

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Area of Thrust:

ICT Integration in Teaching, Learning and Administration at Panjab University

Computer technologies and other aspects of digital culture have changed the ways people live, work, play, and learn, impacting the construction and distribution of knowledge and power around the world.

Information Communication Technology (ICT) is considered a powerful tool for educational change and reform and plays an important role in enhancing the quality of education. Administration and management applications of ICT are currently popular in HEIs due to its capabilities in facilitating administration activities from data storage to knowledge management and decision making.

NAAC manual for Self-Study Report of Universities mentions the following: “Technological advancement and innovations in educational transactions have to be undertaken by all HEIs, to make a visible impact on academic development as well as administration. [...] To keep pace with the developments in other spheres of human endeavor, Higher Educational Institutes have to enrich the learning experiences of their students by providing them with state-of-the-art educational technologies. The campus community must be adequately prepared to make use of Information and Communication Technology (ICT) optimally”. Integration of ICT in the everyday functioning of PU has been geared to meet these objectives.

Cultivating sustainable and green practices helps organizations become more efficient, competitive and profitable. Sustainability being one of the core areas of importance and competence at PU, use of green practices came to it quite ‘naturally’. Information resource portal for collecting and organizing raw data, E-office for internal communications (including approvals), ‘portals’ for students and faculty, financial software for meeting accounting requirements, MIS for managing academic matters were thought to be saving both time and resources including papers. It follows that from the very first day, all newly admitted students and staff members are exposed to an ICT enabled environment. This paid a lot of dividend during the COVID-19 pandemic in 2020. The entire teaching and evaluation could be shifted to online mode with no loss in working days.

The Practice

- Effective integration of ICT in every aspect of functioning has been implemented at PU for the last many years. From submission of application form for admission to choice of subjects to checking attendance records to accessing grades, every aspect of a student life-cycle has been operating within the digital platform. Similarly, application for teaching positions to submission of appraisal to application for leave for faculty have been functioning in an ICT enabled environment. All the classrooms are equipped with latest ICT tools. Every aspect of finance is carried out through a digital environment.
- **Panjab University Information Resource Portal** is an innovative way to collect and organize Information from 78 teaching departments on the campus. This portal helps us to collect, organize and submit information to NIRF-MHRD, NAAC, AISHE-

MHRD, and Times-Higher Education, QS World Rankings etc. in timely and efficient manner.

- Implementation of ***Integrated University Management Information System*** (<http://campus.pu.ac.in>) to facilitate transparent and efficient functioning both academic and administrative tasks.
- All academic areas, hostels, guest houses, student center etc. are ***Wi-Fi enabled*** in Sector-14 as well as Sector-25 campus.
- In most of the academic buildings, Classrooms are equipped with Internet connectivity, Audio-Visual facilities and Air-Conditioned environment.
- A.C. Joshi Library is ***fully automated*** and uses SLIM21 software as the Integrated Library Management Software, connected to the Campus Wide Network providing Internet and e-mail facility to the University community. Access to E-Resources, Web Based On-line Public Access Catalogue facility (WEB OPAC), through INFLIBNET, RFID technology to track books and 24x7x365 reading room provide right ambience for more footfalls.
- Department libraries are improved with good collection of books, back volumes and National and International Journals, Internet facility and subscription to electronic databases.
- Provision of video-conferencing, smart classrooms, various research CDs and DVDs for the Teachers and the students to meet their needs of research oriented programs.
- A large number of faculty members have individual laptops and desktops with necessary software for teaching and research and are always connected to the outside world through Campus Wide Network and Powerful Internet bandwidth.

Methods of ICT Integration in Teaching and Learning

- Teachers extensively use ICT enabled tools for interactive teaching to optimally deploy student centric methods.
- Power-point presentations, holding quizzes (Google Forms) etc. are few methods adopted by teachers to blend IT-enabled methods in the traditional classroom set-up.
- Guest-lectures, seminars/webinars, talks etc., workshops, trainings are organized through video-conferencing, skype etc.
- A repository of recorded video of seminars, guest-lectures and also lectures developed by faculty members have also been created for different courses; they are made available to students online for self-paced learning (online Notice Board on the departmental website).

ICT enabled Examination Result Processing

- Format and weightage of assessments are integrated into the PU evaluation portal.
- Entire process of submission of grades by the faculty, moderation, submission of grades to the Controller of Examination and final display of results to be accessed by the students is carried out online via the Computerized Examination Systems.

- Plagiarism detection software available for detection of similarity in students' submissions for term-papers, project reports, thesis and dissertations.
- Adoption of OMR based Form/ Answer sheets for timely processing of forms and declaration of results

ICT integration in Admission and other administrative processes.

- Website for admission to all programmes and further time to time updates on the admission-status posted in <https://admissions.puchd.ac.in>
- Up-to date and complete information on the admission dates, procedure to apply, no. of seats, fee payment, loan facility, refund policy along with a copy of brochure are posted on the PU website.

Infrastructure supporting ICT integration

- Dedicated IT staff for managing IT services and ICT assets in Dr A P J Abdul Kalam Computer Center and other branches at the university.
- Every classroom, seminar halls and conference rooms at PU is well-equipped with a computer system and projector.
- Wi-Fi enabled campus.
- Vast collection of e-books, e-journals and other e-resources along with remote-access to the library.

Pedagogic innovations in response to COVID 19 Pandemic

- Advent of the pandemic and the subsequent lockdown, forced the physical premise of the university inaccessible, however, teaching-learning and evaluation continued with the same rigor.
- Students, faculty and staff given several training sessions for use of e-platform and resources.
- Remote access to the office – computer systems given to faculty and staff for better coordination. Students could access the computer in the laboratory to access and use the software in those systems.
- CISCO WebEx and Google Meet were used as the platform for conducting classes, discussions, webinars etc.
- Accessibility of Online Resources at the Library from remote locations facilitating the students to access online aggregators subscribed by the library such as JSTOR, Science Direct, etc.