff in each section. The students union (*Annexure 6.1*) is a training ground for students, where they learn the basic lessons of democratic functioning and value of dialogue.

The students of the CUPB have established various clubs that manage environment issues, weekly documentary movie, organize functions on commemorative days and carry out various cultural and sports activities. Students are given liberty to organize and manage on their own, with an objective of inculcating managerial skills, leadership, crises management, rescue management, nurturing relationship and gaining confidence.

**6.1.10 Has the University evolved a knowledge management strategy? If yes, give details.**

Any new segment of knowledge that is received or created at CUPB is well disseminated to all levels. Such a sharing of knowledge leads to better learning experiences and evolving of new programmes. Any learning experience by a faculty member who is deputed to attend seminars, workshops or courses outside college are shared in the Faculty Meetings or at the Department meetings.

Practical manuals, text-books and other reading materials prepared and published by the teaching staff are also numbered in the library. The University Library maintains complete database of all the publications by the faculty and students of the university. Hard copies and e-copies of Ph. D. dissertations are required to be submitted in the library and these are uploaded on *Sodhganga*. Lectures delivered by the faculty during faculty seminars and by the invited experts on various occasions are available on the university intranet.

The University also collaborates with national and international research organizations and universities and has signed various MOUs in an effort to diversify its interdisciplinary and inter-institutional, academic and research activities. All the knowledge and information from such efforts is well documented and disseminated.

**6.1.11 How are the following values reflected in the functioning of the University?**

*(a) Contributing to National Development*

The goal of higher education is to equip the individual with knowledge and skills that meaningfully contribute towards meeting societal needs and thereby contribute to the development of the nation. This goal has been embodied in the mandate of CUPB. Not only does the university try to produce knowledgeable and skilled individuals for contributing to national development, but also it has

specific programmes in its Community College for skill development as per the national need. The University continuously tries to contribute to National development and for the purpose, it has established the following:

- Community Development Cell
- Rashtriya Awashkar Abhiyan
- Innovators Club

Schools and Centres at CUPB are aware of their regional and national obligations and develop programmes accordingly. Research programmes focus on national needs. For example Researchers of Centre for Plant Sciences at Central University of Punjab, Bathinda successfully identified a new microscopic '*Endyophytic Algae*' which has anti-cancer compounds such as 'Taxol'. This was possible due to advanced microscopic facilities available at the CUPB.

(b) *Fostering global competencies among students*

- New programmes are continually planned and existing ones updated to meet national and global needs
- Innovative teaching techniques ensure that the core competencies of students are developed to make them employable world-wide.
- Research students are encouraged to publish research articles in reputed journals to enable them to go for Post-doctoral Programmes in reputed foreign universities.
- Students are trained through soft skill development classes organized in the university to equip them with the requisite tools to compete in the highly competitive world.
- Significant e-learning resources are made available for acquisition and enhancement of knowledge to face competitive challenges.
- CUPB education has led its students to the top universities of the world such as Yale University, Oxford University, University of Kent and University of Lund.

(c) *Inculcating a sound value system among students*

Various cultural clubs are constituted to provide a platform to the students to benefit from the initiatives of CUPB.

- Clubs like Innovators Club, Environment Club, Cultural club and Community Club have been constituted which make significant contributions towards making life better.
- The Faculty, the mentors, the research guide, wardens, DSW and even the Vice-Chancellor try to present the right model of conduct for students.
- The best academicians and thinkers are invited for lectures in an attempt to inculcate right values among students.
- University has started a Certificate Course in Human Rights and Duties to disseminate awareness of human rights and duties among the students.
- University also has National Service Scheme to engage students in the social work.

(d) *Quest for excellence*

- Students are offered with training / exposure visit to national institutes, industries and laboratories to teach them new technologies and provide exposure in using latest equipment.
- The university promotes a culture of excellence by a well-defined mechanism of Awards and Recognitions (Annexure) for outstanding teaching, research and general activities.

(e) *Promoting use of technology*

Smart class rooms, wi-fi internet throughout the campus and hostels, well equipped computer centre, library with high tech facilities, specialized laboratory all ensure the use of technologies in academic work at CUPB.

## 6.2 Strategy Development and Deployment

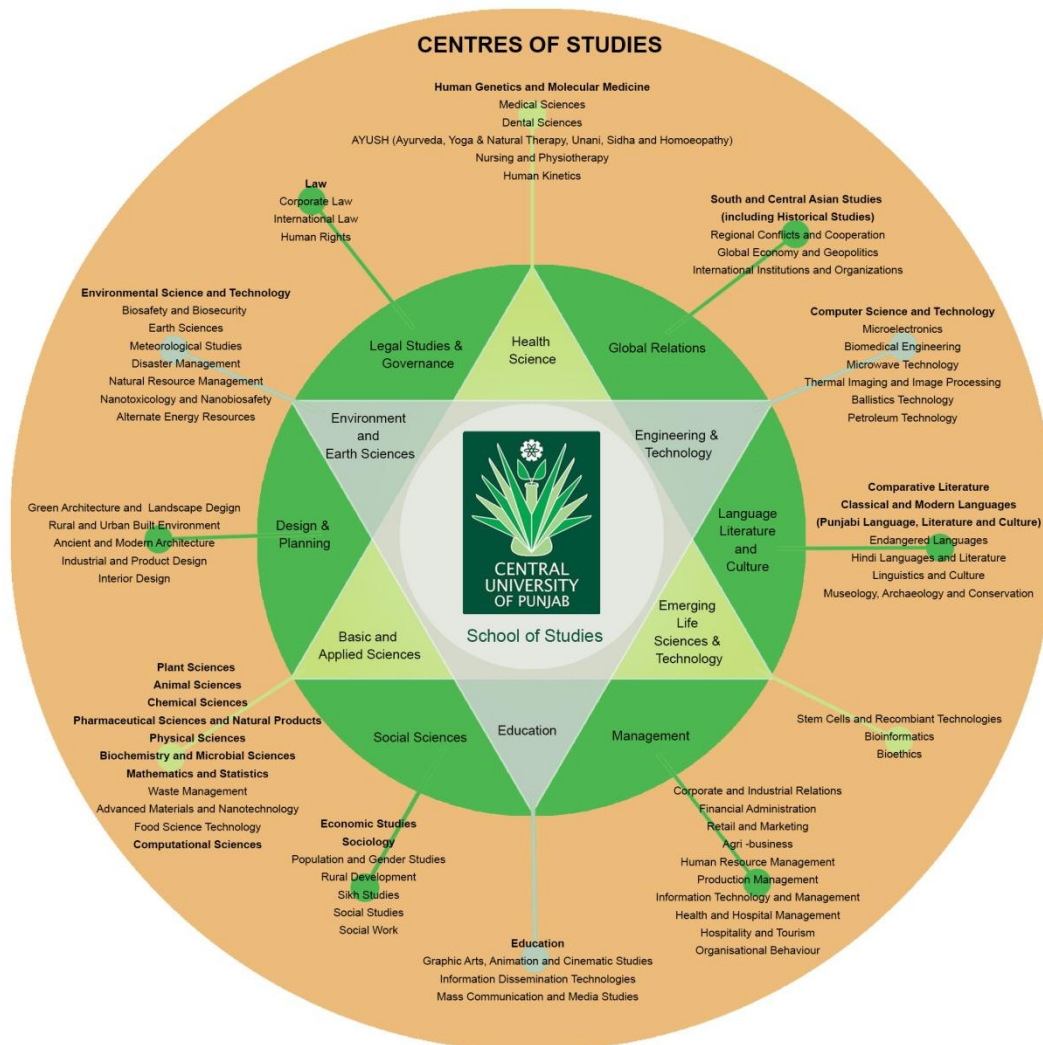
### 6.2.1 Does the University have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

The University has a perspective plan for development of new Centres, infrastructure and research facilities. The development of policies and strategies is based on the mandate of the university, needs of students, faculty and stake-holders, national needs and directions of regulatory bodies. For example, the overall academic plan, new Centres and schools are reflected in *Figure 6.1*.

At present the University has nineteen Centres under nine School (Annexure)

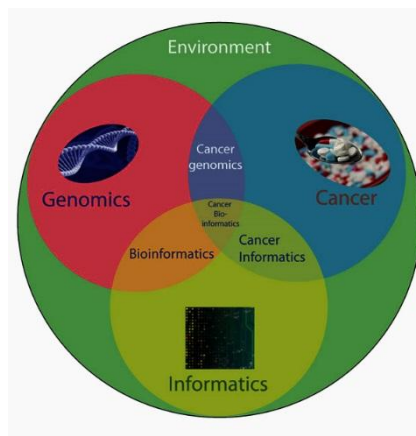
The perspective plan of the university is in line with:

- *Vision and Mission for which it has been established:* The mission of this University, which is located in a backward region, reflects equity in access for education, encompassing more of under privileged students and ensuring quality of education.
- *Teaching and Learning as outlined by the UGC:* The perspective plan of the University is designed to have periodical reforms, increased students' choices of courses, improved technology-assisted participatory teaching-learning processes and academic programmes updated by feed-back-based curriculum revisions. Further, it focuses on attracting and retaining the students from socially deprived backgrounds particularly in rural areas.



**Figure 6.1 : Schools and Centres**

- *Research and Development:* University's prospective planning includes creation of international quality infrastructure and resource support to researchers in all the disciplines with the aim to generate basic knowledge in frontline areas and to develop cutting-edge technologies.



