CHAPTER 4

PROFILES OF THE UNIVERSITIES AND THEIR LIBRARIES UNDER STUDY IN CHANDIGARH AND PUNJAB

4.0 Introduction

Education is an essential part of human being which serves a source of light to attain the knowledge. It develops the thoughts and ideas. For the development of the nation, primary education is essential because it creates base. But higher education is also important, as it contributes to scientific, technological, economic, and social progress for overall development of a country. It creates social opportunities to people and fosters vibrant democracy in our polity. It is the key in driving economy reforms in facing the challenges of economic global competition. It is the means for modernizing the society and producing highly educated leader from all walks of life. It enables the people to meet various challenges in a dynamic world of today and trains them to adopt a changing and fast moving society. It also makes the people conscious about the surroundings in which they live and also responsibilities to be shared by them. It promotes understanding of co-existence and knowledge of human fundamental rights. It also aims at national development by dissemination of knowledge, skills and attitudes. The main aim of higher education is to impart specialized and advanced knowledge to pupils for all round social progress. It builds up one’s ability and capability to contribute to knowledge and provides a beginning for the creation of knowledge society.

The system of higher education in India has undergone a remarkable transition from an elite system to mass system. The numbers of higher educational institutions which have played an active role in the social transformation have increased rapidly after independence and the role of universities has also changed significantly.

4.1 Concept of university

The universities are the places of higher learning and centres for higher education. A university is an institution of higher education which grants academic degrees in various disciplines. It imparts instruction at graduate and postgraduate levels...
and provides facilities and infrastructure for study, teaching, research and specialisation. It creates and imparts advanced knowledge through research. The main aim of a university is teaching and research. It has the primary role of producing and developing competent human resources. A university is a social institution and the servant of society with its mission changing with the social changes. Universities provide members of the academic community easy and direct access to recorded knowledge accumulated and conserved by libraries through the ages.

According to Encyclopedia Britannica, university is an institution of higher education consisting of a liberal arts and science college as well as graduate and professional schools having the authority to confer degrees in various fields of study. The modern university evolved from the medieval schools known as ‘Studia Generalia’ i.e. generally recognized places of study without any restriction to students from all parts.”

According to International Encyclopedia of Social Sciences (1968), universities are “organizations engaged in the advancement of knowledge; they teach, train and examine students in a variety of scholarly, scientific and professional fields. Intellectual’s pursuits in the universities define the highest prevailing levels of competence in these fields. The universities confer degrees and provide opportunities both for members of their teaching staff and for some of their students to do original research.”

Pandit Jawaharlal Nehru in his convocation address to the University of Allahabad in 1947, thus summed up the basic objectives of the University and its role in National Life; “a university stands for humanism, for tolerance for reason, for the adventure of idea and for the search of truth. It stands for the onwards march of the human race towards even higher objectives. If the universities discharge their duties adequately then it is well with the nation and the people.”

4.1.1 Functions of university

The concept of a university the world over has undergone change in both denotation and connotation from age to age as a result of constant endeavour on the part of the system of higher education to answer societal demands. The task and

functions of a university assumed new dimensions and depth. Wilson and Tauber broadly grouped the functions of the university as follows:

a) To pursue truth, explore and cultivate new knowledge and interpret the old knowledge in the light of new perspectives.

b) To strive to promote equality, liberty, fraternity and justice to the people and reduce social and cultural gap in the society by disseminating knowledge and information.

c) To diffuse and foster the real values and attitudes among teachers and students.

d) To impart knowledge to the students in all the fields and to give professional and vocational training for the development of nation and people, and

e) To generate and provide the right kind of leadership in all walks of life in the society.  

