Comparative Study of Selected Open University Libraries of India

A Thesis

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By

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Candidate's Declaration

I, hereby, certify that the work, which is being presented in the thesis, entitled **"Comparative Study of Selected Open University Libraries of India"** in partial fulfillment of the requirement for the award of the Degree of Doctor of Philosophy, carried under the supervision of Dr.S.P.Sood and submitted to the (University Department of **Library and Information Science** University Center), University of Kota, Kota represents my ideas in my own words and where others ideas or words have been included. I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree or diploma from any Institutions. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Rohit Nandwana

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This is to certify that the above statement made by (Candidate Name- **Rohit Nandwana**) (Enrolment No.-**2001/----------**) is correct to the best of my knowledge.

Date:_____

(Research Supervisor (s))

(University Department of Library and Information Science /University Center)

C E R T I F I C A T E

I feel great pleasure in certifying that the thesis entitled **"Comparative Study of Selected Open University Libraries of India"** by **Rohit Nandwana** under my guidance. He has completed the following requirements as per Ph.D. regulations of the University.

(a) Course work as per the university rules.

(b) Residential requirements of the university (200 days)

(c) Regularly submitted annual progress report.

(d)   Presented his work in the departmental committee.

(e) Published/accepted minimum of one research paper in a referred research journal,

I recommend the submission of thesis.

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Thesis Approval for Doctor of Philosophy

This thesis entitled **"Comparative Study of Selected Open University Libraries of India" by Rohit Nandwana** submitted to the (University Department of Library and Information Science /University Center), University of Kota, Kota is approved for the award of Degree or Doctor of Philosophy.

Examiner

Supervisor

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Place :_____

Preface

Higher education in India is said to be started with the establishment of three universities in Bombay, Calcutta and Madras during 1850s. However, the establishment of universities took speed only after independence. But the education was only provided in these universities in regular mode, means that a student has to attend classes regularly during working days. Thus, those who either were in services or engaged in other works as well or those were residing in remote areas were not able attend these regular classes. Thus, they were deprived of having education which is against the fundamental rights of the country.

Thus, to provide education to all those who were derived of the same due to one or the other reasons, first open university was opened in the country during 1982 as Andhra Open University at Hyderabad, which later was renamed as Dr. B.R. Ambedkar Open University in 1991. Since then, various open universities have been opened in different states and today there are 13 open universities exit in the country. However, there is Indira Gandhi National Open University at New Delhi which was opened in 1985–it works as the national university of the country and almost all state open universities work under its umbrella.

Thus, the present age is witnessing the continuing development in education, and today we find distance and open learning for those who are in-service or those who cannot afford the regular education due to several reasons. But a good library with balanced and adequate collection is necessary to satisfy the needs of the students pursuing courses through open / distance stream. Therefore, the present topic "Comparative Study of Selected Open University Libraries of India" was choosen for PhD research work.

There are total 7 chapters, bibliography and two appendices in the thesis. Chapter 1 is about the introduction of the education system of India, where a brief description about it during ancient, medieval and modern times. Discussion on Open University system is also made in this chapter. Further, the role of libraries in university system is also discussed.

Chapter 2 is on the Review of Literature where review of literature is presented under two headings: Library Services in Academic Environment and Library Services in Open / Distance University Environment. It is observed that not many studies have been carried out in the library services field for Open University system.

The Research Methodology along with the statement of present problem, its objectives, hypotheses and limitations etc. are discussed in chapter 3.

Chapter 4 is on Library Organization, Management and Collection Development, where discussion on library organization, charts, university library staff with qualifications, and library management with collection development policies etc. are discussed. Open University Library System is also discussed.

Library Services & Resource Sharing and Library Finance are discussed in chapter 5. A discussion on different sections of a university library, it collection management – library classification and cataloguing, different library services and resource sharing is made in this chapter.

Next and the main chapter is Chapter 6 that is on Data Collection, Tabulation and Analysis. Here the tabulation and analysis of the data collected from different libraries under study are analyzed for confirming the objectives and hypotheses made in the study.

Discussion and Conclusion are presented in last chapter that is chapter 7. Hypotheses of the study are also verified here. Besides, future scope of the study and limitations are also discussed briefly.

Lastly, a bibliography is appended in the thesis and also two appendices are there on the format questionnaire on which the data were collected from different libraries. APA style is used in citing the references and bibliography.

Dated: **(Rohit Nandwana)**

Acknowledgement

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Dedicated to

Lord Shree Krishna

Contents

Chapter – 1

Introduction

1.1. Introduction

Education is the most potent builder of a nation that equips the society with the fittest who are capable of being "adoptative, adaptative and adept". It is a basic tool of cultural and social development of the country, where higher education plays a major tool for bringing about socio-economic transformation. The objective of education can be summarized as:

"असतो मां सद्गमय"।

"तमसो मां ज्योतिर्गमय"।

"मृत्योर्मा अमृतं गमय"।

It means: Lead me from falsehood to truth!, Lead me from darkness to light! And Lead me from death to immortality. Where truth, light and immortality constitute a trinity and are incomplete without each other. this trinity provides a wide and lofty framework to the system of education.

If we talk about the education system, its roots can be traced back to Vedic period when Guru Shishya Parampara was the most prevalent. The students used to live in the house of the Guru and acquire knowledge traditionally. This system is called Gurukul system of learning. The meaning of Gurukul is, "learning while living with the Guru in his house". The student while living in a Gurukul would offer services to the Guru and at the same time, living under a stringent discipline, spending moderate lifestyle and perpetually practicing whatever education has been given to the student by the Guru and learning by heart was the only way to receive knowledge.

Balwaria and Gupta[1] mention that "Buddhist Education System in the 5th B.C. by Lord Buddha education system came into the existence known as Buddhist education system. It was most important system of education in early medieval period. In this

period, Brahman teachers deprived the common people of their right to education. The emergence of Buddhism rented the people the freedom to obtain education and to practice their religion themselves. This system of education was monastic. In monasteries and Vihara teaching is taken care by monk or 'Bhikkhu'. They were placed under the inchargeship of two superiors, qualified by learning, character and standing, who were called the 'Upadhyaya' and 'Āchārya'. 'Upādhāya' was entrusted with the duty of instructing the young Bhikkhu in the sacred texts and doctrines, while the 'Āchārya' assumed the responsibility for his conduct and discipline. The teacher himself must spend at least ten years as a monk and necessarily must have the purity of character, purity of thoughts and generosity. Both the teacher and student were responsible to the monastery. Both were following the "simple living and high thinking" principle.

1.2. Education during Mughal Regime or Late Medieval Period

The foundation of Muslim rule in Northern India was laid down by Mohammad Gori after defeat of Prithviraj Chauhan. Muslim ruled over India for almost five hundred years and its influence was comparatively more in the North than the South. The rulers provided aid to schools called as Maktabs and Madarassas. The small schools (Maktabs) were regularly given financial aid. For bigger institutions Madarassas were granted landed property. For permanent financial provision most of the schools were connected with Mosques.

Balwaria and Gupta[1] further state that the main aim of education was to produce religious men and to bring out the latent faculties of the students, to discipline the forces of their intellect and to equip them with all that was essential for their moral and material development. Education was regarded as a preparation for life and the teacher who helped his pupils to achieve this end, he held a very respected position in the society. Like ancient India, medieval India also presents no example of any formal college for teachers' training.