- *Community Engagement:* The University is constantly engaged in planning community based skill development programmes through its community college. The community development programmes like computer literacy classes for the senior citizens of Bathinda, constitution of innovators club, visit of cycle club members to the university, INSPIRE internees visit to the university, participation of the students of other institutions and of under privileged and physically challenged children in various programmes of the university, organization of blood donation camp in the university, etc. The university also made various groups for environment awareness and protection which includes i.e. Environment Awareness Club, Green campus group, Renewable Energy Group, Green Building Policy, Environment Auditing and Monitoring cell.
- *Human Resource Planning and Development:* The prospective plan of the University in human resource development includes capacity building and capability enhancement with modern-day requirement of the faculty resources through training in current developments and technologies. The University started its functioning since 2010 with two schools now expanded to 9 school and 19 centers. Some unique centers has introduced including Centre for Computational Science.
- *Industry Interaction:* In curriculum designing major thrust is given to the employment avenues by arranging periodical industrial visits and campus interviews through placement cell. The University has



University Industrial forum, University-Industry Council and a Placement coordination cell for enhanced industry interaction. (*Annexure 1.4*)

- *Internationalization*

To make CUPB's programmes internationally acceptable, curriculum and evaluation system is designed and periodically revamped to fit requirements of changing global scenario. Students are provided hands-on training so as to widen their practical knowledge and competence in various facets. Computer related courses are also included in the curriculum. The University has created international collaboration division at CUPB to meet this objective. (*Annexure* )

### **6.2.2 Describe the University's internal organizational structure and decision making processes and their effectiveness.**

CUPB believes in an organizational structure that should be participative and non-hierarchical in decision making, but effective and efficient in functioning and implementation of decisions. The Vice-Chancellor is the Head of the institution. He is assisted by the Dean Academic Affairs (DAA), Registrar, Controller of Examinations, Deans of Schools and Coordinators of Centres (CoCs) in all academic and administrative matters.

#### *Academic Set up:*

CUPB has nine schools with a total of nineteen Centres. Each center has a COC as chairperson, but the real decision making lies with Academic and Administrative committee. The DAA and the Dean of school form the next level of internal organizational; next only to the Vice Chancellor. Important academic decisions taken in academic and administrative committees of the Centres are subsequently discussed in the Board of Studies and finally in the Academic Council.

#### *Administrative Setup:*

Both the academic and administrative activities are under the purview of the Vice-Chancellor, who provides overall guidance for various functions of the University. However, all the administrative functions come under the overall control of the Registrar.

The administrative machinery is well knit in spite of decentralization of various functions, vested with the Deputy Registrar, Assistant Registrars,

Superintendents, etc. The various administrative wings look after the particular aspects of administration assigned to them.

*Examination Setup:*

The examination wing is headed by the Controller of Examinations supported by Assistant Registrars of examinations and the subordinate staff.

**6.2.3 Does the University have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?**

Not compromising on the quality, the university has limited seats in each programme, therefore making an effort to select quality students. Ensuring Quality of Education, the university adopts following strategies:

- (i) To encourage the research environment, the University provides Research Seed Money to each faculty member.
- (ii) Recruiting the best faculty who would serve as role models. The mechanism of award and recognition is in place.
  - The faculty if NET and Ph.D. both.
  - Recruitment process is fair and transparent having best experts for the selection committee, mostly fellows of National Academies.
  - University send letters to Fellows of national Academies asking them to encourage best faculty and researchers to apply at CUPB.
- (iii) Imparting a quest for learning among students and providing an ambience favourable for learning.
- (iv) Offering merit scholarships, fee concession and awards for meritorious performances
- (v) Hosting of seminars/ conferences/workshops/trainings and endowment lectures, deputation of faculty to participate in external events, collaboration with other institutions, by signing MoUs with them. Allthese are the driving mechanisms of enhancing quality of education.

Apart from the above, CUPB has two important quality assurance bodies:

- a. *Internal Quality Assurance Cell (IQAC)* has been established with the Vice-Chancellor as Chair person, as per the NAAC guidelines. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of the institution. It motivates the Faculty to achieve internal quality. It has full independence for evaluation at through various methodologies. Meetings of the Quality Assurance Committee are being held as per schedule (*Annexure 6.2*).
- b. *Academic Audit and Monitoring Unit* audits curriculum, teaching- learning process, conduct audit of students' assessment and also carries out research and faculty audit (*Annexure 6.3*). The Academic audit and monitoring unit has developed policy for Academic probation and distinction (*Annexure 6.4*).

**6.2.4 Does the University encourage its academic departments to function independently and autonomously and how does it ensure accountability?**

Autonomy and academic freedom are inbuilt in the university policies. The Academic and Administrative Committees in each centre (*Insert 6.2*) are the real pillars of CUPB's functioning. For example, different centres and schools are allocated separate budget per its requirements. Also faculty members of different centers have their own externally funded projects governed by the policy of externally funded projects, whereby principal investigators have complete autonomy. This policy grants administrative and financial powers to PI, equivalent to COC. The accountability is ensured by self-appraisal of the individual faculty and the assessment report by the respective heads which are carefully evaluated and discussed. Academic Audit and Monitoring Unit as also IQAC further ensure accountability. Each centre has complete autonomy to frame its syllabi and carryout academic and co curriculum activities. A separate budget is allocated to each centre to purchase library resources, laboratory equipments, to conduct academic activities etc.

**6.2.5 During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?**

One case under Labour Court was filed against the university in which a worker of outsourcing agency wrongly pleaded to be the employee of the university. Now the case has resolved with the direction of the court to the outsourcing agency to accommodate the litigant.

**6.2.6 How does the University ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?**

CUPB is sensitive to the complaints and grievances of its students, staff, and faculty. The university aims at upholding the dignity of the institution by ensuring strife free atmosphere and promoting cordial relations among the different stakeholders and the management. CUPB encourages people to express their grievances/problems freely and frankly, without any fear. Indeed, there are multiple mechanisms for redressal of grievance:

### **Academic and Administrative Committees in different Centre of CUPB**

The following shall form Academic and Administrative Committees of respective centre of CUPB:

1. Chairperson: Coordinator of the Centre
2. Members: All Faculty members
3. Convener: As designated by the COC/OIC

UGC lays a lot of emphasis on democratization of functioning of the university departments and participation of faculty in decision making. Establishment of Academic & Administrative Committee (AAC) in each Centre is one important step in this direction.

1. AAC is to be established in each Centre of CUPB with the following objectives:
  - To develop a system for conscious and consistent action to improve the academic and administrative performance of the Centres.
  - To promote measures towards quality enhancement and democratic functioning of the Centres through internal discussions and consensus building.
2. The AAC of the Centres are expected to perform the following functions:
  - Identify mandate and thrust areas of the Centre for teaching and research and plan the various programmes to be offered by the Centre.
  - Prepare calendar of activities of the Centre in line with the Academic calendar of the University. The Department calendar will include schedule of all important activities of the Centre such as orientation programme, workshops, seminars, lectures, refresher courses, meetings of Board of Studies and other activities to be carried out by the Centre during the year.
  - Constitute committees for looking after the various activities of the Centre from preparation of time table to holding of seminars and lectures etc.
  - Review and approve the curriculum development, syllabus of courses as also revision of syllabus of different courses.
  - Recommend books for reference and Book bank of library
  - Propose the department budget including purchase of equipment for various activities of the Centre.

- Determine requirement of the department for teaching and non-teaching posts and Propose qualifications for these.
  - Review research proposals to be submitted by faculty for internal and external funding, student's synopsis, progress reports of research fellows and other research activities of the Centre.
  - Ensure implementation of decisions taken by statutory bodies of CUPB.
  - Provide any academic or administrative exemptions to the faculty and students of the Centre.
  - Develop and maintain of database of students and Faculty of the Centre
  - Prepare the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to IQAC of CUPB.
3. AAC are to be constituted with Coordinator of the Centre as Chairperson and all faculty members as the members of the committee.
  4. The CoCs shall declare the formation of AAC and any changes whenever required and get these approved from the Vice Chancellor, CUPB.
  5. The AAC shall meet on first Wednesday of the month to deliberate on issues related to the Centre. Minutes of the meeting will be recorded and sent to Dean (A) for information.

### **Grievance Redressal Cell**

In order to attend to the students 'complaints, a grievance redressal cell has been set up in the university. It offers immediate and effective redressal to the problems reported by the students and work towards providing a safe and secure atmosphere for the holistic growth of the students.

Grievance Redressal of Employees and Students comprising of the members as detailed hereunder: Every CoC/OIC of the Centre is the Grievance Officer for Redressal.

### **Appeals Committee:-**

- i. Prof. A. K. Dhawan, Dean, School of Health Sciences – Chairperson
- ii. Prof. S. K. Bawa, Dean, School of Education
- iii. Dr. Alpna Saini, Associate Professor
- iv. Dr. Tarun Arora, Associate Professor
- v. Dr. Harish Chander, Assistant Professor
- vi. Mr. Rajender Kumar, Assistant Registrar (Exams) – Convener

## Review Committee

- i. Prof. P. Ramarao, Dean Academic Affairs – Chairperson
- ii. Prof. R. G. Saini, Invited Professor
- iii. Prof. R. C. Sharma, DSW
- iv. Prof. S. K. Bawa, Dean, School of Education
- v. Dr. Anjana Munshi, CoC for Human Genetics
- vi. Dr. Dhanya M.S., Assistant Professor
- vii. Dr. Pankaj Khare, Registrar – Convener

Mercy Appeals shall be considered by the Vice Chancellor.

The above committee shall address the Grievance of Employees and Students, if any, as per the guidelines enclosed with the notification.

- ***Grievance Redressal Committee Members (Examinations)***

- Prof. P. Ramarao, Dean Academic Affairs
- Prof. R. C. Sharma, Associate Dean Students Welfare
- Prof. R. G. Saini, Professor In-charge Examinations
- Dr. Pankaj Khare, Registrar

- ***Grievance Redressal Committee (Infrastructure)***

- Prof. R. C. Sharma, Associate Dean Students Welfare
- Dr. Sanjeev Thakur, Boys Hostel Warden
- Dr. Sandeep Kaur, Girls Hostel Warden
- Er. Daljeet Singh, Executive Engineer

The university has a well-defined grievance redressal mechanism. These are Grievances Committees, Appeals Committee, Review Committee and Mercy Appeals Committee (*Annexure 5.5* ).

