Chapter **8** **Strengthening Technological Infrastructure**

FACULTY OF ARTS & HUMANITIES

DEPARTMENT OF ARCHAEOLOGY

- **Campus Management Solution**
  - o Data is being upgraded with the CMS regularly in respect of this Department

DEPARTMENT OF ENGLISH LANGUAGE & LITERATURE

- **Campus Management Solution**   Yes
- **Web Portal**   No
- **Development of Online Admission System**   No

DEPARTMENT OF PHILOSOPHY

- **Digital Library**
  - o Synchronization with PU main Library for the use of digital library facilities to our students is under the way.
- **Campus Management Solution**
  - o Almost all the results, result cards, academic transcripts & Final transcripts are generated from the CMS. CMS is 70-80% operational in the Department.
- **Web Portal**
  - o Updated information regarding our Department is available at pu.edu.pk.

CENTRE FOR SOUTH ASIAN STUDIES

- **Digital Library**
  - o Yes
- **Web Portal**
  - o Yes

PAKISTAN STUDY CENTRE

- **Digital Library**
  - o Centre provides electronic access to Punjab University's Main Library and HEC Digital Library through its computer lab for students and researchers.
- **PERN**
  - o The Centre is connected to PERN which is a national research and education network of Pakistan which connects premiere educational and research institutions of the country.

- **Campus Management Solution**
    o Implementation of Punjab University's Campus Management Solution has been accelerated and required key informations have been updated in the CMS system.
- **Web Portal**
    o Salient features and significant information about the Centre have been made available and updated on the Punjab University's website regularly. Soft-copies of the latest issue along with previous issues of the research journal Pakistan Vision are also available on the said website.
- **Development of Online Admission System**
    o Nil

COLLEGE OF ART & DESIGN

- **Campus Management Solution**
    o The work is in progress.
- **Web Portal**
    o http://pu.edu.pk/cad/site/history.html
- **Development of Online Admission System**
    o The work is in progress.

FACULTY OF BEHAVIORAL & SOCIAL SCIENCES

DEPARTMENT OF GENDER STUDIES

- **Digital Library**
    o Working to convert the old system into new software.
- **Campus Management Solution**
    o Trained the staff on handling the CMS. Presently entering data directly into the New software CMS
- **Web Portal**
    o Strengthening the website of the Department. Planning to start on-line short courses.

INSTITUTE OF SOCIAL & CULTURAL STUDIES

- **Digital Library**
    o The ISCS has access to digital library through Punjab University library.
- **PERN**
    o The ISCS utilizes the facility of online journals, online research resources through Punjab University digital library using PERN band width.
- **Video Conferencing**
    o Nil

- **Campus Management Solution**
  o The ISCS on a regular basis updates its semester results and admission records through Campus Management Solution of Punjab University.

- **Web Portal**
  o Punjab University IT Centre is providing NSSA (National Student Software Accessibility) Web Portal Service with the collaboration of HEC & Microsoft to all the faculty members and students of the University including this Institute.

- **Development of Online Admission System**
  o Nil

FACULTY OF COMMERCE

HAILEY COLLEGE OF BANKING & FINANCE

- **Digital Library**
  o College library is automated and we use Library Software M LIMS designed by PU Main Library with the help of IT Centre.

- **Campus Management Solution**
  o Data of students of Morning Program of BBA (Hons.), MBA (Morning) Program and MBA (Evening) Program of Banking & Finance and Insurance & Risk Management Session 2011-12 have been uploaded in the CMS software. Approximate 600 students admitted in the session 2011-12.
  o Results of different Program of BBA (Hons.) Banking & Finance and Insurance & Risk Management upgraded.

Sr. No.	Session	Semester	Banking & Finance	Insurance & Risk Management
1.	2007-11	8th	Completed	Completed
2.	2008-12	6th	Completed	Completed
3.	2009-13	3rd	Completed	Completed
4.	2010-174	2nd	Completed	Completed

  o Hostel student's data have been completed.

- **Web Portal**
  o Punjab University IT center is providing NSSA (National Student Software Accessibility) Web Portal services with Collaboration of HEC & Microsoft to all Faculty Staff and Students of the University including this College.