Tiwari[2] remarks that as learning resources, they have libraries as a rich source of teacher education, for example, Imperial Library of Bijapur, a small amount of which still exists in Asari Mahal, had a rich collection of such books which could be highly interesting for the scholars of Arabic and Persian literature. Great emperor Akbar also

helped to a great number of scholars and teachers to earn renown. Besides, several books of repute were written during Akbar's time which served the purpose of teacher education. 'Akbar Namah' and 'Ain-i-Akbari' by Abul Fazl etc. are some of the most marvellous masterpieces of Persian literature produced in Muslim India during the reign of Akbar. Those scholars further enhanced their knowledge by a large number of Sanskrit and Hindi books which were translated into Persian under the imperial sponsorship.

According to Ray[3] the Imperial Library of Akbar and his successors flowed richly with the books on history, philosophy, science and religion. Any scholar who had access to this library must have had the rare opportunity of broadening his insights. So the teachers in medieval India although did not have any full-fledged college to educate themselves, still had several other means to amass the wealth of knowledge. One system which continued from ancient period till the medieval times was the 'Monitorial System'. During this period the students was given severe corporal punishment on the charge of indiscipline. Again proper importance was not given to woman education.

1.3. Education System in Modern India

The history of modern education in India started with the arrival of European missionaries in the Indian sub continent. Before the arrival of the Britishers in India, the European Missionaries first start scholars and later initiated teacher education institutions. The impact of colonial rule on India has or made the education system less innovative, non creative and least original.

Indian Education system in real sense as we have it today, started with the establishment of British Government after arrival of East India Company in India. They started changing the Indian Education system gradually and one day we were there with a completely new process of educating people. They transformed the whole system to encapsulate European attitude in Indian children. They emphasized on use of English in education rather than our own native languages. They started textbook culture in India. The motive of introducing textbooks was to stop children from producing new knowledge and made them think that they were mere consumers of the knowledge which the textbook writer wants to convey to them. The second and the most dangerous impact of introduction of text books was the degradation of respect of teachers in Indian society.

The teachers lost the right of deciding what to teach and how to teach. They had to just follow the matter given in textbooks. The second concept introduced by the British in Indian Education was that of the examinations. It was a plan of British to have a centralized control of Indian Education System through the introduction of examination system. So the students were limited to learn only those things which were supposed to be covered in the examination and rest of the things was left. In this way the area of knowledge became very narrow. Examination system gave rise to a serious implication known as cramming in students. The students started memorizing things whether understood or not so that they could clear the exam. Indian students were not very good at English those days. So they just started memorizing the concepts in English rather than learning by heart (Kumar[4]).

It is observed that Indians educated in Hindu or Muslim institutions were not useful for working in the offices of the British government, Lord Macaulay drew up a plan of Western oriented Education in India. The policy developed on the basis of Macaulays' educational views gave primacy to the propagation of European literature and science, suspension of scholarships for students, neglect of publication of Eastern literature and encouragement to propagation of English literature. Lord Benting accepted this policy. When Lord Auckland succeeded Macanlay as India's Governor general, some critics of Macanlay's policy presented a memorandum to him. Lord Auckland increased the educational grant for the orientalists, increased scholarships and made arrangements for the publication of oriental works.

However, East India Company, employed only those who received English Education, A significant change in the field of Education was its intimate link with livelihood. Domestic hand crafts were neglected and many artisans and craftsmen sought employment in British Factories.

Thus, "the foundation for modern education was laid by the Britishers. They set up network of schools to impart western education in English medium (Perkin[5]). First such college to impart western education was founded in 1818 at Serampore near Calcutta. Over the next forty years, many such colleges were established in different parts of the country at Agra, Bombay, Madras, Nagpur, Patna, Calcutta, and Nagapattinam. Its

historical landmarks are McCauley's Policy of 1835 to promote European learning through English, Sir Charls Woods' Dispatch of 3 1854 which for the first time recognized the need for mass education with private and missionary help and gave up the policy of selective education known as the 'filtration theory' and finally the first Indian Education Commission of 1882 which recommended the initiative of private agencies in the expansion of education.

An important step in the history of Indian education is marked by Sir Charles Wood's epoch-making Dispatch of 1854, which led to (1) the creation of a separate department for the administration of education in each province, (2) the founding of the universities of Calcutta, Bombay, and Madras in 1857, and (3) the introduction of a system of grants-in-aid. Even when the administration of India passed from the East India Company into the hands of the British crown in 1858, Britain's secretary of state for India confirmed the educational policy of Wood's Dispatch (Sudha Rao and Singh[6]).

As far as the modern system of education is concerned, the development in education system of India can be studied under tow heads – education during 1857-1947 and education after independence.

1.4. Education during 1857-1947

The reigns of India's administration after the war of Independence in 1857 passed in to the hands of British parliament. Woods dispatch had removed the monopoly of Christian missionaries over education in India. Twenty eight years after the Dispatch of 1854 the Government of India appointed an education commission to enquire particularly into the manner in which effect has been given to the principles of the Dispatch of 1854 and to suggest such measures as it may think desirable in order to the further carrying out of the policy therein laid down. The commission of 1882 is popularly known as Hunter's commission after the name of Sir William Hunter, who was appointed as the president of the commission by Lord Rippon, the Vice Roy of the country, to survey Education in India. The commission – surveyed primary, secondary, higher, religious and women Education in India and made important recommendations. Some of its recommendations were as follows:

- Provision in Education must be made for Muslims Harijans, tribals, hill people and members of Royal families.

- Indian Institutions should be provided aid.

- Scholarships must be provided to local institutions.

- The responsibility for higher education should be entrusted to local people and the government should provide aid.

- The Education department should run institutions of higher learning in the country.

- There should be complete freedom for religious education.

1.4.1. Indian University Commission - 1902

The period from 1897 to 1902 was the period of silence in Indian history. Two dreadful famines and ravaging plagues had shaken India. In 1899 Lord Curzon was appointed Governor General of India. In his seven years' rule, Curzon paid his attention to each and every aspect of administration. But another important land mark in the history of modern Indian – education, was universities commission. Some of its important recommendations are (Sharma and Sharma[7]):

- New Universities should not be established.

- The Constitution of Universities should be changed to make provisions for teaching in the universities.

- Under graduate and post graduate colleges should be introduced.

- Conditions for recognising colleges should be stern.

- The Syndicates should have from 9 to 15 members.

- The standard of Metric Examination should be improved.

1.4.2. Indian Universities Act 1904

Indian Universities Act of 1904 was formulated on the basis of these recommendations. Lord Curzon made significant efforts for the progress of higher education in India. However, in the Calcutta session of Indian National Congress in 1906, a demand was raised for a nationalist policy of Education. It asked for Indian control of the Educational system. It asked for more Vocational Education. It denounced imitation

of the west, though it appreciated Western knowledge and science. The government did not give much importance to these damands. This denial gave scope for emergence of National spirit and starting of Institutions like Santiniketan, Gurukul, Kangri, Jamia Milia Islamia, Guzarat Vidyapith, Kashi Vidyapith, the women's university (SNDT) etc. These institutions had a distinctly national character.

In 1912 the government announced its Educational policy. It proposed, making primary education village oriented. Government aided institutions were replaced by institutions managed by local bodies. The school education was separated from higher education.