### ***Complaints Cell for Sexual Harassment:***

Complaint Committee to deal with the complaints regarding Sexual harassment/abuse in Central University of Punjab, Bathinda: There is online provision of form for filing the complaint.

1.	Dr. Surinderjit Kaur Bawa Professor, Centre for Education CUP, Bathinda	Presiding Officer
2.	Dr. Sushil Kumari Gupta Officer on Special Duty (Academic & Admin)	Member

3.	Dr. Satwant Kaur Bhullar, Principal, RBDVA Senior Secondary School, Bathinda	Member
4.	Mr. Jagmohan Kaushal, Founder & President Teachers Home Trust, Bathinda	Member (NGO)
5.	Mrs. Shweta Arora (Member) Deputy Registrar, CUP, Bathinda	Member Secretary
6.	Dr. Deepak Kumar Assistant Professor CUP, Bathinda	Member
7.	Dr. Anil Kumar Mantha Assistant Professor CUP, Bathinda	Member
8.	Dr. Kiran Kumari Singh Assistant Professor CUP, Bathinda	Member

### ***Anti Ragging Cell***

The university has a zero tolerance policy towards ragging-related matters. All issues in this regard are dealt with utmost urgency and stringent action taken against those who are involved. A copy of UGC regulations on curbing the menace of ragging have been distributed to all students upon admission and have procured undertakings and affidavits from the students as well as parents in this regard.

In compliance with the Directions of University Grants Commission, the competent authority has constituted Anti-Ragging Committee, Anti Ragging Squad/Cell and Nodal Officer at Central University of Punjab for the year 2013-14 as per the details given below.

### ***Anti-Ragging Committee***

- Prof. R. C. Sharma, Professor (ADSW)
- Dr. Sanjeev Kumar, Assistant Professor
- Dr. Sandeep Kaur Bhatia, Assistant Professor
- Mrs. Shweta Arora, Deputy Registrar
- Sh. Paramjit Singh F/o Ms. Harvinder Kaur, 3rd Sem M.Phil-Ph.D. Integrated Program Development Economics.
- Sh. Onkar Singh, F/o Ms. Chitra (M.Phil-Ph.D. Integrated Program, EVS.)
- Ms. Sheenam (M.Phil-Ph.D. Integrated Program, Comp. Lit.)
- Mr. Rabindra Kumar (M.Phil-Ph.D. Integrated Program, EVS)
- Mr. Prateek Sharma (M.Phil-Ph.D. Integrated Program Bio Sciences)
- Ms. Anamika Das (M.Phil-Ph.D. Integrated Program in EVS)



### ***Anti-Ragging Squad at Central University of Punjab***

- Dr. Zameerpal Kaur, Assistant Professor
- Dr. Kiran Kumari Singh, Assistant Professor
- Dr. Sanjeev Kumar, Assistant Professor
- Dr. Pankaj Bhardwaj, Assistant Professor
- Dr. Puneeta Pandey, Assistant Professor
- Dr. M.S. Dhanya , Assistant Professor
- Dr Hans Raj Arora, Assistant Professor
- Dr. Gagandeep, Sports Officer

### **Nodal Officer**

Prof. R. C. Sharma, Professor (ADSW)

### ***Anti-Discrimination Cell***

The university community comprises of heterogeneous population from different parts of country, different religious/caste affiliations, linguistic heterogeneity and persons with various financial backgrounds. Discriminations based on caste/sex/appearance/state of domicile etc. are dealt with extreme seriousness. The university puts its best efforts to ensure that the minority community faces no discriminating incidents in the campus.

### ***Liaison Officer for Persons with Disabilities:***

Dr. Puneeta Pandey, Assistant Professor

### ***Liaison Officer for SC/ST Category Personnel:***

Mrs. Shweta Arora, Assistant Registrar

### ***Liaison Officer for OBC Category Personnel:***

Dr. Dhanya M. S., Assistant Professor

In its 7<sup>th</sup> meeting held on 23.05.2015, CUPB modified the grievance redressal policy. This was approved by Executive Council in its meeting on 24.05.2015 (*Annexure 5.5*)

### **6.2.7 Does the University have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?**

Typically student's feedback is obtained at the end of each semester as course feedback. But CUPB has a very elaborate Performa to seek response on multiple issues (*Annexure 1.6*). The feedback form is available on the University website. Based on the students' feedback the CUPB modifies its

programmes and curriculum and also improves the facilities to cater to the needs of students.

**6.2.8 Does the University conduct performance audit of the various departments?**

The University has constituted Academic Audit and Monitoring Cell and Internal Quality Assurance Cell to audit the academic performance of various departments. Performance audit on various parameters is carried out by both these bodies. Academic Audit and Monitoring Cell, regularly reviews different courses as also progress of students. The IQAC reviews all systems as also self-appraisal reports of faculty and students feedback. Further, Internal Research Committee reviews the research output of different Centres.

**6.2.9 What mechanisms have been evolved by the University to identify the developmental needs of its affiliated institutions?**

Not applicable, since Central University of Punjab has no affiliated colleges as per the Act.

**6.2.10 Does the University have a vibrant College Development Council (CDC) / Board of College and University Development (BCUD)? If yes, detail its structure, functions and achievements.**

Not applicable, since Central University of Punjab has no affiliated colleges as per the Act.

**6.3 Faculty Empowerment Strategies**

**6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff?**

- To enhance the professional development of teaching staff, the University encourages the staff to attend orientation programmes, Refresher courses, summer and winter schools, training, workshops, in-service training programmes, seminar, conferences, symposia etc.
- Provisions for study leave to the faculty to enhance and update their existing qualification.
- Provision for paid professional leave in addition to casual leave, earn leave, duty leave, medical leave for faculty

- The University is constantly motivating the staff members to get research projects from various funding agencies.
- The University has various policies for the professional development of non-teaching staff including leave for attending training programmes.

**6.3.2 What is the outcome of the review of the various appraisal methods used by the University? List the important decisions.**

The Self-Appraisal reports are obtained from staff and analyzed by a committee constituted for deciding on promotions for teaching and non-teaching staff. Assessment by the Head of department is also obtained annually. The IQAC cell assesses the quality of teaching. All such feedback leads to discontinuation of some practices and addition of newer, more innovative approaches.

**6.3.3 What are the welfare schemes available for the teaching and non-teaching staffs? What percentage of staff have benefited from these schemes in the last four years? Give details.**

There is a health centre, a Physical fitness centre and a day care centre for kids of university employees. The University is planning for the health insurance scheme for the students and staff (Teaching and Non-Teaching) of the University. All the three centers are used by CUPB community. Scheme of LTC is available to Faculty and employees.

**6.3.4 What are the measures taken by the University for attracting and retaining eminent faculty?**

The University creates conducive environment for the eminent faculty by providing academic freedom, good infrastructure, lab facilities, recognition, etc including the following benefits:

- Cumulative Professional Allowance of Rs. 3.00 Lacs in a block of three years.
- Assistant Professors, Associate Professors, Professors are entitled to receive Books/Journals grant of Rs. 5000/-, Rs. 7500/-, Rs. 10,000 per annual, respectively.
- Every faculty member having regular position in the University is entitled to receive Research Seed Money with an objective of initiating research by the newly recruited faculty.

- Faculty is entitled to attend one national/international seminar/conference in a year with support from the University.
- Faculties are also encouraged to attend orientation programs, refresher courses, training programmes, workshops, symposium under Faculty recharging strategies of the university.
- The University started Faculty Seminar Series from October, 2012 with the objective to promote interdisciplinary research collaboration between different centres of the University.
- The University has the Policy for Research Awards and Incentives for state and national level recognition in research. (Annexure 4)

**6.3.5 Has the University conducted a gender audit during the last four years? If yes, mention a few salient findings.**

Gender audit for students, teaching and non-teaching staff is carried out regularly. The number of female employees among the Assistant Professors and Group C employees is significant.

Year	Non Teaching Staff									Teaching								
	GP A			Gp B			Gp C			Prof.			Assoc. Prof.			Asst. Prof.		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
2012	04	02	06	05	-	05	17	07	24	04	-	04	02	-	02	20	14	34
2013	07	02	09	06	-	06	21	09	30	03	-	03	02	-	02	30	15	45
2014	08	01	09	09	-	09	32	11	43	06	01	07	02	01	03	28	16	44
2015	08	03	11	10	-	10	35	15	50	07	01	08	02	02	04	27	16	43

**6.3.6 Does the University conduct any gender sensitization programmes for its faculty?**

Gender sensitization is a part of the orientation programme in every semester. Apart from this the university makes continuous efforts to bring about gender sensitization. The university conducts special lectures, the recent ones being, by Justice Daya Chaudhary on Woman Empowerment on 20 March 2015. Besides this the university has a ladies club which works towards contributing to the human, social, cultural and intellectual development and opportunities to engage women. The club meets regularly. The actions undertaken by the club are celebration of important days and events, organizing general scheduled and special purpose meetings and organization of special programmes, complementary to the intellectual environment, health and development of the University. Anyone from the University staff members and wives of University employees can become a member. The

Vice-chancellor is the patron and madam Vice- Chancellor is the chairperson of this club.

**6.3.7 What is the impact of the University's Academic Staff College Programmes in enhancing the competencies of the University faculty?**

Not Applicable

**6.4 Financial Management and Resource Mobilization**

**6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?**

The University has implemented a code of classification to record the expenditure under the SOE form 2014-15. The SOE wise expenditure can be ascertained at any point of time as and when required. Every care is taken that no expenditure is incurred more than it is required to spend. The rules relating to fundamental principles of financial propriety are followed before any expenditure is incurred.

**6.4.2 Does the University have a mechanism for internal and external audit? Give details.**

Before any expenditure is incurred from the University funds, it is processed through various check at different levels, which minimize the possibility of any financial irregularity. The university has an Internal Auditor for the purpose.