Kothari Education Commission listed the functions for the institutions of higher learning as follows:

a) To seek, to cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth and to interpret old knowledge and beliefs in the light of new needs and discoveries;

b) To provide the right kind of leadership in all walks of life; to identify gifted youth and help them develop their potential to the full by cultivating physical fitness, developing the power of the mind and cultivating right interests, attitudes and moral and intellectual values;

c) To provide society with competent men and women trained in agriculture, art, medicine, science and technology and various other professions, who will also be cultivated individuals, imbued with the sense of social purpose;

d) To strive to promote equality and social justice and to reduce social and cultural differences through diffusion of education;

e) To foster among the teacher and students and through them in society generally, the attitudes and values needed for developing the ‘good life’ in individuals and society.  

---


Thus, the universities serve their societies through their work in teaching, research and wider community service. University research increases the body of theoretical knowledge as well as its application to practical problems. A university is expected to help to conserve the cultural heritage of the country. It is an effective vehicle of disseminating knowledge in the society at different levels through diverse modes and media. It promotes the course of knowledge, its modification, renewal and enrichment. It is charged with the duty of developing the human resource of the country to the optimum capacity of its potential. It has among others, a future-related obligation towards the community. It provides the field for trying out uncommon, unconventional and innovative ideas. Thus, universities contribute to the process of national progress and development.

4.2 University Library

The prime necessity for a university is a good library. A university library is a collection of documents which satisfies the information needs of academic community of a university. It acquires books and other reading materials and prepares these materials for the use. Library is a heart and soul of any academic programme without which the institution can not accomplish its educational objectives. It is a dynamic instrument of education. It is an asset to the institution to which it is attached. Library is a channel through which a large amount of knowledge contained in books and other reading materials may be disseminated.

According to the ALA Glossary of Library and Information Science, a university library is defined as “a library or system of libraries, established, supported and administered by a university to meet the information needs of its students and faculty and support its instructional, research, and service programmes.”

No university can develop or produce standard academic work without a strong library at its centre. In fact, it is a vital organ of the university and can appropriately be described as the heart, because its vitality directly affects the healthy growth of the institutions.

---


A university is rightly described as “a community where scholars and teachers are the head, students are the body and library its heart. If the community is to perform its function properly and efficiently, its heart must be strong and efficient in its functioning”\(^8\).

Thus, a university is gauged largely by its library. The programme of university depends upon a strong library as its centre for academic pursuit. All academic activities revolved around the universities libraries. They manage the needed information for the purpose of the programmes of study, teaching and research in higher educational institutions. So the university library is established within the campus as an essential organ to meet its ideals and objectives.

4.2.1 Importance of university library

The university library is very important and integral part for any university. It plays a vital role in the development of higher learning. It is primarily responsible for following:

i) The selection and collection of material appropriate for users,

ii) The preservation of the collection,

iii) The organization of the collection and,

iv) The dissemination of the material or the information which it contains.

S. Radhakrishnan, Chairman, University Education Commission 1948, rightly observed that, “Library is the heart of all university’s work, directly so as regards its research work and indirectly as regards its educational work which derives its life from research work. Scientific research needs a library and laboratory in one.”\(^9\)

Buck has given the following credo on the role and utility of university library:

i) Library remains the great conservator of learning,

ii) A quality education is impossible without a quality library,

iii) You can not have a quality faculty without a quality library,

iv) A library is vital to proper exploitation of our intellectual resources.

---


v) The library is essential to maintenance of free access to ideas and to the function of the untrammeled mind. Thought control will be successful so long as books are freely and widely available. Hence the laboratory can never take the place of library.\textsuperscript{10}

4.2.2 Functions of university Library

The basic function of the university library is to aid the parent institution in carrying out its objectives and to meet the instructional and research needs of the students and faculty members of that university. The Kothari Education Commission in its report clearly defined the functions of university libraries in order to realize the objectives of university education as under:

a) To provide resources necessary for research in fields of special interest to university,

b) To aid the university teacher in keeping abreast of development in his field,

c) To provide library facilities and services necessary for success of all formal programmes of instruction,

d) To open the door to the wide field of books that lie beyond the borders of one’s own field of specialization, and

e) To bring books, students and scholars together under conditions which encourage reading for pleasure, self-discovery, personal growth and sharpening of intellectual curiosity.\textsuperscript{11}

Wilson and Tauber stated that the fundamental essentials to successful operation of the library and the coordination of its programme with the teaching and research programmes of the university may be presented as follows:

i) Resources for instruction, research and extension,

ii) A competent library staff,

iii) Organization of materials for use,

iv) Adequate space and equipment,

v) Integration of the library with administrative and educational policies,

vi) Integration of the library with the community, state, regional, national and international library resources,


vii) Adequate financial support, and
viii) A workable policy of library governance.  

