Central University of Punjab

INTERNAL QUALITY ASSURANCE CELL

External Academic and Research Audit Report-2023

The External Academic and Research Audit of 31 departments was conducted on 2nd -12th May, 2023 as per the approved schedule and a structured criteria was followed. The departments were grouped as per the availability of the external expert and for each group following members were in the Committee:

1. External Expert
2. Prof. R. K Wusirika, Dean In-charge Academics
3. Prof. Anjana Munshi, Dean Research
4. Dean, of the Concerned School
5. Head of the Concerned Department
6. IQAC Member
7. Prof. Monisha Dhiman, Director IQAC

The general suggestions by the committee members for all the departments:

1. The activities and functions of Mentor-Mentee system to be improved significantly. Academic mentors and regional mentors must interact with students for their career interest and other guidance.
2. **Departmental Academic calendar** must be made.
3. The record of remedial classes or tutorials conducted for learner's need must be maintained at department level.
4. The faculty is highly motivated and can be encouraged to involve Innovative techniques in teaching.
5. Curriculum and teaching be focused on nurturing creativity: problem solving innovative ideas, innovative projects.
6. The departments need to develop industry linkages.
7. The department should avoid creating too many thrust areas of research, there should be a common theme/area of research for a department.
8. Research publications, patents and Consultancy may be encouraged.

Date: 02nd May 2023
Experts: Prof. S. J. Sangode and Prof. Shiva Kumar

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1. Department of Geology

Strengths

- Interdisciplinary collaborations
- Good number of students qualifying NET/GATE

Observations

- Research publications to be improved.
- Add some advanced, skill and job oriented topics
- The number of Ph.D. scholars are few, concrete plan to enhance the numbers.
- The visibility of the department should be enhanced through social media platform or updated information on the university webpage.

- The local issues related to soil, water and environment should be projected.
- Some of the geology specific specializations are not covered in the overall research thrust area of the department, please go through that.
- The weakness and challenges should be revisited and should be broader.

Challenges

- Consultancy, industry-academia collaborations to be enhanced

2. Department of Environmental Science and Technology

Strengths

- Consultancy and industry collaborations
- Institutional collaborations
- Good infrastructure and facilities

Observations

- Low publication by few faculties.
- The department has potential to offer training in emerging environmental issues for local, national and internal importance.
- The PG diploma in Geoinformatics is one of the strength of the department where all the departments of the school are collaborating. More such collaborative skill based courses should be planned.
- DST FIST Level-2 should be applied so that high end research facilities can be created.
- Consultancy is the strength of the department but only few faculties are involved.
- The PG curriculum should reflect the research expertise of the faculty.
- Interdepartmental credit share is another best practice of the department.
- Internship opportunities should be explored.
- Attract more Post-Doctoral Fellows and Research Associates.
- Department should plan for the NABL Accreditation
- Department has potential to enhance entrepreneurship and startup.
- Encourage faculty to file Patents.

3. Department of Geography

Strengths

- High placement
- One faculty has a Consultancy

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Observations

- Number of faculty is less with high teaching load, sharing courses with EVST and Geology can overcome this problem
- Some unique and skill based courses may be added
- Less number of Ph.D. scholars.

- Placement of the students should be enhanced.
- Instruments and tools based on GIS, total station and GDPS may be procured to enhance the visibility of the department and which will further generate consultancy.
- Attract more Post-Doctoral Fellows and Research Associates
- Focus more on interdisciplinary research and specify the thrust area of the department.

Date: 04 May 2023
Expert: Prof. D. K. Verma

4. Department of Economics

Strengths

- International Grant and collaboration
- Research output high

Observations

- The department has potential to get consultancy, explore such possibilities.
- Students must get involved in social issues for their dissertation and thesis.
- Publications very good senior faculty but others need focus on publications.
- As the research output of the department is good, the department must organize FDPs or workshops for research methodology, paper writing and grant writing.
- Department should have a concrete future plan with a focal theme.

5. Department of Psychology

Strengths

- The discipline has high demand and scope
- Interdisciplinary collaborations
- Publications are good

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Observations

- PhD program started in 2022 hence less number of Ph.D. scholars
- The department has potential to get consultancy, explore such possibilities.
- Hospital Collaborations should be initiated
- More activities should be done under counseling cell
- Low research grants
- Community outreach and awareness activities must be planned
- The research lab should be functional and develop some psychological tools.

6. Department of History

Strengths

- University Museum
- Extramural research grant

Observations

- Publications very low, only one faculty has Scopus indexed paper.
- Visit to historical and archeological sites must be done as part of experiential learning
- Enhance interdisciplinary research and international collaborations
- MoU with reputed organization must be initiated.
- The departmental data not presented as a team, which reflected the lack of coordination at departmental level.