After the compilation of annual accounts by the University, the accounts are got audited by the Chartered Accountant and then the Balance Sheet duly signed by the University authorities is sent to Comptroller Auditor General of India(Director General of Account, Chandigarh). An audit party is deputed by the CAG for audit of accounts & draft Separate Audit Report is sent to University by him. Necessary replies are given to CAG regarding the observation made by the audit party in the Draft SAR. Then the SAR is issued by the CAG of India. The printed annual accounts along with SAR & replies thereof are submitted to the MHRD for laying the report on the table of Parliament. Since the inception of the University, the audit of SAR has been undertaken by the CAG and report submitted to MHRD regularly.

**6.4.3 Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?**

The accounts of the University are being audited regularly as reported in para 6.4.2 above. No major audit observation had been raised by the audit party so far.

**6.4.4 Provide the audited income and expenditure statement of academic and administrative activities of the last four years.**

The income and expenditure for the last 4 years are as follows:

Sr. No.	Year	Period of Audit	Report submitted to MHRD by CAG
1	2009-10 2010-11	30.12.2010 to 11.01.2011	10.03.2011& 17.10.2011
2	2011-12	06.08.2012 to 24.08.2012	26.12.2012
3	2012-13	12.08.2013 to 06.09.2013	10.12.2013
4	2013-14	14.07.2014 to 23.07.2014	10.11.2014

The copies of income and expenditure statement for the last 4 years are attached in (*Annexure* ).

**6.4.5 Narrate the efforts taken by the University for Resource Mobilization.**

The University is mainly funded by the Government of India through the UGC. However, the other sources of funds are as under:

1. Externally funded projects are a major source of research grants. Presently there are projects with a total grant of approximately Rs. 9 crores.
2. Fee/fines from the students.
3. Student Aid Fund is received from some sources.
4. Amount is also generated through donation. The University is registered Under Section 80G of Income Tax Act, so that the donor gets the benefit under the IT act.
5. Form the next year, the examination cell plans to generate some income.

#### **6.4.6 Is there any provision for the university to create a corpus fund?**

The University has created the depreciation reserve fund against depreciation incurred on the assets of the University. Also a corpus fund has been created for “Student Financial Aid” programme.

### **6.5 Internal Quality Assurance System**

#### **6.5.1 Does the University conduct an academic audit of its departments? If yes, give details.**

Yes, the university in every academic session conducted academic audit in which students of different departments submit feedback of faculty members of the centre. Such academic audit has been conducted by the university from last four academic years. For such purpose the university also constituted Internal Quality Assurance Cell (IQAC) with following members:

1. Professor R. K. Kohli, Vice-Chancellor, CUPB (Chairman, IQAC)
2. Professor Gurmail Singh, Vice-Chancellor, Akal University, Talwandi Sabo
3. Prof. P. Ramarao, Dean Academic Affairs
4. Dr. Pankaj Khare, Registrar CUPB
5. Prof. R. G. Saini, Invited Professor
6. Prof. S. K. Bawa, Professor and Co-ordinator of Centre for Education
7. Dr. Anjana Munshi, Associate Professor, Centre for Human Genetics
8. Dr. Deepak Chauhan, Assistant Professor, Centre for Environmental Law
9. Dr. Sunil Mittal, Assistant Professor, Centre for EVST
10. Ms. Shweta Arora, Deputy Registrar
11. Sh. L. K. Wadhwa, COO, Indo-Swift tech.
12. Sh. Dinesh Sood, GM HR Department, NFL, Bathinda
13. Mr. Gajendra Singh, Vishwakarma, Regn. No.-CUP/MPh-PhD/SEES/EVS/2009-10/12
14. Professor A. K. Dhawan, Director, IQAC (Member Secretary)

#### **6.5.2 Based on the recommendations of the academic audit, what specific measures have been taken by the University to improve teaching, learning and evaluation?**

Assessment and consequent improvements are a regular part of the teaching, learning and evaluation.

**6.5.3 Is there a central body within the University to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

Teaching learning process is continuously reviewed by Academic Audit and Monitoring Unit. This unit carries out the following:

a. *Curriculum Audit*

After approval of the curriculum in BOS, it will be assessed by academic audit committee to monitor the following aspects:

1. Process of curriculum development has been followed or not
2. Parity of the course content with objectives
3. Requirement of teaching hours according to content
4. Transaction mode of every course
5. Design of the curriculum

b. *Teaching Learning Process*

Course wise feedback of teachers from students will be audited to analyse different dimensions of effectiveness of teaching techniques, classroom behaviour and continuous evaluation programme at the end of every semester. The results of the feedback will be reported to the concerned teachers for improvement.

c. *Academic Audit of Student's Assessment*

**i. Based on CGPA/SGPA**

The results of the audit will be reviewed on the following parameters:

- i. Process of examination
- ii. Skewness of scores and standard deviation
- iii. Reasons: problem in question paper setting or evaluation
- iv. Audit report on academic standing of students based on examination rules and regulations



*d. Faculty Audit*

- i. Evaluation of faculty by students
- ii. Professional growth
- iii. Research output

**6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?**

The IQAC is expected to perform the following functions:

- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes
- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles
- Documentation of the various programmes/activities leading to quality improvement
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality
- Development of Quality Culture in the institution

- Preparation of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC, to be submitted to NAAC.

**6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the University for Implementation?**

The IQAC is in its first year and its decisions will be placed in the meeting of Executive Council scheduled to be held on 07.09.2015.

**6.5.6 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.**

Yes.

**External members**

1. Prof. Gurmail Singh, Vice Chancellor, Akal University, Talwandi Sabo
2. Sh. L.K. Wadhwa, COO, Indo-Swift Tech.
3. Sh. Dinesh Sood, GM HR Department, NFL, Bathinda

**6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?**

IQAC is a newly formed cell.

**6.5.8 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?**

- All university bodies from Academic and Administrative Committees of centres, Board of Studies, Academic Council and Executive Council periodically review administrative and academic functions of CUPB centres.
- Monthly meeting of faculty members, students and non-teaching staff (administrative staff) with the Vice-Chancellor are held to ensure the periodic review of administrative and academic departments of the University.
- For the periodic review of administrative and academic activities at the centre level, meeting of Academic and Administrative committee is required to be conducted on first Wednesday of every month. A report of the same is to be sent to the office of Dean Academic Affairs.

- For curriculum development, Meeting of Board of Studies of the centre and Board of School are required to conduct in each semester.

### Students Union of CUPB

The students make an integral part of any teaching organisation. The university also recognises the student power and cooperates with the Central University of Punjab Students Union (CUPSU). Both CUPSU and the university jointly work towards the betterment and the advancement of the academic life of the university. The office bearers of the Students Union are:

The second council elections were held in 2015 (Notification on 8<sup>th</sup> May 2015).

#### Office Bearers:

<b>President</b>	-	Mr. Satej Bhushan	(Biosciences)
<b>Vice President-</b>		Mr. Sapinder Singh	(Comparative Literature)
<b>Secretary</b>	-	Mr. Biswabhusan Bhuyan	(Economic Studies)
<b>Joint-Secretary-</b>		Mr. Sukhvinder Singh	(Computer Science and Technology)

#### Representatives of Various Centres of the University:

Sr. No.	Name of the Centre Representative	Centre
1.	Mr. Hardeep Singh	SCAS
2.	Er. Vicky Kumar	CST
3.	Ms. Simaranjit Kaur	GDMM
4.	Ms. Neha Garg	Human Genetics
5.	Ms. HeenaSingla	CPS
6.	Mr. Sukhman Singh Aulakh	EVST
7.	Mr. Parul Kumar Sharma	PMS
8.	Ms. Manavi	EVL
9.	Ms. Navrattan Kaur	Biosciences
10.	Mr. Jimmy Goyal	ECS
11.	Mr. Sapinder Singh	CPL

**Staff Advisor of the Union:** Dr. Deepak Kumar Chauhan, Assistant Professor

**Treasurer of the Union:** Ms. Sheetal Dubey (Research Scholar, EVST)

**Ex-President of the Union:** Mr. Ravi Prakash Cholia (Research Scholar, Biosciences)

**Executive Committee of the Student Union**

All the office bearers (mentioned above)

All the representatives of the centres (mentioned above)

**Establishment of Internal Quality Assurance Cell (IQAC) at CUPB**

- (a) In order to meet the requirements of National Assessment and Accreditation Council (NAAC), the Central University of Punjab has established an IQAC with the following objectives:
- To develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the university.
  - To promote measures for university's functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.
- (b) The IQAC is expected to perform the following functions:
- Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution
  - Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
  - Getting feedback forms filled from students, parents and other stakeholders on quality-related institutional processes
  - Dissemination of information on various quality parameters of higher education
  - Organization of inter-institutional and intra-institutional workshops, seminars on quality related themes and promotion of quality circles
  - Documentation of the various programmes/activities leading to quality improvement
  - Acting as a nodal agency of the institution for coordinating quality-related activities, including adoption and dissemination of best practices
  - Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality
  - Development of Quality Culture in the institution
  - Preparation of the Annual Quality Assurance Report (AQAR) as per the guidelines and parameters of NAAC, to be submitted to NAAC.

- (c) Maintaining IQAC shall be an important organ for clarity and focus in institutional functioning towards quality enhancement, internalization of the quality culture and providing a sound basis for decision-making to improve institutional functioning.
- (d) As per NAAC guidelines, IQAC shall work under the Chairmanship of the Vice-Chancellor and comprise of CoCs, heads of the Centres & Deans of the Schools, a few teachers, a few distinguished educationists and representatives of management, alumni, student representatives and stakeholders.

