Chapter - IX
INFORMATION TECHNOLOGY

9.1 Network Services

The university campus network came into existence from the year 1996. Now campus network is fully operational with the advanced network facilities and powerful central servers. Network services include access of web based online programmes such as online bill, online tour, online PF, online JAU circulars in addition to internet and e-mail facilities. Above all, antivirus applications, research reference services and video conference facilities are also part of JAU network services. These comprehensive facilities and services are very useful to the university students, faculty and staff for their learning, research, teaching, extension and administration activities.

To support all the IT services in the university, JAU network is strengthened by 4 MBPS Leased Line Internet Connectivity from BSNL and two broadband connectivity of 10 MBPS each under National Mission on Education through Information and Communication Technology (NME-ICT) Scheme of Ministry of Human Resources Development, Government of India. The university is also connected to Gujarat State Wide Area Network (GSWAN), Gandhinagar through radio connectivity.

The University also made Google Apps for Education available for faculty, staff, and students enhance the use of modern online tools to foster learning, teaching and research at the University. Google Apps includes the services such as Google Docs, Google Drive, Gmail, Google Calendar, Google Sites and many more.

9.2 Beneficiaries

The coverage of the University Campus Network is extensive with more than 500 network points and over 14 wireless access points. A permeating network access environment, known as ACEnet (Access-Everywhere-Network), has been established to provide staff and students with wired and wireless connectivity to the campus network. This state-of-art networking environment of the JAU has made a remarkable impact on the work culture and mind-set of students, scientists/teachers and administrative staff.

All the offices of university campus and sub-centres are getting circulars online as well as through e-mail facility. In addition to this service, the online accounting, online tour programme and online PF have increased good governance and ultimately these services have saved lot of time, reduced paper work and eliminated drudgery.

9.3 Training

The IT Cell has undertaken responsibility to train more and more students and staff members to make best use of the facilities provided through network services. Trainings on fundamental aspects of operating computer system as well as operating online accounting and online tour programme were given to the university staff frequently.

9.4 Network Implementation and Management

To avail all the IT services to the end users, the University installed a high-speed campus network infrastructure based on Gigabit Ethernet, Fast Ethernet and Wi-Fi Wireless LAN technologies. The network infrastructure is managed with enforcement of high security measures, spam and virus filtering and Quality of Service (QoS) bandwidth regulation.

The coverage of the University Campus Network is extensive with more than 500 network points and over 14 wireless access points. Wireless connectivity is made available in College of Agril. Engg. & Technology, University Administrative Building (University Bhavan), Food Testing Laboratory (FTL), Information Technology Cell, VIP Guest House and Girls' Hostels of main campus.

JAU staff and students are provided with uninterrupted access to the campus network

anytime and anywhere. The campus network is connected to Railtel and BSNL for redundant high speed links through leased line circuits. University faculty and students are provided with the resourceful network connectivity to enhance their teaching and research activities.

The Information Technology Cell (IT Cell) of the University is responsible for installation and maintenance of the network. A sizable amount of money has been saved by using an open source Network Operating System *i.e.* Linux/Fedora/CentOS. The network is continuously monitored and the problem, if any, is attended and rectified.

9.5 Reference Services

All the available e-Resources in agriculture *viz.,* CAB, AGRIS and AGRICOLA are provided through LAN by ITC in collaboration with the University Library to UG/PG students for their research projects and to university personnel engaged in research and teaching work. This enables the user to get quick information through computer on any reference related to agricultural research through network. In addition to this, the online access to Consortium for e-Resources in Agriculture (CeRA) is made available by IARI, New Delhi, for accessing National and International Journals. *Krishi Prabha* an online doctoral theses facility of All India Agricultural University from HAU, Hisar is also available. J-Gate online database is also provided to the users. This has made the reference services very fast and has saved lot of time of the scientists and the students.

9.6 University Web Site

The web site of the university is hosted in our own server at IT Cell with a registered domain name www.jau.in. The web site contains commonly required information for the students, faculty, researchers, staff and farmers. These information are related to education, rules and regulations, scholarships, library facility, students examination results, medals, important announcements/ events, university circulars, tenders, advertisements, RTI, Farmers' corner and current news regarding the events of the University. Other information related to research, research recommendations, new varieties released, university publications, MoUs, extension education activities are also made available on the website. The web site is maintained and updated regularly during the year.

The information in vernacular language kept on university website with the aim for providing information directly to the farmers on various activities of the university in the agriculture field so that the farmers are able to make proper and timely use of the available information.

9.7 Qualified Personnel

All the services at IT Cell are managed by IT trained personnel of the University.

9.8 Visitors

The ITC has been visited by a number of eminent persons who have appreciated the activities in fullest terms. The students of IT courses of various colleges of Junagadh city are taking frequent visit as a part of their project work. They have remarked JAU a front-runner in IT activities amongst all universities of Gujarat state.

9.9 University Library

The University Library provides services to students and staff of 6 constituent colleges as well as research stations and extension education centres under Junagadh Agricultural University, Junagadh.

Collection

JAU has a rich library with double storeyed stack room with capacity of 1.5 lakh books. It possesses around 47000 books. These books are very valuable and helpful in studies, research and preparation for competitive examinations. It provides 75 Indian & 15 Foreign journals and around 16000 back volumes.

Services

Cyberary with 100 mbps LAN connectivity facilitates users to access online database like J-Gate. Eleven e-Books are also subscribed, facility by ICAR for foreign journals through online access of journals through Consortium for e-Resources in

Agriculture (CeRA) and *Krishiprabha* are available and CD-ROM databases like CAB, AGRICOLA, AGRIS with latest data are available for the users. Full time internet, scanning and CD writing facilities are available for the students in the cyberary. For the purpose, total 40 work stations are provided with internet access through BSNL. These facilities are being extensively utilized by both faculty and students on an average of daily 200 to 250 users for about 12 hours per day. Students are provided with books of their concerned subject of respective semesters through book bank facility. The library is marching towards automation process through Libsys software for the circulation of library materials to users. Library subscribes 9 newspapers to acquaint users with daily news.

The library renders its services to the users from 8:00 to 18:10 h and cyberary renders its services from 8:00 to 20:00 h. The circulation counter, the cyberary and other services are open to the readers during working days.