1.4.3. Sadler Commission

After the First World War, the government appointed Calcutta University Commission in 1917 that is also known as Sadler Commission. Its report was formulated on the basis of Halden's report on London University. On the basis of this report, universities were opened in Mysore, Patna, Banaras, Aligarh, Dacca, Lucknow, Hyderabad and Calcutta.

Besides, some other commission and committees were also formed for enhancing the system of education in the country. To quote some important are: Hertog Committee in 1929 reviewed education in India and had analysed the problem of failing candidates in Secondary Education. Important suggestions regarding vocational educational were also suggested by the commission. They are:

- A student should have the opportunity to choose industrial and vocational courses after middle school.
- To diversify the courses and curriculum at secondary school level so that children could take up suitable vocations at the end of that level, based upon what they had been taught and trained in (Padma and Ramkumar[8])

Later, Sapru Committee in 1934 reviewed the problem of unemployment in U.P and suggested introduction of vocational subjects at the Secondary level.

1.4.4. Abbot-Wood Report in 1936-37

Since 1931 there had been a slump in the economic field in India resulting into much unemployment. Therefore in 1936-37 the Government of India invited two British experts, A. Abbott and S. H. Wood, to come to India and prepare a plan for vocational education in the country. This report is known as Abbot-Wood Report. The committee strongly believed the problem of unemployment in India could be solved only through industrial development of the country. It, therefore wrote, "the development of the industry which will offer employment, depends upon the natural sources of the country, climate, conditions and upon actions in the fields of economics and politics, which do not come within our terms of references" (Chandra et.al. [9]).

During 1938 and 1943 the Central Advisory Board of Education, however appointed several committees to review various educational problems in the country and make suitable recommendations. The recommendations of all these committees have been generally incorporated in the most important reports of the Central Advisory Board of education on "post-war Educational Development in India" in 1944 which is popularly known as the "Sergeant Scheme".

Sargent Commission, 1944 recommended for distinction between academic and technical institutions, though both should aim at integral education. It is a comprehensive treatise on the problems and future organizations of Primary to University education in India. This was the first report that presented a comprehensive picture of education in India (Dash[10]).

Some other notable contribution was made by M.K. Gandhi who on October 2, 1937 presented his 7 years basic primary Education Scheme. It was formulated by Wardha Committee under the Chairmanship of Zakir Hussain and it was organized and implemented by Hindustani Talimi Sangh.

Thus, upto independence (1950-51), there were 27 universities and 696 colleges with an enrolment of 3.68 lakh students and teaching faculties of 19,047. Within a span of 40 years the rate of growth has been very impressive. In 1990-91 there were 177

universities including deemed universities and 7,121 colleges, 44.25 lakh students and 2,13,125 teachers (Pattnaik and Mohanty[11]).

1.5. Education after Independence

British control over Education ended with the attainment of Freedom of India. On 15th August, 1947 with it also ended the period of modern Indian Education as distinguished from contemporary period. India after independence made concerted efforts to improve access to higher education and the system grew rapidly after independence. No doubt Indian higher education is one of the largest, other one being China and the United States. Up till 1980, the higher education was largely confined to arts, science and commerce. Over a period of time, the growing demand for higher education and its relevance in business and industry was felt by people. Quality-wise they had maintained standards and resources were limited. The reforms in early 90s saw the middle class population larger, younger, richer and the country supported entrepreneurship. Thus, education was seen not only as a status symbol but also as a means to get ahead of others.

However, the first significant step taken by the Government of India in the field of education was the appointment of the University Education Commission in 1948 under the Chairmanship of Dr. Sarvapalli Radhakrishnan, a distinguished scholar and former vice-chancellor of Banaras Hindu University and who became the second President of India. This Commission was appointed by the Government of India to go into the problems and prospects of Indian University Education and to suggest improvements and extensions that might be considered desirable to suit the present and future requirements of the country. The Commission was appointed in November, 1948 and it submitted its report in August, 1949 which is of great importance as it has guided the development of university education in India since independence. Inter-University Board of Education and Central Advisory Board of Education recommended to the Government of India that an All India Commission on Education should be appointed to inquire into the requirements of the higher education in India and to put forward the recommendations for the re-organization of the University Education system in the light of the requirements of the country and its traditions. (http://www.kkhsou.in/main/education/education_ 1948.html). Because of the fact that Dr. Radhakrishnan was the Chairman of the

Commission it is known as 'Radhakrishnan Commission'. There were 10 members in the commission.

But further, the need for competitive efficiency, growth in population and technological developments, and competition all over the world had led to privatization and globalization of higher education 1991. The purpose of globalization and global education was to develop a 'global perspective' and sensitize the youth for understanding the multicultural world. The youth has to be aware of the global happenings and issues and the interdependence of people around the world. Therefore, the main challenges in education in 1990s was qualitative improvement in content and processes of education; to make them more responsive to learning needs of individuals and consolidation and newer orientation wherever required in different areas of education through innovative programmes and changed role of educational personnel (Kaur[12]).

Thus, the higher education system of India has expanded at a fast pace by adding nearly 20,000 colleges and more than 8 million students in a decade from 2000-01 to 2010-11. Today, there are 666 universities, with a break up of 43 central universities, 329 state universities, 197 state private universities, 32 deemed universities, 90 private deemed universities and 75 Institutes of national importance which include AIIMS, IIT's and NIT's among others in 2016. Other institutions include 39,071 colleges as Government Degree Colleges and Private Degree Colleges, including 1800 exclusive women's colleges, functioning under these universities and institutions as reported by the UGC in 2016.

1.6. University and the Libraries

A university mainly stands for higher learning and research. It is like a community where scholars and teachers are its head, students are the body and the library is the heart. The primary aim of university education is to cater to the needs of those who are interested in higher education and those who want to spread their knowledge in the interest of nation and society. Once Pt. Jawahar Lal Nehru, the late Prime Minister of India in 1947 remarked about the importance of university in the following words: "a university stands for humanism, for tolerance, for research, for adventure of ideas and for search of truth" (Kothari[13]).

A university that is a derivation of Latin word – universitas means as "a whole", is an institution of higher education and research which grants academic degrees in various subjects and typically provides undergraduate education and postgraduate education (https://en.wikipedia.org/wiki/University#cite_note-1).

While Dictionary of Education defines university as "an institution of higher education which has a liberal arts college; offers a programme of graduate study; has usually, two or more professional or faculties; and is empowered to confer degrees in various fields of study" (Good[14]).

The present age is witnessing the continuing development in education, and today we have *distance and open learning* for those who are in-service or those who cannot afford the regular education due to several reasons. But a good library with balanced and adequate collection is necessary to satisfy the needs of the students pursuing courses through open / distance stream. Thomas Carlyle has rightly stated that, "the true university of these days is collection of books" (Wilson[15]). A university is rated largely by its library. No university can develop effective work, in the academic sense, without a strong library as its centre.

Dongerkery[16] states that "a well stocked and up-to-date library is a sine qua non for every modern university. It is the central workshop of the university which provides the student, the teacher, the scholar and the research worker with the tools require for the advancement as well as acquisition of the knowledge. [It is equivalent to] what the laboratory is to the workers in the field of the humanities and the social sciences".