The suggested composition of the IQAC is as follows:

1. Chairperson: Vice Chancellor, Head of the Institution
2. A few senior administrative officers
3. Five teachers (depending upon size of the organization)
4. One member from the Executive Council/Court
5. One/two nominees from local society, Students and Alumni
6. One/two nominees from Employers /Industrialists/stakeholders
7. One of the senior teachers as the coordinator/Director of the IQAC

It is necessary for the members of the IQAC to shoulder the responsibilities of generating and promoting awareness in the university and to devote time for working out the procedural details. While selecting these members the following precautions need to be taken:

- It is advisable to choose persons from various backgrounds who have earned respect for integrity and excellence in their teaching and research. Moreover, they should be aware of the ground realities of the university environment. They should be known for their commitment to improving the quality of teaching.
  - It would be appropriate to choose as senior administrators, persons in charge of institutional services such as library, computer center, estate, student welfare, administration, academic tasks, examination and planning and development.
  - The management representative should be a person who is aware of the institution's objectives, limitations and strengths and is committed to its improvement. The local society representatives should be of high social standing and should have made significant contributions to society and in particular to education.
- (e) Other conditions as per NAAC are:
- The tenure of such nominated members shall be two years.

- The IQAC shall meet at least once in every quarter.
  - The quorum for the meeting shall be two-third of the total number of members.
  - The agenda, minutes and Action Taken Reports are to be documented with official signatures and maintained electronically in a retrievable format.
- (f) Each School of CUPB will have its own “Internal Quality Assurance team” with CoCs as members and Dean of the School as coordinator.



## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)

नगर परिसर, मानसा मार्ग, बठिंडा-151001

ईमेल: registrar@cup.ac.in

वेबसाइट: www.cup.ac.in

दूरभाष: +91-164-2864106



## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)

City Campus, Mansa Road, Bathinda-151001

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Website: www.cup.ac.in

Telefax: +91-164-2864106

Ref. No: CUPB/CC/15/EC-15/31

Dated: 06-08-2015

### **NOTIFICATION NO 31**

In pursuance to Item No. EC:15:15:28 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council (Item No:AC:7:2015:23) is hereby conveyed for establishment of **Academic Audit and Monitoring Cell** as per the guidelines enclosed with the notification.

Approval of the Competent Authority is conveyed for the constitution of the **Academic Audit and Monitoring Cell** committee comprising of members as detailed hereunder for the governance of the cell:

1. Professor A. K. Dhawan, Professor
2. Dr. Anjana Munshi, Associate Professor
3. Professor S. K. Bawa, Professor (Convener)

This is issued with the approval of the Competent Authority

## **ESTABLISHMENT OF ACADEMIC AUDIT AND MONITORING CELL**

### **Academic Audit**

Academic audit is a process to monitor academic quality control of the institution through students' performance, curriculum, academic growth of faculty, teaching learning process and evaluation system. It is also the assessment of the academic standing of a student in his/her degree programme of study. The audit takes place at the end of a session or academic period, after Grade Point Averages have been calculated. It is the process of monitoring the performance of students to determine whether they may proceed in their program of study or not.

### **Objectives**

- To measure the degree to which the students are achieving learning objectives of the programme.
- To find that learning objectives of the programme have been achieved through design of the curriculum.
- To consider the impact of teaching techniques in achieving learning objectives
- To improve research outcomes and practices

## **PROCESS OF ACADEMIC AUDIT**

### **1. CURRICULUM AUDIT**

After approval of the curriculum in BOS, it will be assessed by academic audit committee to monitor the following aspects:

1. Process of curriculum development has been followed or not
2. Parity of the course content with objectives and the national framework
3. Requirement of teaching hours according to content
4. Transaction mode of every course
5. Design of the curriculum

### **2. TEACHING LEARNING PROCESS**

Course wise feedback of teachers from students through on line mode will be audited to analyse different dimensions of effectiveness of teaching techniques, classroom behaviour and continuous evaluation programme at the end of every semester. The results of the feedback will be reported to the concerned teachers for improvement. The identity of the students will be kept confidential.

### 3. ACADEMIC AUDIT OF STUDENT'S ASSESSMENT

*i. Based on CGPA/SGPA*

The results of the audit will be reviewed every year on the following parameters:

- i. Process of examination
- ii. Skewness of scores and standard deviation
- iii. Reasons: problem in question paper setting or evaluation
- iv. Audit report on academic standing of students based on examination rules and regulations.

*ii. Based on number of failures*

Report based on number of failures will be analysed to understand:

- i. Same Students failing in different subjects
- ii. No. of students who cleared all courses
- iii. The causes of failures: academic problem, psychological problem, health issues etc.
- iv. rules/process of academic standing as approved by council

*iii. Progress of Student's performance*

- i. Every year/semester, an analysis report on the performance of individual student for each course will be made and sent to the students as a feedback
- ii. Depending on the situation, counselling session with the respective student could be arranged

*iv. Analysis of Question paper*

- i. An analysis of the objective type question papers of surprise test and end term test comprising 50% of the continuous evaluation system will be done through Discrimination index. This will serve as feedback for the teacher.
- ii. The question papers of the surprise test, mid semester test and end semester test will be discussed by the teacher in the classroom with the students to serve as a feedback for the teacher.

### 4. RESEARCH

Research process will be audited to know the target achieved and quality of research at different stages:

- i. Research proposal

- ii. Yearly progress
- iii. Research Report
- iv. Publication of research papers
- v. Patents
- vi. IPR

## **5. LAB AUDIT**

- i. Conduct of practical according to SOP
- ii. Evaluation of practical
- iii. Good lab practices being followed or not

## **6. FACULTY AUDIT**

- i. Evaluation of faculty by students
- ii. Professional growth
- iii. Research output

To conduct the process of audit, the following committee has to be constituted:

1. Coordinator of audit and monitoring cell
2. Two senior professors ( by rotation after two years)
3. One Associate Professor ( by rotation, after two years)
4. COC of the concerned programme

The members of the committee will be nominated by the Vice chancellor.

## POLICY FOR ACADEMIC PROBATION AND DISTINCTION AT CUPB

CUPB follows Grade Point System on a 0 to 10 scale for evaluation of students as per UGC guidelines. For “Academic Standing” of a student, the following categories have been defined:

- i. *On Academic Probation:* The students, who will have CGPA less than 4.00 in any semester, will be on put on “ACADEMIC PROBATION”. This will be reflected on the semester report card of the student till he/she improves the CGPA.
- ii. *Good Standing:* The students who will have CGPA more than 6.00 will have “GOOD ACADEMIC STANDING”. This will be reflected on the semester report card of the student till he/she maintains the same.
- iii. *Passed with Distinction:* The students who will have more than 9.5 CGPA in the end semester will have the academic standing of “PASSED WITH DISTINCTION”.
- iv. The students who will remain on academic probation for more than two semesters will not be allowed to register for next semester till he/she improves CGPA and brings it to 4.0 by repeating the courses in which he/she has failed.
- v. Good Academic Standing and passed with distinction will also be included in the final transcript of students on the basis of CGPA at the end of the programme.
- vi. Any comment generated by the Academic Audit and Monitoring Unit will appear on the student’s transcript and/or semester report, as recommended by the Cell.

# **CRITERION-VII**

## **INNOVATIONS AND BEST PRACTICES**

## CRITERION-VII: INNOVATIONS AND BEST PRACTICES

### 7.1 Environment Consciousness

Bathinda is environmentally sensitive place and is known to be a cancer prone district. Due to presence of heavy metals in water and high usage of agrochemicals, this region has many environmental issues. Central University of Punjab has put in sincere efforts to bring about environment awareness. An Environment Awareness Club with four subgroups functions to address various environment related issues. No vehicles are allowed beyond the Parking near the gate of the university and best efforts are made for energy conservation.

The Central University of Punjab was adjudged second best Government institution for its efforts in energy conservation by Punjab Energy Development Agency during the year 2009-10 and received an award for its “constant efforts in energy conservation”.

#### 7.1.1 Does the university conduct a Green Audit of its campus?

The university in its mandate has declared “Environment and Health” as its major thrust area for research and has established the Environmental Monitoring and Auditing Cell (*Annexure 7.1*) in the university with the following mandate:

- Monitoring and record keeping of baseline data for the City Campus and surrounding areas.
- Creating baseline data for the environmental status of the main campus of the university.
- Performing environmental monitoring on regular basis in the CUPB adopted villages.
- Auditing the activities initiated by various Environmental development cells in the University.

*Work accomplished:*

The Environment Awareness Club and Environmental Monitoring and Auditing Cell have already accomplished the following:

- Purchase of various instruments and establishment of environmental analysis techniques.

- Monitoring of groundwater and soil samples for heavy metals in Talwandi Sabo and Goniana villages.
- National Workshop on “Water Quality and Health: Training the Teachers” held in February, 2015.
- Awareness Talk on “Watershed Management in Punjab” on the Water Conservation Day.

Environment Auditing and Monitoring Unit has defined the parameters of CUPB’s environment audit as in *Annexure 7.3*.

### **7.1.2 What are the initiatives taken by the university to make the campus eco-friendly?**

CUPB constituted many structured groups and policies to take care of environment. For strengthening the various environment related activities, Environment Awareness Club and other sub groups have now been reconstituted (*Annexure 7.2*) as follows:

#### *Environment Awareness Club:*

This is the parent club with four subgroups on Green Campus, Renewable Energy; Green building and Waste Management. Earlier, it was named as Environment Club. The group includes the following:

Chairman	: Vice Chancellor
Coordinator(s)	: Prof. A. K. Jain (Dean SEES)
	: Prof. R. C. Sharma (COC, Centre for EVST)
Organizing coordinator	: Dr. Sunil Mittal (Assistant Professor)

#### *Sub group-I. Green campus group:*

The Green campus group has been established on the campus with the following mandate:

#### *Objectives:*

- To initiate a tree plantation drive on the city campus of the university.
- To create awareness among the students and the residents of this part of the country through lectures by experts in this field and to start a tree plantation drive outside the university.



- Plantation of different native, ornamental, flowering, fruit and other species of the trees on the main campus of the Central University of Punjab.