7. Department of Sociology

Strengths

- Teaching learning Centre under PMMMNIIT scheme
- Good number of FDPs, workshops and expert lectures conducted
- Faculty has some consultancy projects
- New MOOCs approved
- Department is coordinating the activities of DACE

Observations

- Department must plan to sign MoU/s with national and International organizations.
- Overlapping and mismatching the data given in Departmental PPT and Individual PPTs, which need to tally with each other.
- Faculty must get involved in outreach activities.
- Research regarding the issue of drug addiction in Punjab should be initiated in collaboration with NGOs and Drug De-addiction centers.
- Publications very low, only one faculty has Scopus indexed paper

8. Department of South and Central Asian Studies

Strengths

- Interdisciplinary research
- Good publications by Dr. Bawa Singh

Observations

- Low publications by few faculties
- No major research grant
- Department needs to identify some real challenges in the field and then try to face and improve in those areas.
- The department has students from diverse regions of India and abroad, the faculty can use the geographical strength of students constructively through their research areas.

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- Initiate some MoUs with national and International organizations.
- Departmental meetings must be organize to enhance healthy competition to enhance and enrich writings, publications, citations.

9. Department of Financial Administration

Strengths

- The discipline has high demand and scope

Observations

- Low publications
- No extramural grants
- National and international collaborations can enhance the publications
- Good strength of Research scholars, which can help to produce quality and quantity publications in Scopus.
- Department has potential to get consultancy in the field of e-commerce and other financial applications.
- The departmental data is not compiled and presented as a team, which reflected the lack of coordination at departmental level.

Date: 08 May 2023
External expert: Dr. Viney Kapoor Mehra

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10. Department of Law

Strengths

- Community outreach activities
- Environment/human rights related grants and activities

Observations

- Add the details of MOOC and all the e-content developed
- Training and court sessions to be conducted
- Internship should be encouraged.
- Placement data to be updated
- National and international collaborations required
- Publications not up to the mark
- Student participation in various activities of the universities
- Efforts are required for collaborations through MoU

Date: 08 May 2023
External expert: Prof. T. P. Singh

11. Department of Biochemistry

Strengths

- Overall the publications and extramural grants are good
- Diverse expertise

Observations

- Few faculties need to improve the publication profile
- The department should have one research thrust area specific to biochemistry to project it.
- Limited ongoing research on actual biochemistry & protein biology.
- Strategies may be planned to improve the progress of the students in terms of competitive examination and placement.
- Department is contributing significantly in imparting good education but research along with teaching is also crucial to enhance the research output.
- The Department should focus on few common areas of specialization where all faculty can collaborate, for global recognition and to enhance the visibility of department at international level.
- Core goal of Department and its contribution to the society may be defined.

Challenges

- Placement

12. Department of Microbiology

Strengths

- The discipline has high demand and scope
- Good Institutional collaborative research

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Observations

- No Consultancy and Patents at department level.
- Internship in industry should be encouraged.
- Few faculties have to improve the publications
- Low PhD intake which may be enhanced through reducing the restrictions for Ph.D. admissions.
- The discipline has a very high demand which should be further enhanced through highly enriched curriculum.
- The department should focus on high end molecular microbiology and emphasize on protein-protein interaction and protein purification work to understand the microbial pathogenesis

13. Department of Human Genetics and Molecular Medicine

Strengths

- Institutional collaborations
- Interdisciplinary research

Observations

- The molecular medicine component is not balanced in the department.
- The components of molecular medicine field should be balanced in the department.

- Department should focus on providing consultancy service in the field of Human Genetics.

14. Department of Zoology

Strengths

- Highly reputed publications
- Good number of institutional collaborations.

Observations

- The possibilities of Consultancy must be explored.
- The Department focuses on advanced zoology rather than the classical zoology, which is the strength of the Department.
- The Department has good infrastructure and high end equipments which should result in high research output in terms of publications.
- Inter disciplinary & Inter institutional collaborations may be enhanced for impactful research.

15. Department of Computational Sciences

Strengths

- New course with very high scope
- Submitted DST-FIST proposal
- Good number of institutional collaborations.

Observations

- Very few PhD Scholars, concrete plan to enhance the numbers.
- The department has too diverse expertise which diffuses the focus of the department.
- The publication record not up to the mark, faculty should focus on more publication
- The research focus of the department should also be on upcoming and advanced technologies such as superconductors etc.
- Industry collaboration should be initiated.