Sri Phadya[17] observing on the situation of university libraries states that "a university library is not merely storage of books and other reading and non reading materials and preservation of them, but is a dynamic instrument of education". However, the sole aim of an education system is to promote learning and extend the boundaries of knowledge. Thus, to satisfy this demands of readers a university and higher educational institution has to depend upon its library.

Kothari Education Commission (Kothari[13]) in its report clearly defines the functions of university libraries in order to realize the objective of university education as under:

(i) To provide resources necessary for research in fields of special interests to university;

(ii) To aid the university teacher in keeping earliest of development in his field;

(iii) To provide library facilities and services necessary for success of all formal programme of instruction;

(iv) To open the door to the wide world of books that lie beyond the borders of one's own field of specialization and;

(v) To bring books, students, and scholars together under conditions which encourage for pleasure, self discovery, personal growth and sharpening of intellectual curiosity".

But the Association of Indian Universities[18] in its report titled "National Policy in University Libraries" has enumerated the following objectives of a university library:

(i) To support the teaching and research programmes of the university.

(ii) To develop its collections by acquiring necessary reading materials to meet the present and future needs of its users for who it is meant.

(iii) To organize its collections, operations and services so as to provide for the reading materials for the reading materials and information needs of its users in anticipation and on demand. Networking and resource sharing among university libraries should be practiced by each institution towards utilization of all resources.

(iv) To introduce, if necessary, the technological innovation like computer/word processing etc. to facilitate users getting prompt service.

(v) To provide facilities like reprography, interlibrary loans and translation and documentation to assist the users.

(vi) To promote library user education and relate to technological innovations so that the academic librarian will no longer remain a craftsman, but serving educationist through technological means.

(vii) Towards achieving the above goals, to get adequate financing, staff, storage and other facilities.

(viii) Maximize efficiency of services with reference to inputs/expenditure so as to make library services cost-effective.

However, with the globalization and impact of WHO on the education system, privatization of the higher education was started (Dhiman [19]) and as a result, many private universities have emerged in recent past all over the country.

Now, we have 749 universities in the country and out of them, 235 are private universities (as given in table 1).

Table 1: List of Universities in India (As on March 2016)

State	Central universities	State universities	Deemed universities	Private universities	Total
Andhra Pradesh	0	20	5	0	25
Arunachal Pradesh	1	0	1	7	9
Assam	2	12	0	4	18
Bihar	3	15	1	0	19
Chandigarh	0	1	1	0	2
Chhattisgarh	1	13	0	8	22
Delhi	5	7	10	0	22
Goa	0	1	0	0	1
Gujarat	1	25	2	24	52
Haryana	1	14	6	19	40
Himachal Pradesh	1	4	0	17	22
Jammu and Kashmir	2	7	1	0	10
Jharkhand	1	7	2	3	13
Karnataka	1	24	14	12	51
Kerala	1	13	2	0	16
Madhya Pradesh	2	21	1	18	42

State	Central universities	State universities	Deemed universities	Private universities	Total
Maharashtra	1	21	21	5	48
Manipur	2	0	0	1	3
Meghalaya	1	0	0	8	9
Mizoram	1	0	0	1	2
Nagaland	1	0	0	2	3
Odisha	1	12	2	3	18
Puducherry	1	0	1	0	2
Punjab	1	9	2	13	25
Rajasthan	1	21	8	41	71
Sikkim	1	0	0	5	6
Tamil Nadu	2	22	28	0	52
Telangana	3	16	2	0	21
Tripura	1	1	0	1	3
Uttar Pradesh	5	24	9	24	62
Uttarakhand	1	10	3	11	25
West Bengal	1	25	1	8	35
Total	**46**	**345**	**123**	**235**	**749**

(Source :https://en.wikipedia.org/wiki/List_of_universities_in_India#cite_note-ugc.ac.in-10)

They are running various courses particularly the technical courses in self-financing mode. But these are also insufficient to cater the needs of our population. Thus, the concept of open and distance education system came into vogue.

1.7. Open / Distance Education System

Thus, In order to meet challenges of access and equity to higher education for large segments of the population, and in particular, the disadvantaged groups such as those living in remote and rural areas including working people, housewives and other adults who wish to upgrade or acquire knowledge through studies in various fields, academic institutions and government sector were looking for an alternative system of education that can provide access to learning of information as well as a degree for recognition like traditional system of education (Kundu[20]).

Open and distance learning in India started around 1960s. By the 1980s, there were 34 Universities offering correspondence education through departments designed for that purpose. The first single mode Open University was established in Andhra Pradesh in 1982 as Andhra Pradesh Open University on 26 August 1982 through APOU Act 1982 (Ramanujam[21]. This University was renamed as Dr. B.R. Ambedkar Open University on 7th December 1991 by the Government of Andhra Pradesh through APOU Act of 1992. Kundu[20] further adds that in 1985, the Union Government took initiative for establishment of a National Open University and on 20th September 1985, Indira Gandhi National Open University (IGNOU) came into existence.

Apart from the above two open universities, we have another 13 State Open Universities set up by the respective state grants as shown in table 2. They are single mode institutions means they are providing education only in the distance mode and art catering to the people who are unable to pursue regular courses due to various reasons. Additionally, there 140 dual universities offering programmes/courses through the distance mode. Thus, about 40% universities in India are offering distance education To maintain educational standard and strong co-ordination among all ODL institute, Distance Education Council (DEC), was established in 1991 under section 16(7) read with Section 5(2) of the IGNOU Act, 1985. Since then DEC, as an apex agency, was responsible for recognizing ODL institutions in India.

It was mandatory for all institutions to seek prior approval of the DEC for all existing and new programmes offered through distance mode. From 4th May 2013, IGNOU through a notification repealed and deleted the statute that provisioned for the DEC. From this time UGC has become a regulatory authority for higher education through open and distance learning mode (ODL).

But it is seen that inspite of open universities, the initiative did not discourage the expansion at the same time of correspondence programs in dual mode universities. The year 1995 witnessed the enrolment of 200,000 students in open and distance learning, accounting for 3% of total higher education enrolment (Ghosh[22]).

Table 2: List of State Open Universities in India

S.No.	Name of the SOU	Address	Phone No.s	Email/Website
1.	Dr. B.R. Ambedkar Open University (BRAOU), Hyderabad, A.P. - (1982)	Prof. G. Ram Reddy Marg Road No.46, Jubilee Hills, Hyderabad - 500033	Tel: 91-40-23544910 Fax: 91-40-23544830	open[at]braou[dot]ac[dot]in
2.	Vardhman Mahaveer Open University (VMOU), Kota, Rajasthan - (1987)	Rawatbhata Road, Akhelgarh, Kota-324010, Rajasthan	Tel: 91-744-2471254 Fax: 91-744-2470451	http://www.vmou.ac.in/
3.	Nalanda Open University (NOU). Patna, Bihar - (1987)	IIIrd Floor, Biscomaun Bhawan, West Gandhi Maidan, Patna - 800001, Bihar	Tel: 91-612-2201013 Fax: 0612 2201001	nalopuni[at]bih[dot]nic[dot]in
4.	Yashwantrao Chavan Maharashtra Open University (YCMOU), Nashik, Maharashtra - (1989)	Dnyanagangotri, Near Gangapur Dam, Nashik-422222, Maharashtra	Tel: 91-253-2231714, 2231715 Fax: 91-253-2231716	openuniv[at]vsnl[dot]com
5.	Madhya Pradesh Bhoj Open University (MPBOU), Bhopal, M.P. - (1991)	I.T.I (Gas Rahat), Building Govindpura, Bhopal – 462 023	Tel: 0755 2784102, 5272017 Fax: 91-755- 2600704	vc[at]rbuphop[dot]mp[dot]nic[dot]in
6.	Dr. Babasaheb Ambedkar Open University (BAOU), Ahmedabad, Gujarat - (1994)	Govt. Bungalow No.9, Dafnala, Shahi Baug, Ahmedabad-380003, Gujarat	Tel: 91-79-22869690/91 Fax: 91-79-22869691	baou[at]sancharnet[dot]in