- **Development of Online Admission System**
  o HCBF official website is updated on time through display of admission schedule, entry test results, general merit list and merit lists for selected students.

FACULTY OF ECONOMICS & MANAGEMENT SCIENCES

DEPARTMENT OF ECONOMICS

- **Campus Management Solution**
  - o Presently in operation
- **Development of Online Admission System**
  - o In Progress

DEPARTMENT OF LIBRARY & INFORMATION SCIENCE

- **Digital Library**
  - o The teachers and students make extensive use of HEC online sources to fulfill their academic and research needs.
  - o The Department has developed its own digital library which is accessible on the intranet to the faculty and researchers
- **Campus Management Solution**
  - o The department has been entering its data in CMS and the work is in progress. A KPO has been deputed to work on this task.
- **Development of Online Admission System**
  - o We made use of the system as per requirement.

INSTITUTE OF ADMINISTRATIVE SCIENCES

- o With the objective of making students well versed in usage of information technology and to enhance their computer literacy skills, IAS has well equipped computer laboratories which cover an area of 4800 square feet. IAS has two well equipped computer laboratories, as we belong to the management sciences so we do not have any scientific laboratories. There are two separate computer laboratories on the upper story of the newly constructed IAS building, one for graduate programs (LAB Gr.) and the other for undergraduate programs (LAB U.Gr.). Both these labs are equipped with 250 computers with contemporary softwares like MS Office, SPSS, Corel Draw, Adobe etc. A strong anti virus software named NOD 32 is installed to prevent viruses from attacking the systems. Instructions/guidelines for the users regarding safety regulations or alike have been displayed on the lab notice boards. In addition, we equip our students with the usage of IT by offering multiple courses throughout their stay at IAS. In addition, we have developed software for online evaluation of teachers through students and installed CMS for annual academic activities and our web portal is in the final stage of making.

INSTITUTE OF BUSINESS ADMINISTRATION

- **Campus Management Solution**
  - o Campus Management Solution has been accelerated and required information have been uploaded in the CMS system.

INSTITUTE OF BUSINESS & INFORMATION TECHNOLOGY

- o During the year 300 new computers with latest available specs replaced the old computers in four computer labs available in IBIT.
- o There were 3412 books in the departmental library on along with 65 MBIT Thesis and 632 Reports. The institute is using maximum modern facilities such as computer hardware and software, internet, and multimedia equipment. Institute has its own website: www.ibitpu.edu.pk
- o Institute is managing its data on Campus Management Sysytem. Institute has its own online admission system which is being used for the last 5 years and students can submit their admission form online and the merit list and prospectus of the institute is also available online.

FACULTY OF EDUCATION

DEPARTMENT OF SPECIAL EDUCATION

- **Campus Management Solution**
  - o Yes

INSTITUTE OF EDUCATION & RESEARCH

- **Digital Library**
  - o Partially
- **Video Conferencing**
  - o Yes
- **Campus Management Solution**
  - o Yes

FACULTY OF ENGINEERING & TECHNOLOGY

INSTITUTE OF CHEMICAL ENGINEERING & TECHNOLOGY

- **Digital Library**
  - o The institute is currently being benefited from the digital libraries hosted by the HEC, PU main library.
- **PERN**
  - o Faculty members are encouraged to be active in utilizing the features of PERN.
- **Video Conferencing**
  - o The Institute is utilizing video conferencing facility of the university on need basis.
- **Campus Management Solution**
  - o The institute has implemented the Campus Management solution for managing student enrollment and examinations. Most of the faculty members have been using Turnitin software for the publication. All MS thesis are mandatory to be tested for plagiarism by this software.

- **Web Portal**
  - o The Institute has a shared web portal with University of the Punjab.

INSTITUTE OF QUALITY & TECHNOLOGY MANAGEMENT

- **Digital Library**
  - o Available
- **Video Conferencing**
  - o Video Conferencing facility is available in the University campus and can be arranged whenever needed.
- **Campus Management Solution**
  - o Campus Management Solution (CMS) has been successfully operating in the institute.