*Task Accomplished:*

The city campus of Central University of Punjab is studded with ornamental, timber, medicinal, aesthetic and fruit plant trees. Till date the campus encompasses a total of about 3000 plant trees belonging to 38 different species. These include neem, Tecoma, melia trees, palm species, Casuarina, Ashoka, *Ficus* species, Acacia, Bakain, neem, Tecoma, jamun, shisham, mulberry, Subabul, Black board trees etc. Also Silver Oak, Babul, Royal Palm plant species around Administration block. Guest house premises is surrounded by 10 different species that include Amaltas, *Hibiscus*, *Puttranjiva*, *Ficus*, *Thuja* etc. Boys' Hostel has babul species, shisham, Mulberry, Neem, Melia and Girls' Hostel has Bel, Jamun, Khajoor, Mulberry, Neem, Melia, Jand, Cactus etc. There is garden of citrus species and also melia plantation. The boundaries of certain areas are highlighted by hedges of Clerodendron, Dodenea and Duranta species. In addition to this, there are species of seasonal flowering plants and certain creepers at every nook and corner that adds to the beauty of the campus.

- A university publication entitled *Plant Biodiversity of Central University of Punjab* compiled by Dr. Attar Singh and Prof. R. G. Sainin reports 157 species from the University.
- Twenty bird nests have been placed on Campus to increase biodiversity.

*Sub Group-2. Renewable Energy Group:* The use of conventional resources of energy has to be reduced by use of renewable source of energy and conservation of energy.

The renewable energy group has therefore been created with the following objectives:

- Promotion and adoption of renewable energy sources installation on the campus.
- To bring an awareness among the students regarding energy conservation and use of renewable energy sources.

The renewable energy group has carried out the following work:

- *Installation of solar photovoltaic units (SPV).* Two SPV units having capacity of 3.6KW are operational on the campus. The electricity generated from these is being used for lighting a part of the academic block.
- *Street lights.* About 50 standalone street lights operating on solar cells have been installed on the campus.
- *Solar water heaters.* Solar water heaters of about 3000 litres capacity (10 Nos.) have been installed on various hostels for boys and girls on the campus.
- *Wind mills.* Two Wind mills having a capacity of 6.8 kw have been installed on the campus for demonstration purpose. The electricity is used for lighting a part of the academic block building.

*Sub Group-3.Green Building Group:*

An integrated green labelled building design best addresses the issues of energy, water, materials, indoor environmental quality and carbon emissions before the construction of the building.

This group strives towards wider adoption of eco-friendly and green building concepts and spread of Energy Conservation Building Code (ECBC), to make the buildings "ECBC Compliant Building". Indeed, CUPB will be among the first few University buildings to be completed under GRIHA – IV norms

The following are the broad objectives which the Committee shall strive to achieve:

- To create awareness of an Integrated Building Design
- To improve energy efficiency
- To improve indoor air quality of buildings
- To create simulation models for ventilation, daylight and heat minimization

*Tasks accomplished:*

All the necessary steps have been taken while designing and preparing the layout for the building of the main campus of the university to make the building energy efficient. The important point which has been taken care of is use of renewable energy devices such as solar photovoltaic power plants,

street lights, solar water heater, bio-gas plant/STP, street lights, orientation of the buildings for maximum light and temperature comfort etc. The new campus will comply with GRIHA-IV rating norms.

*Sub group – 4. Waste Management Group:*

The Central University of Punjab is a fast growing educational institution and the rapid increase in the students and staff community has led to huge amount of waste generation. The different types of waste are generated in the campus that is biodegradable and non-biodegradable. The environmental and health impacts related with various types of wastes are of concern. The management of waste is, therefore, a necessity in the campus to make it green and enhancing the quality of the environment.

*Objectives:*

- To provide awareness and educate the campus on the need to manage waste and make the campus a zero waste zone
- To recycle and reuse the waste materials for value added environment friendly products.

*Work Initiated for Waste management:*

- Solid waste management: Different colored bins have been provided for collection of different type of waste. The biodegradable waste from hostels/campus, canteen and all plant waste is used in composting plant. Non-biodegradable wastes are collected in dustbins, are emptied and collected daily by the Municipal Corporation, Bathinda.
- Sewage treatment plant (STP): Two Sewage treatment plants (STP) are being installed in the campus for the treatment of sewerage waste from the hostels of the university. The water regenerated will be used for landscaping and gardening. The stabilized sewage will be used as compost.

As is clear from above, CUPB has a strong emphasis on environment consciousness, renewable energy and waste management. These activities are redefined below as per NAAC Performa:

(a) *Energy Conservation:*

- Solar based LED lights (49) and CFLs are used on the Campus.
- Solar water heaters are installed in the hostels.
- All electrical appliances such as ACs are 3 to 5 star rated and energy efficient. All freezers are based on CFC free technology.

(b) *Use of renewable energy:*

Following renewable energy systems have been installed on the campus replacing a part of conventional energy systems such as electricity.

- *Installation of solar photovoltaic units (SPV).* SPV of 3.6 KW capacity are operational on the campus. The electricity generated from these plants used for lighting a part of the academic block.
- *Street lights.* About 50 standalone street lights operating on solar cells have been installed on the campus.
- *Solar water heaters.* Solar water heaters of about 3000 litres capacity (10 Nos.) have been installed on various hostels for boys and girls on the campus.
- *Wind Mills.* Two wind mills, having a total capacity of 6.8 KW have been installed on the campus for demonstration purpose. The electricity is used for lighting a part of the academic block building.

(c) *Water Harvesting*

The City Campus has lots of open spaces and soil being sandy loam has good percolation. Therefore water from the roof tops of buildings percolates into the soil.

The new campus of CUPB is fully compliant to water harvesting regulations. Presently, two Sewerage treatment plants (STP) are being installed on the campus for the treatment of sewerage waste from the hostels of the university. The water regenerated will be used for landscaping and gardening.

(d) *Check Dam Construction*

The university is established on plane land and no check dams are required.

(e) *Efforts for Carbon neutrality*

- The University encourages paper less circular; restriction on use of non biogradable material in office work and has made large plantations.
- To use less paper, RFID system in library and Tally ERP are used by university.
- To cut green houses gases, electrical appliances three to five star rating are being used.

(f) *Plantation*

CUPB has carried out plantation drive in and outside the campus. Under this programme about 3000 saplings have been planted on the campus and about 40,000 trees in five phases from 2010-2015, outside the campus wherein the Faculty and students of CUPB participated. Plant biodiversity analysis of the main campus has been documented and further restoration of these species and other varieties in the districts are being carried out in main campus.

(g) *Hazardous waste management*

Negligible hazardous waste is generated and the university has an arrangement with Medicare Environment Management Agency for collecting biomedical waste.

- *Awareness Programme*

With the help of student volunteers, campaigns related to waste management such as 'Don't Litter in the Campus' improved the waste collection in the campus. Educating about the color codes of dust bins for different waste also improved proper waste disposal.

- *Reduction at Source*

Waste minimization by achieving waste reduction at source is emphasized. The students are also encouraged for the waste reduction by reducing use of papers by printing double side, using electronic versions for communication.

- *Segregation of waste at the Source and Onsite storage*

Proper color codes for bins may enhance the handling and segregation of waste at the source. Separate types of the organic waste is to be collected in separate bins (food wastes, vegetable and fruit peels, etc.) especially at the canteen. Separate collection system for paper wastes at the administrative and academic block. Non-biodegradable materials like plastic waste will also be segregated and may help in selling the materials for recycling. Vermicomposting facility, composting pit and sludged drying beds are available for disposal of different waste.

(h) *e-waste management*

Proper management of electronic waste is being promoted at CUPB.

(i) *Any other:*

CUPB has organized the following programs to create an awareness regarding Air, Water and Soil pollution.

- *Tree Plantation at the Main Campus site: August 06, 2011.*  
Tree Plantation along the entire boundary wall of the Main Campus of the university at village Ghudda was started on August 06, 2011 to make the beginning of “Greening” the Main Campus of the University.
- *Establishment of Genetic Heritage Park : September 9, 2011*  
A Genetic Heritage Park has been established in a six-acre piece of land at the City Campus to preserve rare and endangered species of trees and plants from Malwa region of Punjab. To begin with, saplings of Imli (*Tamarindus indica*), Lasuda (*Cordia dichotoma*), Phalsa (*Grewia asiatica*), and Phalahi (*Acacia modesta*) were planted on September 9, 2011 at the site.
- *World Cancer Day: February 3, 2012.*  
On this occasion a special lecture Radiations in Health Care - Atoms for Peace was delivered by Dr. B. R. Mittal, Professor and Head, Department of Nuclear Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh. Dr.Santokh Singh, Chief Surgeon from S. Waryam Singh Memorial Hospital, Amritsar, spoke on the role of radiations especially, the depleted uranium in causation of cancer. Dr. Bhola Singh Sidhu, also a Surgeon from Parvati Devi Hospital, Amritsar, delivered the lecture on “Surgical intervention and other prospects of cancer treatment”. Dr. Navdeep Singh, an Oncologist from Ludhiana

Medicity, spoke on “Recent advances in the treatment of metastatic cancer”. Dr. Daljit Singh, a leading and world renowned Ophthalmologist from Amritsar, talked about “Alternate treatment remedies available for the prevention and cure of cancer”. Dr. Paramjit Singh Raja, a Radiotherapist from Baba Farid University of Health Sciences talked about the role of Baba Farid University of Health Sciences in creating awareness on cancer and on “Prevention and treatment of Cancer” at early stages.

- *Earth Day 22/2013*

The Centre for Environmental Science and Technology took the initiative to celebrate the Earth Day to rouse the people from their slumber and work towards saving the environment. Various activities were organised like skit, lectures, songs, poetry writing, slogan writing, poster writing and video presentation.

- *International Biodiversity Day Celebration Lectures (May 22, 2013)*

The Centre for Environmental Science and Technology organised the International Biodiversity Day, committing itself to find solutions to the issues of environment and human health. Eminent scientists in the field delivered lectures.