S.No.	Name of the SOU	Address	Phone No.s	Email/Website
7.	Karnataka State Open University (KSOU), Mysore, Karnataka – (1996)	Manasagangotri, Mysore - 570006, Karnataka	Tel: 91-821-2515149 Fax: 91-821-2500846	vcksou[at]eth[dot]net
8.	Netaji Subhas Open University (NSOU), Kolkata, W.B. - (1997)	1, Woodburn Park, Kolkata -700020, West Bengal	Tel: 91-33-22835157 Fax: 91-33-22835052	nsou[at]cal2[dot]vsnl[dot]net[dot]in
9.	U.P. Rajarshi Tandon Open University (UPRTOU), Allahabad, U.P. - (1998)	17, Maharshi Dayanand Marg (Thornhill Road), Allahabad, Uttar Pradesh	Tel: 91-532-2621840, 2623250 Fax: 91-532-2624368	uprtou_alld[at]hclinfinet[dot]com
10.	Tamil Nadu Open University (TNOU), Chennai, Tamil Nadu - (2002)	Directorate of Technical Education Campus, Guindy, Chennai-600 025	Phone: 044-22351414 Fax: 044 2220 0601	http://www.tnou.ac.in/
11.	Pt. Sunderlal Sharma Open University (PSSOU), Bilaspur, Chhattisgarh - (2005)	Near Pandit Deen Dayal Upadhayay Park, Vayapar Vihar, Bilaspur (Chattisgarh) -495001	Phone No: 07752 – 514255 Telefax : (0771) 2221259	http://www.pssou.ac.in/
12.	Uttarakhand Open University, Haldwani, Distt. Nainitall, Uttarakhand	Teenpani Bypass Road, Transport Nagar, Haldwani-263139, Distt. Nainital, Uttarakhand	Tel: +91 5946 261122, +91 5946 261123 Fax: +91 5946 264232 Toll Free No.18001804025	http://uou.ac.in/

S.No.	Name of the SOU	Address	Phone No.s	Email/Website
13.	Krishna Kanta Handique State Open University, Guwahati, Assam	Housefed Complex, Last Gate, Dispur, Guwahati – 781006, Assam	Ph. No: (0361) 2235971, 2235642 Fax: (0361) 2235398	http://www.kkhsou.in/web/

(Source : http://mhrd.gov.in/technology-enabled-learning-sou)

Note: Besides, there is one national university that is known as Indira Gandhi National Open University and its headquarter is at New Delhi but in almost in each state, it has regional / branch offices.

Ghosh further mentions that most open and distance learning universities in India follow the model of the UK Open University. They co-ordinate communication and collaboration through the Distance Education Council (DEC), founded in 1992. DEC is responsible for the promotion, co-ordination, and the maintenance of quality and standards. A range of factors including emerging ICTs, liberalization, privatization and globalization have amplified the demand for open and distance learning. While the government is responsible for more than 90% of open and distance learning funding, plans are underway to involve the private sector more closely, especially through permitting the increase of fees.

There are various advantages for opting open universities course. Pattnaik and Mohanty[11] have detailed out some of them as follow:

- Supplement the efforts of traditional system: The traditional system is partly unable to meet the needs of the growing number of students.
- Equality of Opportunity: The Open University offers a sound chance of updating and acquiring higher education to all.
- Expand Geographical access to Education: The Open University reaches every inaccessible area through printed and electronic media.
- Expand the capacity for Education in new areas: Traditional system provides education within the time frame. The Open University system meets the needs through fresh courses specially designed for the scientific and technological changes.
- Education in Natural Environment: Through the Open Universities, the students can learn while working as well as living in home environment.
- Flexibility: The Open University system meets the requirement of large no. of people in a manner to suit their need.
- High Potential for In-service Education: Now with the advancement in the field of science and technology, to reap the benefit of new development, the govt. has set up training institutes to upgrade the skill and knowledge of personnel working in govt. sector. It can be done through Open University. It can increase the coverage in terms

of contents and also nos. it can provide in-service training especially for technical personnel.

- New Methods of Instruction: The much needed flexibility in the Open University offers the use of a variety of instructional methods in imparting quality education at a distance.

- Student Support Services: Students support services consist of networking of study centers and Regional Centers where the Counsellor/Tutors act as the surrogates of teachers in classrooms and interact with the learners and are well equipped with audio-video cassettes, libraries and etc. In this case the learner can make the best use of what the learning package offers to him.

Besides, the courses of Open University system are cost effective.

1.8. Role of University Libraries in Education

The academic library has been described as the "heart" of the learning community, providing a place for students and faculty to do their research and advance their knowledge. The librarians and library staff provide numerous services to these users, addressing their diverse needs, characteristics, and interests (Simmonds and Andaleeb[23]).

University library that is a part of university set-up plays a major role in daily life. Every library programme supports university's total progress. It reflects the character of the university. But our education system is under great strength and stress and university library being an integral part of the university system is equally affected. University libraries in India have to cope not only with increasing number of users, but also with the users from newer field of the study, teaching and research. The interdisciplinary approach in many of these fields has led to the additional dimension to the situation, where university libraries are hopefully expected to respond meaningfully to the changing needs. Needless to say, its organization must be geared to present and future needs and also be oriented to the demands of the modern world's student, teachers and research workers.

However, academic libraries' services have changed very fast in the last twenty years. Nowadays, electronic resources, networks and the World Wide Web represent a large parcel of the library services. "With the advent of online catalogues, CD-ROMs, online data-bases, other electronic resources, new methods of document delivery, and access to information, the

role of the academic library has begun to change. Students do not have to be physically present in the library in order to access the library's resources. With the Internet and the availability of new technologies and numerous indexes, abstracts, and databases, the range of services that academic libraries can provide has increased dramatically. Users can access the libraries' resources without stepping into the library building" (Simmonds and Andaleeb[23]).

Melo and Sampaio[24] mentions that during the last twenty years, researchers and librarians from all over the world have created performance indicators and methodologies for the traditional services. But the library services that are traditionally being provided to regular students cannot be equally beneficial for open / distance learning community due to its varied nature in comparison to regular mode students.

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Chapter - 2

Review of Literature

The review of literature enables to avoid the duplication of research work and broadens the understanding of the research problem. Various studies have been carried out on different aspects of library services in university and college environment by different authors in India and abroad. Though the studies on library services and their use by the end-users have been scattered in other fields like information science, communication studies, etc; therefore it is difficult to collect them in systematic way.

Thus, this review of literature includes studies on library services in traditional academic environment and in open / distance university environment being provided by different libraries for the benefits of their users. Some important of them include the following:

2.1. Library Services in Academic Environment

Naidu[1] has studied "College Libraries in Andhra Pradesh: With Special Reference to Andhra University" to find the causes leading to unhappy situation of libraries. It is disclosed that the gloomy picture of college libraries and suggested to lay down some norms and standards for college libraries by inspection commission of each university. This study suggests that atleast 6% of the college budget should be spent on library.