FACULTY OF ISLAMIC STUDIES

SHEIKH ZAYED ISLAMIC CENTRE

- **Digital Library**
  - o Sheikh Zayed Islamic Centre is providing the digital library facilities to the students with the help of University Digital Library System.
- **Video Conferencing**
  - o Video Conferencing facilities are available in the Language Lab. of the Centre.
- **Campus Management Solution**
  - o The Centre is using Campus Management Solution for different categories i.e. admission, Examination, Hostel and Finance. The trained staff is available for implementation of Campus Management Solution.
- **Web Portal**
  - o University of the Punjab is providing the Web portal to the Centre. All the information related to the Centre is available on the University Web Portal.

FACULTY OF LIFE SCIENCES

CENTRE FOR CLINICAL PSYCHOLOGY

- **Campus Management Solution**
  - o CMS is used for the admissions, results and accounts related activities.
- **Web Portal**
  - o Information regarding Centre is available on Punjab University Web Portal.
- **Development of Online Admission System**
  - o In future admissions will be conducted through online admission system through CMS.

CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY

- **Digital Library**
  - o Partial resources are available in the centre as well as in the hostels
- **PERN**
  - o PERN 2 is operational for wired and wireless internet as well as intranet.
- **Video Conferencing**
  - o Polycom VSX-7000 video conferencing solution is available for national and international communications.
- **Campus Management Solution**
  - o Using CMS deployed by the University of the Punjab.
- **Web Portal**
  - o Website is available for the centre http://www.cemb.edu.pk

DEPARTMENT OF APPLIED PSYCHOLOGY

- **Digital Library**
  - o At present, Departmental students are given access to Digital Library of HEC. The Digital Services of the Punjab University Main Library are also accessible from the webpage of the University. Digital Access is provided free of cost to almost world famous journals/e-books i.e. full access to JSTOR, Science Direct, EBSOHOST, IEEE etc.
- **PERN**
  - o Digital Services being provided by the University is based on PERN. This project is also supporting the students in their research activities as non-stop access to internet is given to the students through cable and Vi-Fi connections.
- **Campus Management Solution**
  - o Campus Management Solution (CMS) is also in progress and all the data of the students is entered in this database.
- **Web Portal**
  - o The Administration of the Department in collaboration with University IT department is in the process to have one dedicated webpage for the department. In this regard some paper work has already been done on development of alumnus portal.

DEPARTMENT OF BOTANY

- **Digital Library**
  - o Available   (Fully functional)
- **Campus Management Solution**
  - o Available   (Fully functional)

- **Web Portal**
  - o Available   (Fully functional)

DEPARTMENT OF MICROBIOLOGY & MOLECULAR GENETICS

- **Campus Management Solution**
  - o Complete record of departmental students has been updated in CMS. Five office staff is continuously working on it.

DEPARTMENT OF ZOOLOGY

- **Campus Management Solution**
  - o Work is being done and an official has been assigned duties of CMS.
- **Development of Online Admission System**
  - o Work is being done and an official has been assigned duties of CMS.

INSTITUTE OF BIOCHEMISTRY & BIOTECHNOLOGY

- **Digital Library**
  - o Under process
- **PERN**
  - o Yes
- **Video Conferencing**
  - o Yes
- **Campus Management Solution**
  - o Under process
- **Web Portal**
  - o Yes
- **Development of Online Admission System**
  - o Under process

FACULTY OF SCIENCES

CENTRE FOR HIGH ENERGY PHYSICS

- **Campus Management Solution**

  We have worked on the following modules:
  - o Admissions
    - Additions of applications
    - Matriculation (Terms activation, Scheduling of courses)
    - Enrollment (Creation of students and class blocks, Assignment of courses to students)
  - o Examinations

- Block Merging.
- Grading and Preparing Grade Roasters of different terms.
- Preparing Grade Books.
  - Finance
    - In Progress
  - Generating Reports
    - Student data
    - Results

CENTRE FOR INTEGRATED & MOUNTAIN RESEARCH

- CIMR has recently computerized all offices and facilitated students with latest computer laboratory which possess computers containing latest software
- Class rooms are facilitated with latest Multimedia projectors for teaching purpose.