- *The Chancellor releases book on Insects ( September 10, 2013)*

The Chancellor of Central University of Punjab released a book based on the life of world of insects on September 10, 2013. The book in Punjabi language named “*Baatan Keet Sansar Dian*” has been authored by a renowned zoologist, Prof. Pushpinder Kaur.

- *World Cancer Day (February 4, 2014)*

- *International biodiversity day:*

University celebrated international biodiversity day on 22<sup>th</sup> May, 2014. It was sponsored by Punjab State Council for Science and Technology. Noted Biodiversity and Environmental experts from all over the country participate in the program.

- *National workshop:*

A National workshop on training the trainers: Water quality and health held on 11<sup>th</sup> February, 2015.

- *Dr. J. S. Yadav memorial lecture:*

Dr. J.S. Yadav memorial lecture was held on 19<sup>th</sup> March, 2015. There was an expert lecture entitled “Energy and Environment: A New Paradigm” by Prof. S. K. Sharma was also held.

- *Earth Day on April 22, 2015*

CUPB in collaboration with Punjab Pollution Control Board, Bathinda, celebrated Earth Day on April 22, 2015 by planting trees on the university campus followed by a pledge to save environment. Distinguished personalities such as Sh. Manpreet Singh, IAS, Chairman, Punjab Pollution Control Board; Prof. V.K. Jain, Vice-Chancellor, Doon University; and Prof. S.S. Dhillon, Emeritus Professor Punjabi University, Patiala visited the campus. The programme ended with a plantation drive and placing the wild birds' nest-boxes on the university campus trees.

- *International Day for Bio-Diversity*

An awareness programme on International Day for Biological Diversity on the theme "Biodiversity for Sustainable Development" was organised on May 22, 2015 in collaboration with Punjab Biodiversity Board. The programme was sponsored by National Biodiversity Authority, Govt. of India. The awareness programme involved expert lectures by eminent speakers, a documentary, and an extra-curricular programme by the students. Prof. R.K. Kohli, Vice-Chancellor, shared his ideas on the efforts and movements at international level to protect bio-diversity. Speaking on the occasion, Prof. Daisy R. Batish, an expert on the subject from Panjab University, Chandigarh, highlighted the role of bio-diversity in sustaining the life on this earth. She also enumerated on the endangered species notified by International Union for Conservation of Nature. Prof. Jagbir Singh, from Punjabi University, Patiala, continued the momentum and sensitised the participants in an illuminating way by his presentation on plants, animals, and mountains. Prof. Gurmail Singh, Vice-Chancellor, Akal University, emphasised on the need to redefine and revisit the meaning of development in the perspective of environment preservation.

- *Tree Plantation drive at New Campus:*

A tree plantation drive was started at the new campus on 19<sup>th</sup> July



2015 and various plants belonging to 89 species have already been planted. The target is to plant 20,000 trees during this season to make new CUPB Campus green ahead of time.

- *Akshay Urja Diwas 2015:*

Akshay Urja Diwas 2015 was celebrated on August 20, 2015 as an Awareness campaign for renewable energy. Professor B. S. Pathak, Director, Sardar Patel Renewable Energy Institute, Vallabh Vidyanagar, Gujrat, delivered a lecture on “Potential of Biomass energy in India” and about 100 participants pledged to save energy and use renewable energy wherever possible.

- *Invited lectures:* Inviting lectures by the eminent personalities in the area of Biodiversity, Environmental Science, Earth Sciences and Renewable Energy etc. is a regular feature in the university. The important lecture organized in the university are as follows:

- I. Prof. Dr. A. K. Saluja, “New Therapies of Pancreatic Cancer” - December 9, 2011
- II. Dr. Devinder Singh Sandhu, “Cancer in the Elderly” on 13<sup>th</sup> December, 2011
- III. Prof. Dr. Naresh Kochher, “Seismicity in North western Himalaya and importance of Radon as Precursor and Chemical quality of good water in parts of SW Punjab in relation to incidence of cancer” 18<sup>th</sup> November, 2011.
- IV. Prof. C. P. Kaushik, “Protecting our atmosphere for generation to come” 26<sup>th</sup> September, 2012.
- V. Dr. Babu Ram, “Environmental Issues and their Management” 27<sup>th</sup> December, 2012.
- VI. Prof. S. S. Bir, Professor Emeritus, Punjabi University, Patiala. Chief Guest delivered the inaugural address on international biodiversity day celebration. May 22, 2013
- VII. Prof. D. S. Brar, ‘Utilization of Genetic Resources for Increasing Productivity and Sustainability of Crops’. May 22, 2013
- VIII. Prof. Pushpinder Kaur, ‘Biodiversity and Insects’. 22<sup>nd</sup> May, 2013

- IX. Prof. P. K. Joshi, 'Biodiversity: That Sustains Life'. 22<sup>nd</sup> May, 2013
- X. Dr. B.M. Gandhi, "Funding Opportunities and Effective Grant Writing" 29<sup>th</sup> May, 2013.
- XI. Prof. A. Tikoo, "Those countries are considered development who have an abundance of natural resources" 1<sup>st</sup> November, 2013.
- XII. Prof. M. S. Kang, "The importance of technology in agriculture and how new technologies being used in agriculture in advanced countries of the world can pave way for future prosperity of Punjab" 01<sup>st</sup> November, 2013.
- XIII. Prof. J. S. Hundal, "Innovations and technology development should not be at the cost of environment" 17<sup>th</sup> January, 2014.
- XIV. Prof. R. K. Tuli, "Various programmes undertaken at global level to encourage the innovations world over" 17<sup>th</sup> January, 2014.
- XV. Prof. A. K. Malhotra, "Positron Emission Tomography." 4<sup>th</sup> February, 2014.
- XVI. Dr. J. S. Sekhon, Fortis, "Advances in Targeted Therapies in Cancer." 4<sup>th</sup> February, 2014.
- XVII. Dr. Neeta Kang, "Integrated Approach in Cancer Diagnosis and Therapy." 4<sup>th</sup> February, 2014.
- XVIII. Dr. Rajesh Vashishta, "Prevention and Early Detection of Cancer." 4<sup>th</sup> February, 2014.
- XIX. Dr. Manjit Singh Bal, "Cancer Registry in Punjab." 4<sup>th</sup> February, 2014.
- XX. Professor B. S. Pathak, "Potential of Biomass energy in India" August 20, 2015

- *Extension lectures:* The faculty of the university especially from the centre of environmental science and technology participate in the invited lectures in conference/ training programs/workshop and awareness lecture, thus spreading the message regarding the importance of clean environment and how to keep the environment clean.
- Faculty are member of various local environmental bodies including the Local Biodiversity Board constituted by Punjab State Council for Science and Technology (PSCST).
- Visit to Biodiversity Train.
- Visit to forest cover main campus
- Documentary shows on biodiversity loss
- Formation of Environmental Club
- Faculties' involvement in Environmental Research
- A diploma course in Green Faming Technologies under UGC community college scheme has been introduced from academic session 2015-16.
- Four short term courses namely vermicomposting, apiculture, mushroom cultivation and sericulture together form this training. The course module includes pamphlets, lecture notes, power point presentations, practical training, field visits, visits to nearby locations for practical training and project reports.

## 7.2 Innovations

### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the university.

The very establishment of CUPB Campus by utilizing an abandoned, dilapidated building is an innovative concept. CUPB has introduced many innovative steps and policies to create positive impact on academic and work environment:

- The schools and Centres are organised in a very innovative way i. e School of Legal Studies and Governance, School of Social Sciences, Centre for Human Genetics and Molecular Medicine, Centre for Computational Science are some examples.

- Many of our programmes are unique and innovative like Human Genetics and Molecular Medicine, Environmental Law etc.
- Innovative programmes like computer literacy programme for old people, human rights certificate programme, earn by learn scheme, competitive examination cell have been initiated by the university.
- Many class room innovations: Term papers, online exams, lectures on intranet
- Policy innovations e.g. University Industry Forum and Council.
- Due to limitation of new construction in transit campus, portable hostels are constructed.
- RFID System is installed in library , which has saved manpower as well as paper

Besides these the university has taken the initiative to capture all innovations in various academic institutions and at local level through Innovators Club of the university.

Innovators Club of the university plays a hub for promotion and dissemination of creativity, exploring opportunities and methods of innovations and creating inductive environment for creative minds from different backgrounds Common platform for awareness about innovations through organization of seminars, symposia, exhibitions, debates, declamations, lectures/interactive sessions/discussions with the visiting faculty and scientists.

The club has celebrated two innovators day, the information for the same is mentioned below:

- First Innovators Day was celebrated on 17<sup>th</sup> January, 2014, in which 160 participants participated and 50 various innovative models were shown. The main attraction was of paddy chopper. Other innovative models were like ‘Smart Laser Security System’, ‘Cell phone Controlled Agricultural Motor Pump’, ‘Mobile and Theft Detectors’, ‘Bio Gas Purification’, ‘Jamun Dye Solar Cell’ etc.
- Second Innovators Day was celebrated on 22<sup>nd</sup> January, 2015. 125 participants participated and 44 models were shown.
- Rashtriya Avishkar Abhiyan was formed to make science interesting

for school children, inculcate a desire for enquiry based learning and encourage students towards the fields of mathematics and science learning. MOUs of Rashtriya Avishkar Abhiyan have been signed with five schools/colleges (R.B. D.A.V School, Bathinda, Shaheed Sipahi Sandeep Singh School, Bathinda, Silver Oaks Public School, Bathinda, D.A.V College, Bathinda and Sukhanand Girls College, Bathinda) Rashtriya Avishkar Abhiyan laboratory has been inaugurated on this occasion and children from these schools visited CUPB on 27.08.2015.

### **7.3 Best Practises :**

#### **7.3.1 Give details of any two practices which have contributed to better academic and administrative function of the university.**

The following are some of the best practises which have contributed to better academic and administrative functioning of the university:

Provision of Research Seed Money to faculty members, Earn While Learn Scheme For Students, Competitive Examination Cell, Inter Disciplinary Centres of Excellence, Identification of Centres with Potential for Excellence, Professional Development Allowance, Research Awards for National International Recognition, Human Right Group, Environment Audit and Monitoring Unit.