Alabi[2] has made a survey on the computerization of library services in seven Nigerian University libraries. This study shows that one of the major constraints of library automated systems in Nigeria is that of securing right caliber of personnel for the running of systems. This restriction is not restricted to library automation but also for computer installation.

Kumbar[3] has assessed the existing situation and status of 54 college libraries through questionnaires and interviews methods. This survey represented a disappointing picture of

libraries as only 12 libraries had their own buildings. Though, 14 libraries were spending more funds on books and comparatively less on periodicals but library services were not found satisfactory.

Chandran[4] has conducted a survey to study the use of internet resources and services in S.V. University, Tirupathi. The study reveals that most of students, researchers, and faculty use Internet facility available within the university campus. Most of the respondents use Internet for communication of mails and gathering news. Besides, the WWW and e-mail were the popular Internet services.

A study on the "Use of Library Facilities and Information Resources in Sahyadri College" was studied by Kumbar and Lohar[5]. The main aim of the study was the use of resources and services of their respective college's libraries. Various aspects of libraries regarding use of resources, services and physical facilities were examined during study.

Singh[6] has brought forward a study on the use of college libraries by faculty members of University of Delhi. This study that textbooks were most frequently used resources, followed by reference books and general books. Main purpose of visiting library was to prepare notes for students. Journals and textbooks were not considered very adequate. Almost all the faculty members favoured need for computerization of their libraries.

Using questionnaire method of survey among the lectures at the University of Ibadan, Nigeria to investigate the impact of information technology on their research activities and problems that hinder the use of IT is studied by Sangowusi[7]. This study revealed that the information technology has influenced the respondents' research work as follows: increases formal communication; improves quality of work; widens the scholarly community; increases publication; produces more work in less time; improves creativity; and makes it easier to put publication together.

A survey in 14 central university libraries for the computer systems and software used, computerized library operations and development of databases by Venkataramana and Chandrasekhar Rao[8]. It is found that some of the libraries were providing Internet access service, CD-ROM search service, CAS, SDI, accession list, reference service, and online search service to the users. The study suggested the libraries to plan systematically for successful implementation of IT in the libraries and derive maximum benefits and minimise problems.

The use of Online Public Access Catalogue by research scholars in Karnatak University Library is assessed by Sangam and Hadimani[9]. It is examined that the users frequency of use and purpose of consulting OPAC, difficulties in locating books, OPAC for periodicals and other reading material, time spent in using it, approaches followed to locate material, assistance from library staff in using OPAC, etc. Some users suggested for up to date library guides explaining how to use catalogue.

Ahmad and Haridasan[10] carried out a study of periodical collection in national library of veterinary sciences, Izatnagar (Bareilly). It was found that About 310 foreign journals and 120 Indian journals are being subscribed by the institution. The findings of the investigation revealed that most of the respondents were satisfied with the periodicals collection.

Kaur[11] has conducted a survey for the use of e-resources use by the teachers and researchers of Guru Nanak Dev University using questionnaire method. It is noted that the purposes for using e-resources were: research/project work; teaching purpose; publishing articles/book; keeping-up-to-date in the subject area; finding relevant information in the area of specialization; and for getting current information. But most of the respondents found the information adequate and the slow speed of Internet was judged as the major problem.

A study on the use of electronic resources by faculty members of Bapuji Institute of Engineering and Technology is conducted by Lohar and Roopashree[12]. It is found that the faculty use Internet, CD-ROMs, e-journals, e-books, online databases, and OPAC. They also

use e-resources to access current information. But the lack of hardware and software, lack of training, lack of information on e-resources, and lack of time are some of the problems facing by the users. The study also suggested the conduction of training to create awareness of e-resources among faculty and provide funds to develop IT infrastructure in the library.

Use of Internet by teachers, researchers and students of Mysore University is studied by Mulla and Chandrashekhar[13] using questionnaire method. This study reveals that Internet was a useful source of information and they use it for e-mail, and accessing information required for their work. Most of the respondents were satisfied with the information that found on the Internet. They took assistance from the friends for gaining knowledge of the Internet.

Saraf and Jain[14] have studied the library services in networked environment at Banaras Hindu University Library. It is noteworthy to mention that the Library is a part of UGC-Infonet and INDEST consortium for e-journal subscription and it is providing access of Internet through 12 nodes. But the need to create awareness among the users about the availability of these services is felt necessary in the study.

Kaur and Satija[15] have listed, the major challenges with regard to electronic resources are: complicated procurement and preservation system; technological obsolescence; non-compatibility of organizational culture to digital environment; security in library environment; absence of a national repository of digital documents and legislative provisions in this regard; financial constraints; resistance to change; decentralization of library services; access related problems; and problems related to check the reliability and authenticity of digital information.

The problems and prospects of Collection-development policy in academic libraries are studied by Kumbar and Hadagali[16]. They are of the opinion that indeed an opportunity to better serves the user community by developing a need based, relevant and variable cost

effective collection sometimes without owning but providing access to information through networking.

The use of Internet by faculty and students of engineering colleges exist in three districts of Karnataka state is studied by Kumbar and Vasantha Raju[17]. It is found in the study that most of the respondents use Internet only for e-mail followed by for entertainment, and for preparing assignments, seminars. Less number of respondents use Internet for career opportunities, keeping abreast with new developments, and publish papers. Retrieval of unwanted pages, less speed, system hang-up, and power failure were the problems faced by the respondents. But the need to train the users, develop IT infrastructure, and to extend Internet connectivity to the departments and laboratories of the colleges is felt must in the study.

A Case Study of Goa University Library for marketing of services was conducted by Madhusudan[18]. It is noted that within 21 years of its establishment, GUL has found a place among the better known university libraries in India . After having been given a special appreciation and reward by the National Assessment and Accreditation Council (NAAC) of India, the library is poised to work with more zeal and dynamism to earn more on its services and achieve a special status in academic librarianship. This study suggests that libraries need to achieve an imaginative design of service and products, and develop communication methods and a feedback mechanism to improve service.

Shukla[19] has carried out a qualitative assessment study was carried out by to know the use of e-journals by postgraduate students and the researchers. The study reveals that most of the users use databases and e-journals daily and they prefer to access e-journals in the library while some users use them in their laboratories or classrooms. A single window is also suggested which could index all e-journals of different publishers on a particular subject. Besides, there should be coordination among various other consortia running in the country so that all the users could have access to information dealing with a particular subject regardless of type of institution.

Mahawar et.al.[20] has made a study based on the students opinion for Tagore Library of University of Lucknow. This study has covered the frequency of library visit, satisfaction with opening hours of the library, library collection, and user satisfaction from library services. This study also covers the use of reference sources in the library. The study reveals that the users of library are partially satisfied with the present library services; the users of library require increased library opening hours and the budget is insufficient and irregular l it is found that the library automation process is very slow. Further, the books on shelves and catalogues are not arranged systematically the numbers of computers are less to provide effective library services to users. Besides, the number of trained and untrained staff is insufficient.