  Following instruments are the part of sophisticated laboratory in the CIMR
  - Shaker (1 No)
  - Oven (1 No)
  - Microscope (2 No)
  - Air Quality Meter (1 No)
  - Sound Meter (1 No)
  - Dissolved Oxygen Meter (1 No)
  - Anemometer   (1 No)
  - pH meter (1 No)
  - Light Meter (1 No)
  - Balance (1 No)
  - Turbidity Meter (1 No)
  - Flam Photometer (1 No)

CENTRE FOR UNDERGRADUATE STUDIES

- **Digital Library**
  - Under Process
- **Video Conferencing**
  - Fully Functional
- **Campus Management Solution**
  - Under Process
- **Web Portal**
  - Under Process

COLLEGE OF EARTH & ENVIRONMENTAL SCIENCES

- **Digital Library**
  - o Efforts are being made to convert the college library to a digital library.
- **Campus Management Solution**
  - o A CMS committee consisting of five members is continuously updating the data of the college in CMS
- **Web Portal**
  - o A website committee of 3 faculty members keeps updating date on the website of the University of the Punjab. There is a plan to develop an official website of the college.

COLLEGE OF STATISTICAL & ACTUARIAL SCIENCES

- **Digital Library**
  - o Synchronization with PU Main Library for the use of digital library facilities to our students is under the way.
- **Video Conferencing**
  - o Presently not in operation, however, equipment & techniques are available in the College.
- **Campus Management Solution**
  - o Almost all the results, result cards, academic transcripts & Final Transcripts are generated from the CMS. CMS is 70-80% operational in the College.
- **Web Portal**
  - o Updated information regarding our College is available at pu.edu.pk

DEPARTMENT OF GEOGRAPHY

- **Digital Library**
  - o Yes
- **Video Conferencing**
  - o Yes
- **Campus Management Solution**
  - o Yes
- **Web Portal**
  - o Yes
- **Development of Online Admission System**
  - o In progress

DEPARTMENT OF MATHEMATICS

- **Campus Management Solution**
  - o Yes

DEPARTMENT OF PHYSICS

- **Digital Library**
  - Synchronization with digital facilities of PU Main Library is in progress.
- **Campus Management Solution**
  - Almost all the results and academic transcripts are generated from the CMS. CMS is 70-85% operational in the Department.
- **Web Portal**
  - Update are available at www.pu.edu.pk

PUNJAB UNIVERSITY COLLEGE OF INFORMATION TECHNOLOGY

- **Digital Library**
  - Yes
- **PERN**
  - 28 MB Bandwidth
- **Video Conferencing**
  - Yes
- **Campus Management Solution**
  - CMS provides the standard tools for faculty to manage their online courses, process assignment, maintain grade books and stay in contact with colleagues and students. Students enjoy being able to easily see their assignments, lessons and other information for all of their classes like semesters transcript etc. staff benefits from services such as built-in help desk, textbook requisitions, exam scheduling and faculty/course changes.
- **Web Portal**
  - Completely redesigned and implemented PUCIT web page: www.pucit.edu.pk
- **Development of Online Admission System**
  - Yes

SCHOOL OF PHYSICAL SCIENCES

- **Digital Library**
  - Digital Library facility at main library of Punjab University is available. Video conferencing facility is also available in the university campus and can be arranged whenever needed.
- **Campus Management Solution**
  - Campus Management Solution (CMS) has been operating in the University.

PUNJAB UNIVERSITY GUJRANWALA CAMPUS

- **Digital Library**
  - The students and faculty members of PUGC have access to the HEC Digital Library and can access different resources, e-books and e-databases on http://www.digitallibrary.edu.pk/punjabuni.html

- **PERN**
    - o Punjab University Gujranwala Campus has been selected as Aggregation Point of Presence (A-POP) for the connectivity of PERN2 by the HEC. Fiber Optics has been installed in the Campus for the completion of this project.
- **Video Conferencing**
    - o The state-of-the-art equipment is available at the PUGC for video conferencing.
- **Campus Management Solution**

    Campus Management Solution is in progress. The following modules have been used:
    - o Student Application Entry
    - o Term Activation
    - o Student Enrollment
    - o Student Grading and Enrollment
    - o Student Financials

PUNJAB UNIVERSITY JHELUM CAMPUS

- **Digital Library**
    - o Yes
- **PERN**
    - o No
- **Video Conferencing**
    - o No
- **Campus Management Solution**
    - o Under process
- **Web Portal**
    - o No
- **Development of Online Admission System**
    - o No