Thus, a well-equipped and well-managed library is the foundation of modern education structure. The educational advancement depends upon good collection of university library. It supports various educational programmes and research activities by catering intellectual requirements of students, researchers and teachers. The university library being large reservoir of knowledge is vital to any kind of research in any field, as the promotion of research is one of the most important functions of university. It provides text books, reference books and periodicals to students and a large number of bibliographical tools and up-to-date literature on various disciplines for teacher and researchers. It also provides efficient reference and information service to its users. Therefore, it performs a variety of functions.

4.3 Profiles of universities and their libraries under study

4.3.1 Panjab University, Chandigarh (PUC)

On October 05, 1882 Sir Illhert Countney, the law member of Government of India, introduced a bill in the legislative council toward creating of the Panjab University at Lahore. After the partition of the Subcontinent in 1947, all schools and colleges were disaffiliated from the university at Lahore. An ordinance was promulgated on September 07, 1947 by the Punjab State Government, for the establishment of East Panjab University with effect from October 1, 1947. The university has been shifted to Shimla. The ‘prefix’ east was dropped on the Republic Day on January 26, 1950 and it was rechristened as Panjab University. Due to shortage of space at Shimla, in 1953, Punjab Government suggested locating the University at Chandigarh for its permanent home and the syndicate accepted the suggestion. The university facing many ups and downs finally in 1956 started shifting to Chandigarh.  

After the reorganization of Punjab in 1966, Panjab University has been Inter State Body Corporate. The university presently is being funded by jointly the central and Punjab government in the ratio of 60:40 respectively. By virtue of its age, experience, achievements and philosophy, the Panjab University is a university of

---


national character and stature; it has attracted both the faculty members and students from all over the country and abroad. Now it has entered into programmes of collaboration and exchange with several reputed universities abroad. The Panjab University is chosen by the Government of India, University Grants Commission and other Indian bodies for their special research programmes.

This university offers a beautifully lay out compact campus with modern facilities. The red sandstone campus of the university was designed by the French Architect Piere Jeannette under guidance of the renowned Le Corbusier. It has modern laboratories and equipments for the purpose of study and research. More than 69 teaching departments/centres on its campus are grouped under the faculties of Arts, Science, Languages, Law, Education, Design and Fine Arts, Business Management and Commerce, Engineering and Technology, Medical Sciences and Pharmaceutical Sciences. At present, more than 179 colleges of Punjab and Chandigarh are affiliated to the Panjab University. It has its regional centres at Muktsar, Ludhiana and Hoshiarpur.

The university is doing its best to restructure its existing course and has introduced a number of new courses to meet new societal challenges. The university has set up University Institute of Engineering and Technology in 2002, University Institution of Legal Studies in 2004, Dr. H. S. Judge Institute of Dental Studies with 100 beds in 2006, Swami Sarvanand Giri P.U. regional centre at Hoshiarpur for Engineering courses in 2006 and University Institute of Applied Management Sciences (UIAMS) in 2008, as its major initiatives. The university has recently established Centre for Emerging Areas in Science and Technology, Centre for Emerging Areas in Social Sciences and Centre for the study of Social Exclusion and Inclusion policy.