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Date: 09 May 2023 (Morning session)
External expert: Prof. Shahid Husain Ansari

16. Department of Chemistry

Strengths

- Good number of trainings, workshops and expert lectures conducted

Observations

- Strengthen the interaction with Local industries and follow up meetings
- Low admissions in M.Sc. Med. Chemistry (11/25)
- Low publication by few faculties

- Promote interdisciplinary research
- The department has potential to get good number of Patents.
- Internship in industry should be encouraged.
- Good progress in terms of NET qualified students and placement
- Good number of grants have been submitted by the faculty members.
- Faculty should be encouraged to participate in international conferences organized abroad to enhance the peer interaction and to boost their knowledge
- Text book for PG level practical course can be published by the faculty of department.
- The remedial classes for slow learners should be added in the time-table

17. Department of Pharmacology

Strengths

- Establishment of Animal house facility in university
- Placement good

Observations

- The department has potential to get good number of Patents but no patents filed.
- No industry collaborations and MoU signed and Internship in industry should be encouraged.
- MoU with Pharmacology Industries for testing the efficacy, stability and toxicity of herbal formulation should be initiated; such collaborations can enhance the consultancy projects of the department.
- The efforts of the department for placement are appreciable.
- The specialized lab requirement for the department should be specific and department should try to procure the same from extra-mural grants
- PG practical books specialized in Pharmacology as per PCI guidelines should be published by the faculty of the department.

18. Department of Pharmaceutical Sciences

Strengths

- Consultancy and industry collaborations
- Institutional collaborations
- Patents filed and granted
- Excellent Publications

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Observations

- Internship in industry should be encouraged.
- The department has good molecular modelling set-up, which should be available to faculty and students from the university.

- Tie-up with Pharmaceutical Industries for testing the efficacy, stability and toxicity of herbal formulation. Such collaborations can enhance the consultancy projects of the department.
- Department should start UG programs soon.
- Proposal for Medicinal Garden may be submitted to various funding agencies like NMPB, etc.
- Earmark repository of biomarkers and natural products

Date: 09 May 2023 (Evening session)
Expert: Prof Arun Grover

19. Department of Computer Science and Technology

Strengths

- Students have successful start-up.
- Alumini of the department contributing in placements
- New PG Diploma courses offered

Observations

- M Tech CST has poor student admission, concrete plan to improve the admission.
- For Low local student admission new guidelines to be proposed.
- The department has potential to get good number of Patents and consultancy projects.
- Teaching load is very high so department can have adjunct faculty who can share the teaching load.
- Interdisciplinary work with Department of Mathematics & Statistics.
- Publication record of few faculties not up to the mark.

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20. Department of Physics

Strengths

- Good publications and extramural grants

Observations

- Physics is a vast subject, hence exposure to the vast discipline to the students, department should have 4 to 5 adjunct faculty who can give online lectures and interact with students.
- Skill based courses focus more on the skills of the discipline.
- Explore grants from other external agencies.
- For nurturing activities there should be a session once a month where teacher interacts with students.
- Align your expertise towards more advanced and recent trends to get more funds.
- Initiate inter-disciplinary collaboration

21. Department of Mathematics and Statistics

Strengths

- Course with very high scope

Observations

- No Consultancy and patents
- Encourage interdisciplinary research
- Teaching load is very high so department should have adjunct faculty who can share the teaching load
- MoUs should be encouraged.
- Collaborations should be outcome based where Inter University Collaboration lecture series may be initiated.
- Department have a good number of research scholars in Mathematics whereas the admission in PhD, Statistics is low.

Challenges

- Limited budget for purchasing programming software required in the department

Date: 10 May 2023
External expert: Prof Appa Rao Podile

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22. Department of Applied Agriculture

Strengths

- Rural immersion model
- Placement high
- Academia-industry interaction is established.
- High demand among international students

Observations

- The department is advised to improve their consultancy
- The programmes relevant to agriculture community must be initiated.
- The publication and extramural grants in the department not up to the mark.
- Few PhD scholars PhD.
- Internship in industry should be encouraged.
- Work on the productivity in terms of publications and grants.
- High commitment from the faculty is required to be the best department in FST.
- Explore interdisciplinary collaborations

Challenges

- Limited Industry nearby for trainings and collaboration

23. Department of Botany

Strengths

- Faculty from one of oldest department
- High number of students qualifying national level examination
- Highly productive in terms of grants
- Recently faculty got a consultancy

Observations

- Set-up high bench marks for research and academics.
- Progress should be incremental in terms of publications.
- Department should have one focus of research thrust area, all faculty have their diverse expertise where focus for the department looks minimal.
- Look for some unexplored area of research focusing on local problems to get big departmental grant.

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Date: 10 May 2023
Expert: Prof. Kuldeep Agnihotri

24. Department of English

Strengths

- High number of students qualifying JRF/NET/GATE/English

Observations

- Collaborative research required
- Publication profile of few faculties not up to the mark
- Interaction with community may be planned
- Focus on extramural grants and research proposal must be submitted.
- Multidisciplinary projects for the department must be submitted
- Interdisciplinary research in English/Hindi/Punjab should be initiated
- Research associated with local, regional and international issues may be proposed.