The facilities and Services in traditional university libraries in Karnataka from the Researchers' Point of View have been studied by Shivalingaiaha and Gowda[21]. The responses were also collected on the problems they face in the use of these facilities and the study also identifies various training areas which will improve the use of the libraries. It is concluded in the study that the libraries are expected to provide user-centric services. The emergence of information society has given enough impetus to the service sector to improve their services and the libraries being in this domain have not fallen back. Further, authors hope that the findings and recommendations of this study may provide useful insights for the management to take necessary steps to strengthen the existing facilities and services to maximize the use.

Kanaga et al.[22] has conducted a study on the web based library services of Tamil Nadu universities. It is found that most of the universities under survey are providing OPAC services to know the bibliographic details of their collection. Also the access of electronic resources is being provided them to the users.

A survey of library and information services to physically-challenged students in academic libraries in Ogun State of Nigeria was carried out by Lawal-Solarin[23]. This study

shows that physically handicapped students suffer a lot of deprivation as per their responses received through questionnaire. Therefore, the study concludes that the federal and state governments need to enunciate policies that address the barriers faced by the physically-challenged in their quest to be educated.

Madhusudhan and Nagabhushanam[24] have studied web based services of selected university libraries in India through circulation of structured questionnaire personally among 600 respondents in 20 university libraries in India and the response rate was 100 percent. The findings of the study reveals that many of the surveyed university libraries are yet to exploit full potential of the web forms, and lagging behind in effective use of library website. A few libraries offer innovative web-based library services in different sections. It is noted that university libraries in India are lagging behind in providing web forms to users in different web-based library services, which are effective tools for library user interaction and communication.

Mal et. al.[25] has studied the status of e-resources and collection development in Uttar Pradesh state university libraries. It is noted that 58.3% university libraries have separate e-resource section while 41.7% libraries don't have any separate section. Only 8.3% university libraries are using software to manage e-resources while 91.7% are not using any software. 50.0% university libraries have 1 or 2 staff to manage the e-resource section whereas 50.0% libraries don't have a single staff for this purpose. 84% that is the maximum amount of budget are allocating for books where as 16% amount of budget are allocating for journals and very few amount allocating for accessories. But not a single university is allocating a single rupee for e-Resources. Although few university libraries are subscribing e-Resources from the funds allotted for books, journals and accessories, but only 17% university libraries framed the collection development policy for their traditional collection but not a single university library framed this policy for the new emerging collection of e-resources. 92% university libraries have average collection of CD-ROM/ Floppy. Further, 50% university libraries open their e-resource section for less than 8 hours, while 25% libraries open for 8-10 hours and only 8% libraries open more than 10 hours to access e-resources.

Palaniappan[26] has carried out a comparative study on the library services being provided by Alagappa University and Bharathidasan University in Tamil Nadu. This study shows that 31.8%, which is highest percentage in Alagappa University have visited the library daily followed by 30.3% visited weekly, 29.5% visited alternative days, and only 4 (3.0%) and 7 (5.3%) have visited the library monthly and occasionally. On the other hand, it is seen from the Bharathidasan University that highest percentage 117 (47.4%) of the respondents have visited the library alternative days, 73 (29.6%) visited daily, 50 (20.2%) weekly, and only 6 (2.4%) and 1 (0.4%) have visited the library monthly and occasionally. It was found from the total respondent that 41.2% of the respondents have visited alternative days, which is the highest percentage followed by 156 (30.3%) visited daily, 90 (23.7%) visited weekly, and only 10 (2.6%) and 8 (2.1%) have visited monthly and occasionally.

A Survey of Information Retrieval System of Central Libraries of IIT Delhi, IIT Kanpur and Kashmir University was conducted by Ali[27]. The primary purpose of this study was to assess the current status of information retrieval system of two leading institutes of national importance and one of the first ISO certified university library in India to help other libraries also to enhance their information retrieval system. The study also highlights the features of different software packages used by the select libraries i.e. Central Library, Indian Institute of Technology (IIT) Delhi; P. K. Kelkar Library, IIT Kanpur and Allama Iqbal Library, Kashmir University. Being technologically advanced, the author was of the notion that the information retrieval system of the select IIT libraries may be comparatively more developed. However, it is observed that the retrieval system of Allama Iqbal Library is rather more advanced. Nevertheless, even after using the leading international software and installing a complete automated retrieval system, some users in Kashmir University still rate the overall status of retrieval system behind the retrieval system of the select IIT libraries. On contrary, a significant percentage of users in the select IIT libraries are satisfied with the overall status of retrieval system.

Mishra and Mishra[28] have studied the role of ICT resources and services in university libraries. The study concludes that Information and communications technology (ICT) have brought unprecedented change and transformation to university library and information services. It has created an environment where rapid continuous change had become the norm. But the university library finds itself in a time of tremendous challenge but it is also a time of boundless opportunity to use ICT creatively to enhance service delivery to the user. So that University librarians should through research and consultation with their users find ways to add value to the user's information retrieval experience.

Nkamnebe et. al.[29] has conducted a study for evaluation of the use of university library resources and services used by the students in Paul University, Awka (Nigeria) through a structured questionnaire and observations from the entire population of 276 students. The study shows that they use the library most during examination periods. It also revealed that resources currently available are fairly adequate and fairly accessible to the students. Furthermore, the study revealed that users are satisfied with the services and facilities provided by the library. Problems militating against effective use of the University Library by the students were identified and solutions were proffered.

Patil and Pradhan[30] have studied the library promotion practices and marketing of library services. This study enumerates the concept of library promotion and marketing of library services. Academic libraries are having all type of collections. To promote the collection in use it is necessary to market library products. This paper suggests practical solutions, ways and means of marketing the library services.

Prakash et al.[31] has studied the library collection, facilities and services of the Central University of Karnataka through a well structured questionnaires circulated among the users. The study demonstrates and elaborates that various aspects of use of collections, Facilities and services, purpose of visit to the library; adequacy of library hours, infrastructure facilities, use and collections of documents both print and non – print.

2.2. Library Services in Open / Distance University Environment

If we move on the studies towards library services being provided open universities, it is seen that some of the studies are also carried out in this area. Important of them include the following.

Gupta and Jain[32] have studied the concept and relationship of Open University and library and libraries' role in fulfilling the objectives of open universities in India. Library services being provided by Indira Gandhi National Open University, Kota Open University and Dr. B.R. Ambedkar Open University are briefly outline in the study. A need of cooperation among all types of libraries and computerization of the Open University libraries is also emphasized.

Wong[33] has conducted a case study for library services for distance learners in the Open University of Hong Kong. It is noted that the tutorials are held in places scattered all over Hong Kong to suit the needs of the students. Video programmes related to courses are broadcast to the students on Sunday mornings to enrich the contents of the courses. CD-ROM and IT technology are also applied to courses where appropriate. It is also noted that the library of the university signed a memorandum with the public library system in Hong Kong in 1990 to make course materials and set books available in 15 public libraries scattered over Hong Kong; and the online catalogue of OUHK Library has also been available to students in the major public library branches since 1993.

A case study of information services provided to distance learners in Open University of Tanzania was studied by Msuya and Maro[34]. The findings of the study show that Open University of Tanzania has problems in meeting out the information needs of its staff and students. It is also noted that main library of the university has not adequate resources while the Information Units at regional centres and Tanzania Library services are poorly stocked. That's why students use nearby libraries for satisfying their needs.