Several teaching departments under various programmes of UGC and DST have been recognized the centres of excellence in teaching and research. The university has also been recognized by the UGC as the ‘University with Potential for Excellence in Bio-Medical sciences’ with facilities for Stem Cell Research and Drug Development. There are also many other achievements of the university. The university is accredited with the ‘Five Star Status’ by NAAC (National Assessment and Accreditation Council) of UGC.14

---

14 Panjab University, Chandigarh web site. Retrieved on April 21, 2009 from (www.puchd.ac.in).
4.3.1.1 A.C. Joshi Library

The Panjab University library is officially named as “A. C. Joshi Library” after the name of an illustrious Vice-Chancellor of the university. It is one of the largest libraries of the country. In the year 1955-56, the university started shifting its offices to Chandigarh. The foundation stone of the new library building was laid in 1958 by Dr. S. Radhakrishnan, then the Vice-President of India. The library in its new campus was formally inaugurated in 1963 by Pandit Jawaharlal Nehru, then the Prime Minister of India. It is housed in a five storied building and based on modern principles of architecture. The library building is centrally air-conditioned and has a seating accommodation of 600 readers. The library is equipped with computer and communication network.

The Library houses overall seven lakh volumes which include books, bound volumes of periodicals, theses/dissertations, rare books, reports, government documents, back files of newspapers, other non-book material and manuscripts. It is subscribing nearly 662 current periodicals. There are around 1500 rare manuscripts in classical and regional languages. This library also possesses facilities like photocopy, Internet, CD-ROM databases, etc. Library orientation programmes are conducted in the beginning of each academic session for new entrants. The library also arranges books on inter-library loan to and from other libraries on demand. For the purpose of resource sharing, the library is a member of library networks at national level like Developing Library Network (DELNET) and INFLIBNET. At the local level, the library is a member of Chandigarh Libraries consortium. It is fully computerized with integrated library management software named Techlib Plus. All library operations are being operated with the help of the computer. The library is providing OPAC facility to the users.

In 2003, INFLIBMENT Centre came up with a consortium project named UGC-INFONET to provide access to the universities with electronic resources through a central agency. The Panjab University is also part of this consortium from its beginning; at present, nearly 4500 online journals are made accessible through this consortium on entire campus network of the university. As per the usage statistics provided by various publishers to INFLIBNET, the Panjab University got the rank among the top ten universities for the use of electronic resources. The Library is also a part of another consortium named Indian National Digital Library in Engineering Sciences and Technology (INDEST) and this consortium is providing nearly 300 online
journals. This library has access to 225 online full text journals as apart of print journals subscription as per policy of various publishers. Being a very rich in the resources in North India, this library has been identified as one of the six Document Delivery Centres of INFLIBNET for covering the North-West region. It also provides document delivery to DELNET for which it is itself a part.\textsuperscript{15-16}

4.3.2 Punjabi University, Patiala (PUP)

Punjabi University, Patiala was established on April 30, 1962. Initially, its main objective was to develop Punjabi language, art and literature, but now it has evolved in the largest university in the State of Punjab and is imparting education in multi-disciplinary courses. It is spread over 600 acres of land with pollution free environment. It has strength of nearly 525 teachers who are imparting instruction and guidance to nearly 9200 students. It includes 65 teaching and research departments on its campus, five regional centres and six neighborhood campuses. It is providing the affiliation to 166 colleges.

The university has achieved a couple of milestones towards overall development of Punjabi and published a record number of over 3000 titles in Punjabi covering a wide range of areas. It is catering linguistics and cultural needs of Punjabis in India and abroad. It has set up a centre for teaching of Punjabi as a foreign language (CTPFL) and an Advanced Centre for Technical Development of Punjabi, Language, Literature and Culture (ACTOPLC) to serve the global community. The university is trying to bridge the widening gap between rural and urban, rich and poor, deprived and privileged people of the society by establishing six centres in the most backward areas to access education.

To promote technical and professional education on its main campus, it has set up a University college of Engineering (UCoE) equipped with latest infrastructure. It has several departments and centres under the faculties like Languages, Life Sciences, Physical Sciences, Business Studies, Arts and Culture, Social Sciences, Education, Information Sciences, Law, Physical Sciences and Engineering and Technology.