25. Department of Punjabi

Strengths

- The discipline can enhance the visibility of the university in region
- Offered new PG diploma courses

Observations

- Publications low
- Devise a plan to promote Punjabi culture among masses
- Extramural grants should be submitted
- Comparative Literature on Dialect of Punjabi specifically in the North Western Punjab may be explored

- Contribution of Udasi Nirmal Panth in Punjabi Literature in Punjabi Literature should be explored
- Translation work in Pashtuni Punjabi Sahitya may be explored

26. Department of Hindi

Strengths

- Offered new PG diploma courses
- Good number of PhD scholars

Observations

- No Consultancy
- Placement low
- National and international collaborations required
- More efforts required to enhance the visibility of the department.
- Department should initiate some research work on correlative and comparative study of Sapt Sindhu region.

Date: 12 May 2023
Expert: Prof. Amit Kauts

27. Department of Mass Communication and Media Studies

Strengths

- The discipline has high demand and scope
- Faculty has some consultancy projects
- Good placement
- Media lab

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Observations

- Community outreach activities must be planned
- Low publications by few faculties
- Initiate MOUs with premier institutions
- To prepare a detailed documentary evidence on the services provided to other departments
- To focus more on experiential methods of learning

28. Department of Physical Education

Strengths

- The discipline has high demand and scope

Observations

- Outreach and university vide activities must be planned
- Participation at national and international sports events
- Some efforts required to enhance the publications.

- The programme is a perfect balance between Physical Education & Sports Science.
- The department should try to secure extramural grants from Khelo India & Ministry of Youth Affairs and Sports.
- The department should promote local sports and invite local prominent personnel to encourage the students.
- Initiate MoUs and collaboration with nearby reputed sports institutions such as National Institute of Sports etc
- The department should promote the concept of open gymnasium.
- For the international student's admission, the department may seek equivalence of B.P.Ed. with similar degrees all over the world and get approval from AIU.

Challenges

- International collaborations

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29. Department of Education

Strengths

- PMMMNIIT scheme
- Good number of FDPs, workshops and expert lectures conducted
- Studio in the department
- Patents filed in the department

Observations

- No industry collaborations and MoU signed
- Publications to be enhanced.
- Department must develop some innovative tools and methods in internship.
- Develop a Resource Centre for the region for service learning and teacher educators to obtain consultancy.
- The department's strength is having the Central sector PMMMNMTT scheme which addresses all issues related to teachers, teaching, teacher preparation, professional development and curriculum. The department must retain this scheme through self-sustainable mode.
- The department should explore the possibilities for consultancy through e-content development.
- The Education studio should be used for more vibrant classroom teaching.
- The department has the responsibility of setting up the assessment tools for identification of various types learners and to guide everyone in various teaching learning methods and pedagogy.
- The community activities should be enhanced.

30. Department of Library and Information Sciences

Strengths

- Although a new department but still good number of PhD scholars

Observations

- **None of the PhD scholars attended the audit of the department**
- Being a new department, a lot of focus and coordination between the faculty required.
- Department must devise some good plan for placement
- Students need be allowed to work in the class in the presence of the teacher to develop their originality and creativity
- More focus need be given on higher order thinking of the students
- Learning through MOOCs and other through digital platforms must be encouraged.
- The department should focus on some distinctness such as having rare book collection or digitalization of rare manuscripts etc.
- Collaborate with SWAYAM's national coordinators and CEC to train the students for e-content development.

Challenges

- Infrastructure
- Departmental facilities

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31. Department of Performing Arts

Strengths

- The discipline has high scope and potential

Observations

- The student teacher ratio is very low, efforts required for high admission
- Efforts required to nurture creativity among students
- Faculty must propose plan for interdisciplinary research and National / international collaborations required.
- The department must explore funding resources from various agencies and Ministries for creating infra-structure.
- Department must put efforts to prepare university students for participation in regional, national and international events and AIU activities
- Create different clubs (Drama Club, Cultural Club) which can organize theme based cultural activities to enhance the visibility of the department. The department can organize music concerts time to time.
- Since the department is related to performing arts they can work more on Indian knowledge system with special reference to Punjab
- The Fine Arts faculty should create some thematic paintings in the campus to make it more vibrant and colorful.

- The department need to focus more on publications in SCOPUS indexed journals
- The department need to explore for industry academia collaboration

Challenges

- Infrastructure
- Departmental facilities

Prof. Monisha Dhiman
Director, IQAC

Dean Incharge Academics

Hon'ble Vice Chancellor

Director, Internal Quality Assurance Cell
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