**Title of the Practice:** Research Seed Money

*Objective:*

The main objective is to provide congenial atmosphere for independent research to newly joined faculty members. The underlying idea is to encourage independent research ideas of young faculty members.

*The Context:*

CUPB has appointed young faculty from all over India and abroad. It is important to help them initiate research quickly. A seed money provided on day one to initiate research, coupled with ready availability of equipment in central instrumentation lab, considerably reduces the time lag for productive research.

The major challenge is to end up all the old fashioned practises of the research.

*The Practice:*

University has approved many research projects underlying this scheme. Upon joining CUPB, a faculty member is provided Rs 3.0 lacs as grant for research. This helps them in processing chemicals and other small equipment and contingencies. They have another 3.0 lacs as professional development allowance for travel, books, conferences, etc. Post graduate students and central instrumentation lab complete their research requirement for a start.

*Evidence of Success:*

Seventeen faculty members have availed this scheme and they all initiated research quickly and then got externally funded projects for continuing their work.

*Problems encountered and resources required:*

Though financial resources are enough, but it is not sufficient especially for humanities faculty members as programme has policy of grant for Rs. 3 lakh for science faculty members and Rs. 1.5 Lakh for humanities faculty members.

**Title of the Practice:** Complete transparency in CUPB's functioning

*Objectives:*

For smooth and effective functioning of the university, CUPB has adapted the practice of complete transparency in every system including admission, examination, recruitment etc.

*The Context:*

With ever increasing competition in various spheres, retaining individual's faith in functioning of the universities has become extremely important. CUPB attempts to be fair and transparent in all aspects.

*The Practice:*

- Transparency is promoted from the first steps of admissions: Advertisement is given in 94 newspapers, Score of candidates in CUCET is the sole criteria of admissions in CUPB and there are no points for any interview etc. The counselling sessions are videographed.

- For Faculty appointments, the screening criteria and score of candidates are displayed on CUPB web site, comments of the candidates are invited and any issues raised are addressed before appointment. Selections are displayed on web site. Feedback of the candidates are taken after the interview to ensure that they are satisfied with the process.
- All decisions of Statutory bodies, the EC, AC and BAS etc are displayed on the web site.
- Open meeting with the Vice chancellor every month at various levels of departments' including teaching, non teaching and students has been in practise. Issues are recorded and addressed.

*Evidence of Success:*

- Nearly 450 students were admitted this year out of 3000 applicants and there was not even one complaint.
- There has been no RTI on selections.
- The monthly meeting with the head of the university has resulted in zero complaints and protests from students.
- University's has no complaints of sexual harassment and ragging free campus etc.

*Problems encountered and resources required:*

Initially, problems were faced in maintaining true transparency. But after a point of time all issues have been streamlined. Certainly, the transparent procedures are time demanding and encourage people to raise questions.

## पंजाब केन्द्रीय विश्वविद्यालय

(संसद के अधिनियम सं. 25(2009) के द्वारा स्थापित)  
नगर परिसर, मानसा मार्ग, बठिंडा-151001  
ईमेल: registrar@cup.ac.in  
वेबसाइट: www.cup.ac.in  
दूरभाष: +91-164-2864106



## Central University of Punjab

(Established vide an Act no. 25(2009) of Parliament)  
City Campus, Mansa Road, Bathinda-151001  
Email: registrar@cup.ac.in  
Website: www.cup.ac.in  
Telefax: +91-164-2864106

Ref. No: CUPB/CC/15/EC-15/22

Dated: 04/08/2015

### NOTIFICATION-22

In pursuance to Item No. EC:15:15:20 of the Minutes of the 15<sup>th</sup> Meeting of Executive Council of Central University of Punjab, approval of the Executive Council to the recommendation of the Academic Council is hereby conveyed for establishment of **Environment Auditing & Monitoring Cell** at Central University of Punjab.

#### **Environment Auditing and Monitoring Cell**

1. Dr. J. Nagendra Babu, Assistant Professor
2. Dr. Sunil Mittal, Assistant Professor
3. Dr. Yogalakshmi K.N., Assistant Professor
4. Dr. Dhanya M.S., Assistant Professor
5. Dr. Puneeta Pandey, Assistant Professor
6. Mr. Rajinder Singh Smagh, Liaison Officer
7. Prof. R.C. Sharma, Professor - Convener



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Telefax: +91-164-2864106

Ref No: CUPB/CC/15/Notification/24

Dated: 05-8-2015

## **NOTIFICATION No 24**

Approval of the Competent Authority is hereby conveyed for the constitution of various groups under the aegis of **Environment Auditing & Monitoring Cell** and also for reconstitution of **Environment Groups** as detailed hereunder:

### **CORE GROUP: ENVIRONMENT AWARENESS CLUB:**

- Chairman : Prof. R. K. Kohli, Vice Chancellor, CUPB
- Coordinator(s) : Prof. A. K. Jain, Dean, SEES  
: Prof. R. C. Sharma, COC, Centre for EVST
- Organizing coordinator : Dr. Sunil Mittal, Assistant Professor, Centre for EVST

### **Environment Auditing and Monitoring Cell**

1. Dr. J. Nagendra Babu, Assistant Professor
2. Dr. Sunil Mittal, Assistant Professor
3. Dr. Yogalakshmi K.N., Assistant Professor
4. Dr. Dhanya M.S., Assistant Professor
5. Dr. Puneeta Pandey, Assistant Professor
6. Mr. Rajinder Singh Smagh, Liaison Officer
7. Prof. R.C. Sharma, Professor - Convener

#### ➤ **Sub Group -1: Waste and e-Waste Management Group:**

- Dr. Yogalakshmi K.N., Assistant Professor
- Dr. Shireesh Pal, Assistant Professor
- Ms. Shweta Arora, Deputy Registrar
- Students 2-3
- Dr. Dhanya M.S., Assistant Professor - Convener

#### ➤ **Sub Group-2: Green campus group:**

- Dr. Sanjeev Kumar, Assistant Professor
- Dr. Harish Chander, Assistant Professor
- Mr. Sweet Singh, Campus Manager
- Students:
  1. Ms. Sapna Thakur

2. Ms. Shruti Chaudhri

- Dr. Pankaj Bhardwaj, Assistant Professor - Convener

➤ **Sub Group-3: Renewable Energy Group:**

- Dr. Sunil Mittal, Assistant Professor
- Dr. Deepak Kumar, Assistant Professor
- Er. Daljit Singh, Executive Engineer
- Er. Puneet, Assistant Engineer
- Students:
  1. Mr. Gajender Singh
  2. Mr. Ravinder Kumar
- Dr. A.K. Jain, Dean, SEES - Convener

➤ **Sub Group-4: Green Building Policy**

- Dr. Tarun Arora, Associate Professor
- Er. Daljit Singh, Executive Engineer
- Er. Puneet, Assistant Engineer
- Students:
  1. Mr. Ravishankar
  2. One more student
- Dr. Puneeta Pandey, Assistant Professor – Convener

**Environment auditing of the City campus CUP Bathinda**

It is desired to conduct the environment auditing of the city campus of the Central University of Punjab, Bathinda so that the necessary mitigation measures are taken to have a sustainable and healthy work environment for the students, faculty and other staff of the university. This document considers various parameters included for audit. The document also gives the action to be taken by various groups/offices for compiling the required information and accomplishing the environment auditing work.

**(I) General information: (Action Registrar Office)**

- (a) Student population
  - Total Number of students
  - Number of students in hostels
- (b) Faculty and staff members
  - Number of faculty members on campus (Including family members)
  - Staff members (Total)
  - Number of staff members on campus (Including family members)
- (c) Others including security

**(II) Energy consumption (last one year) (Action Estate organization)**

- (a) Connected electricity load
- (b) Monthly electricity consumption
  - In different units/blocks
- (c) Diesel consumption in DG sets
- (d) LPG cylinders consumption (Action Campus manager)
  - Mess canteen
  - Pantry in Admin block
  - In guest house
  - In residential houses
- (e) Other fuel consumed in the mess/canteen

**(III) Solid Waste management (Daily Basis) (Action Sub Group-1)**

- (a) Total MSW generated
  - Permanent residents including hostellers per day
  - Others per-day
- (b) Trees wastes
- (c) Biomedical waste
- (d) Hazardous waste generated in Labs and electronic waste
- (e) Means of disposal for each type of wastes

**(IV) Sewerage Waste Management (Action Sub Group-1)**

- (a) Total Sewerage Waste generated
  - Permanent residents including hostellers per day
  - Others per day
  - Means of disposal
  - Input and out flow of Sewerage Waste and water to the STP plant

**(V) Water supply (Quantities) (Action Estate organization)**

- (a) Ground water
- (b) Canal water
- (c) Drinking water (details of RO and water desalination plant Capacity and location)
- (d) water analysis data (at six months interval)
- (e) Percentage of area that allow water percolation i.e. Total area – (Buildings area + Area under Roads)

**(VI) Green plants: (Action Sub-Group-2)**

- Number of plants
- Plant species
- Plant height
- Girth diameter

**(VII) Use of renewable energy devices (Action sub-Group-3)**

- SPV power system
- Standalone SPV Street lighting
- Solar water heaters

**(VIII) Air analysis data (Every six months interval) (Action EAM Cell)**

- PM<sub>10</sub>
- PM<sub>2.5</sub>
- O<sub>3</sub>
- SO<sub>x</sub>
- NO<sub>x</sub>
- Pb
- As
- Ni
- CO
- C<sub>6</sub>H<sub>6</sub>
- BaP
- NH<sub>3</sub>

**(IX) Other important parameters (Action Estate organization)**

- No. of Batteries
- No. of Computers
- No. of AC(s) with their capacity
- No. of CFL
- No. of incandescent Lamps
- No. of Toilets