\textsuperscript{16} Panjab University Library, Chandigarh web site, Retrieved on April 21, 2009 from (http://library.puchd.ac.in).
The university has established a computer centre to maintain local area network. It provides internet services to all its departments through LAN. All departments are encouraged to promote quality research culture and spirit. Most of the departments are being funded by national and international agencies. They have developed tie-ups with industry, having undertaken several consultancy assignments.

4.3.2.1 Bhai Kahn Singh Nabha Library

The main library of Punjabi University, Patiala, Bhai Kahn Singh Nabha Library, is housed in a spacious modern building. The library is centrally located and is in consonance with the campus architecture. The library is housed in a five storied building with modular structure. It stocks more than five lakh volumes and subscribes to more than 600 journals. Latest books are added regularly every year. The library has a majestic reading hall of a capacity of 400 readers where they can sit and consult the resources of library. The university has set up six libraries outside Patiala at its campuses at Mohali, Dehradun, Malerkola, Bathinda and Talwindi Sabo to extend library services to the users.

The library maintains and manages the services such as current awareness and documentation services, periodicals received monthly basis, list of new additions, indexing services of newspapers and periodicals received in Punjabi Reference library, subject bibliographies, inter library loan and reprographic services etc. It has developed the database of current periodicals and database of backsets of periodicals.

This library has made its operation and services automated. It has installed LIBSYS software. It is an integrated multi-user library management system that supports all in-house operations of the library. Almost all operations of library are performed with the help of the LIBSYS software. It is providing OPAC services to its users. It has set up a local area network connected to university networks. It is participating with INFLIBNET and getting access to the facilities and services provided by it. It provides overall 4500 e-journals through the UGC-INFONET Consortium. This library is also a member of DELNET and provides the DELNET search facility to the members of faculty and research scholars.

Punjabi Reference Library has been created in a new building which is interlinked with the main building of library for convenience of the users. This library is maintaining a strong collection on Punjab history, culture, Sikhism, Punjabi Language and Literature. The rich collection of this library includes nearly 99267 documents out of which approximately 57719 documents have been collected from
eminent historians and literatures. These documents cover newspapers, magazines, books, diaries and manuscripts pertaining to the 19th and 20th centuries. They record a large amount of information which is very valuable to the scholars. 122 important newspapers and periodicals published daily or weekly anywhere in the world are received regularly in this library.17

4.3.3 Guru Nanak Dev University, Amritsar (GNDU)

Guru Nanak Dev University was set up at Amritsar, Punjab to mark the five hundredth birth anniversary of Shri Guru Nanak Dev Ji. In the Guru Nanak Dev University Act 1964, it was emphasized in its objectives that the new university would make provision for imparting education and promoting research in the humanities, learned professionals, and sciences, especially of applied nature and technology. There were other commitment like study and research on the life and teaching of Guru Nanak Dev Ji and to work towards the promotion of Punjabi language and spreading education among educationally backward communities. During the 46 years of its existence, the university has achieved a place in the academic world. It has a major role in promoting education in such fields as science, arts, management, information technology, industrial technology, environment and planning and architecture.

It is spread over 500 acres. Presently, it has 37 academic departments under various faculties, two regional centres and two colleges. It covers various disciplines under the faculties like Applied sciences, Arts and Social Sciences, Economics and Business, Engineering and Technology, Humanities and Religious Studies, Languages, Laws, Life sciences, Physical education, Planning and Architecture, Physical sciences, Sports, Medicine and Physiotherapy, Visual art and Performing arts. In recent years, the university has diversified in a big way its programmes into applied sciences in relation to job-oriented courses.

To promote research among its faculty, almost all the departments have been provided independent computer facilities, Internet connectivity and departmental libraries. More than 100 colleges are affiliated to it and for them it performs its parenting role of directing and monitoring the academic programmes. It has its contribution greatly in accessing higher education to women. The UGC has identified it as a ‘Centre for Excellence in Sport science”. NAAC has accredited the “Five Star Status” to the university.

17 Punjabi University, Patiala web site, Retrieved on April 25, 2009 from (http://www.punjabiuniversity.ac.in).
4.3.3.1 Bhai Gurdas Library

The library of GNDU was named after the great Sikh Scholar Bhai Gurdas who has the privilege of taking dictation from the reverend fifth Sikh Guru Arjun Dev Ji for the compilation of the holy scripture of the Sikhs, ADI GRANTH. Bhai Gurdas library was established in March 1970 in Khalsa College campus with a small collection of about 12000 books. It was shifted to Physics block of university in 1972. Finally it was shifted to its own building in November 1979. It has five storied and inverted pyramid shaped magnificent building. It is directly visible as one enters the university campus. It is centrally located with teaching departments all around.

At present, it has overall five lakh volumes. It is subscribing 165 international and 253 national journals. In addition to this, it is also receiving about 150 journals as gift. The major collection is in English language. It has a rich collection in Hindi and Punjabi languages. It also possesses a significant collection in Sanskrit, Urdu, Persian and other languages. It contains a significant number of rare books and manuscripts. Non-book material is also available in the library. The library has taken initiative to digitize the manuscripts as it has approximately 1515 rare manuscripts related to Punjab history, culture and Sikh religion and other faith. It has digitized more than 800 manuscripts.

It is a member of two national networks, INFLIBNET and DELNET. The library provides access to more than 4500 journals and some databases through UGC-INFONET e-Journals Consortium. In this Consortium, almost all disciplines have been covered. Through DELNET, this library facilitates the faculty and researchers to procure the books, articles and documents on inter library loan which are not available in the library. It conducts library orientation programme for new students in the beginning of the session to familiarise them with various library services, section of the library and their working. Free training to internet is also arranged to the new students.

Almost all house keeping activities are computerized. Earlier, the library was using in-house software for the records of the library holding. Now it is using WINISIS, Window version of CDS/ISIS, after customizing this software according to its needs and requirements. This software serves almost all activities and services of the library. The library has a local area network connected to university network. It is

---

18 Guru Nanak Dev University, Amritsar web site. Retrieved on April 28, 2009 from (http://www.gndu.ac.in).
providing OPAC service to its user and for this purpose six terminals have been dedicated.

4.4 IT infrastructure and facilities available for supporting OPAC in the three universities

IT infrastructure and facilities available for supporting OPAC in universities under study and other related information are given below:

4.4.1 General information regarding OPAC in university libraries

Table 4.1 presents general information regarding OPAC in university libraries surveyed. The table shows that PUC implemented Techlib Plus software in 1997 for library automation and the OPAC is being used from its implementation. Whereas PUP has implemented LibSys software in 1990 and GNDU in 1996 but use of OPAC was started in 1998 and 1999 respectively. It reveals that GNDU and PUP took years to start OPAC services from its year of installation whereas PUC installed software lately but implemented OPAC services from starting. The number of terminals for the OPAC use varies in the three universities. PUC provides five terminals; PUP two terminals and GNDU six terminals for searching the OPAC.

Table 4.1

<table>
<thead>
<tr>
<th>General information</th>
<th>PUC</th>
<th>PUP</th>
<th>GNDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library software</td>
<td>Techlib Plus</td>
<td>LIBSYS</td>
<td>WINISIS</td>
</tr>
<tr>
<td>Year of software installation</td>
<td>1997</td>
<td>1990</td>
<td>1996</td>
</tr>
<tr>
<td>Year of starting of OPAC</td>
<td>1997</td>
<td>1998</td>
<td>1999</td>
</tr>
<tr>
<td>Number of terminals for OPAC use</td>
<td>5</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

4.4.2 Network facility

Table 4.2 exhibits network facility in the three universities. The table depicts that all the three universities have campus wide network. All universities libraries have developed the network within the library building which is connected to campus wide network. Each library has its own server to support automation of library. All the libraries have Internet connectivity to facilitate its staff and users.
Table 4.2
Network facility

<table>
<thead>
<tr>
<th>Network facility</th>
<th>PUC</th>
<th>PUP</th>
<th>GNDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus wide network</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Network within library</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Library network connected to campus network</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Library’s own server</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Internet connectivity</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

4.4.3 Accessibility of OPAC in universities

Table 4.3 represents the accessibility of OPAC in universities under survey. The table reveals that the OPAC is available on local area network and accessible on the entire campus in the three universities. It shows that PUC and GNDU provide Web-OPAC facility and PUP does not offer this facility, but this university has planned to provide it very soon.

Table 4.3
Accessibility of OPAC in universities

<table>
<thead>
<tr>
<th>Accessibility of OPAC</th>
<th>PUC</th>
<th>PUP</th>
<th>GNDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPAC on LAN</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Restricted only to library</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Restricted to library and teaching departments</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>On entire campus</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Web-OPAC</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

4.4.4 Links to online/electronic resources through OPAC

Table 4.4 illustrates the data regarding the accessibility to online/electronic resources through the OPAC. All the libraries have access to some e-resources. But none of the libraries provide hyper links to online/electronic resources through the OPAC.

Table 4.4
Links to online/electronic resources through OPAC

<table>
<thead>
<tr>
<th>University</th>
<th>Access to e-resources</th>
<th>Links to e-resources through OPAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUC</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>PUP</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>GNDU</td>
<td>√</td>
<td>x</td>
</tr>
</tbody>
</table>
4.4.5 User orientation programme

Table 4.5 provides the data related to user orientation programme in the university libraries. The purpose of orientation programme is to familiarize new entrants with the library services including the OPAC. The table indicates that all the three universities conduct this programme once a year. PUC organizes it for both new and old users but the remaining two universities organize it only for new entrants. The strength of users in a group to conduct this programme is 7-10 users, 25 users and 30 users in PUC, GNDU and PUP respectively.

<table>
<thead>
<tr>
<th>Information regarding orientation</th>
<th>PUC</th>
<th>PUP</th>
<th>GNDU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation being conducted</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Frequency of orientation in a year</td>
<td>One time</td>
<td>One time</td>
<td>One time</td>
</tr>
<tr>
<td>Strength of users for orientation</td>
<td>7-10</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Orientation for new and/or old users</td>
<td>New &amp; old</td>
<td>New</td>
<td>New</td>
</tr>
</tbody>
</table>

4.4.6 Availability of card catalogue along with OPAC

Table 4.6 demonstrates the data regarding the availability of card catalogue along with OPAC. The table reveals that all the libraries maintain card catalogue and are still updating to make catalogue facility convenient for those who are unable to use the OPAC.

<table>
<thead>
<tr>
<th>University</th>
<th>Card catalogue available</th>
<th>Still being updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUC</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>PUP</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>GNDU</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

4.4.7 Impact of OPAC according to librarians

Table 4.7 illustrates point of view of librarians regarding the impact of OPAC. The table shows that according to them by using OPAC, the document search as well as image of the university libraries has improved.
Table 4.7
Impact of OPAC according to librarians

<table>
<thead>
<tr>
<th>University</th>
<th>Document search improved</th>
<th>Image of library improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUC</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>PUP</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>GNDU</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

4.5 Summing up

It is clear from the above tables that all the three university libraries under study are using information and communication technologies for managing their functions and services. These university libraries have developed computer network within their building and it is connected with campus wide network. They even have established their own servers to support the automation of their operations. They have automated their functions and services using different library software and are providing OPAC service. The OPAC service is accessible to the entire campus through campus network in various universities studied. All the three libraries have Internet connectivity to facilitate their staff and users. They have access to some e-resources, but none of the libraries provide hyper links to online/electronic resources through the OPACs. Thus, all the three libraries have almost similar kinds of facilities and IT infrastructure to support their OPACs.