Singh[35] has studied the library services being given to distance learners by Kota Open University. This study shows that though collection of the library and services are quite enough but the services are expected to be provided on the guidelines issued by Indian Library Association, New Delhi.

Tripathi and Jeevan[36] have discussed library system of Indira Gandhi National Open University (IGNOU), for enabling electronic resource access for distance learners. The lbrary and documentation division (L&DD) of IGNOU is a hierarchical system with the Central Library (CL) at the Headquarters followed by libraries located at Regional Centres (RCL) and Study Centres (SCL). The Central Library caters to the needs of Academic, Administrative and Support staff and students at the headquarters. The RCLs look into the library requirements of Staff, Students, Academic Counselors & Academic coordinators at Regional Centres and the SCLs are meant to meet the needs of the Academic Counselors & Academic coordinators and students. But the lack of awareness about resources and services and also the information literacy are some of the barriers in the progress.

A comparative study of student support services of Allama Iqbal Open University and the Open University of Sri lanka is carried out by Gujjar et. al.[37]. This paper attempts to compare the availability, quality, similarities and differences in student support services offered by the Allama Iqbal Open University (AIOU) Pakistan and The Open University of Sri Lanka (OUSL). It also aims to identify and report the deficiencies that students of both the institutions face in the student support services. The study concludes that almost all types of general support services are provided to the students at OUSL. Regional offices of AIOU are not fully equipped to facilitate students in their studies. Both universities are providing almost same tutorial services to their students. Guidance and counseling services are almost same at both the universities, OUSL is slightly better in providing these services to its students. Further, there is no significant difference between the mean score of students of both the universities on provision of media support services to their students. Both the universities have almost the same provision and proper library services are provided to the students of both the universities in almost the same manners.

A comparative study of student support services of Payame Noor University (PNU) of Iran and Allama Iqbal Open University (AIOU), Pakistan and United Kingdom Open University (UKOU) is made by Farajollahi and Moeni Kia[38]. The results of the study reveal that the rate of educational services in face to face classes and the rate of library services of PNU is more favourable than that of UKOU.

Chandhok and Babbar[39] have conducted a case study of Indira Gandhi National Open University for m-library services. The findings of the study suggest that M-Libraries offer a unique opportunity for distance learners in different kinds of learning environment settings. The proposed m-library services architecture suggests developing an M-library web site at IGNOU Library to effectively facilitate m-library services, hence strengthening the M-Learning in Distance Education System.

Students' Perceptions on the Quality and Effectiveness of Guidance and Counseling Services at Zimbabwe Open University is studied by Kangai et. al.[40] using questionnaire and interview methods. Major findings of the study were that: although ZOU has institutionalized guidance and counseling as a key support service for ODL students by setting up a student support service unit (SSSU), the majority of students 80% of whom live and work in the rural areas, needed quality and effective guidance and counseling and general academic support in the following area: distribution of learning materials (modules), management of coursework (assignments), tutorials, processing of examinations, communication, and individualized counseling.

Manzoor Babu[41] has made a comparative analysis of student support services in open universities in India. This study clearly shows that in the field of distance education lack of adequate student support services are very evident. Students are at present not fully utilizing the potential of existing support services either due to the lack of awareness or lack of time. Most of them are satisfied with the study materials provided by the Universities and with limited personal contact sessions. It not only decreases the standard of students, but it also

creates awareness among the society that distance education is a liberal and flexible way of getting a diploma or a degree. The learners of all the Distance Education Institutes frequently make use of the study materials and contact classes. However, the utilization of library and multi-media services is scanty.

Oladokun[42] states that distance teaching institutions should take into cognizance the spread of their students in the country and create opportunities for them to access information resources and/or services. Further, the use of ICT gadgets like cellular phone and its functionalities; Instant Messaging (IM) and Live Chat with a Librarian; Emailing system; Electronic Alerts and Electronic Bulletin; e-counseling and mentoring should be encouraged.

A case study of Indira Gandhi National Open University (IGNOU) Library was carried out by Arora and Babbar[43] for ODL Support Services through use of Innovation and Technology. It is highlighted that IGNOU library is providing m-library services to its users and one of largest institutional repository known as E-Gyankosh has already been set up the university.

Lam and Sum[44] have discussed Open University of Hong Kong (OUHK) experience in resource discovery service. This study describes and discusses the challenges encountered during the implementation and the solutions adopted to facilitate and maximize users' access to the library collection. It shares the experience on how the web-scale discovery service can or cannot help in boosting the visibility of the collection by reviewing the usage statistics of the Library's subscribed/purchased databases, journals and e-books before and after the implementation of the discovery service.

Mtega and Benard[45] have studied e-learning services of three Tanzanian public universities namely: Sokoine University of Agriculture (SUA), Muhimbili University of Health and Allied Sciences (MUHAS) and the Open University of Tanzania (OUT). The data were collected through web analysis, in-depth interviews and documentary reviews. Library directors/e-resources librarians, Information Communication Technology directors/technicians were involved in in-depth interviews. The findings of the study indicate

that the three institutions had the basic ICT infrastructure for e-library services and e-learning and used Moodle learning management systems. It is recommended that libraries should subscribe more e-resources and make them accessible through the e-learning platform; universities should have strategies to improve the ICT infrastructure from time to time depending on the demand and the increasing enrolment rates.

Singh[46] has conducted a study on the total quality management to library and information services In Indian Open Universities. It is suggested that the quality assurance of library and information system should be part of the quality assurance of university TQM project. Besides, there is a need to develop standards / norms for assessing quality of information services with particular reference to distance Education Libraries.

Besides, Oladokun[47] has presented a review on the literature of Information environment of distance learners. In this study, the channels and/or sources of information used by distance learners to meet their information needs are given due consideration in carrying out the review of literature.

Thus, it is seen from the review of literature that various studies are conducted on different aspects of library services in traditional academic library environment and sporadically in the field of library services in Open University environment. But no comprehensive work is done, hence present problem is undertaken for PhD study.

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Chapter -3

Research Methodology

The word "research" comprises of two words, "re" and "search", where're' means- a new or over again and search means to examine closely and carefully, to test and try, or to probe. Thus, together they form a research is a careful, systematic, patient study and investigation in some field of knowledge, undertaken to establish facts or principles.

A research typically comprises of defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis.

A research is important both in scientific and non-scientific fields. It is conducted because of following reasons (Rajasekar et. al.[1]):

- A research problem refers to a difficulty which a researcher or a scientific community or an industry or a government organization or a society experiences. It may be a theoretical or a practical situation. It calls for a thorough understanding and possible solution.
- Research on existing theories and concepts help us identify the range and applications of them.
- It is the fountain of knowledge and provide guidelines for solving problems.

- Research provides basis for many government policies. For example, research on the needs and desires of the people and on the availability of revenues to meet the needs helps a government to prepare a budget.

- It is important in industry and business for higher gain and productivity and to improve the quality of products.

- Mathematical and logical research on business and industry optimizes the problems in them.

- It leads to the identification and characterization of new materials, new living things, new stars, etc.

- Only through research inventions can be made; for example, new and novel phenomena and processes such as superconductivity and cloning have been discovered only through research.

- Social research helps find answers to social problems. They explain social phenomena and seek solution to social problems.

- Research leads to a new style of life and makes it delightful and glorious.

But it is s necessary for a researcher to design a methodology for the problem chosen.

3.1. Types of Research Methods

There exist various types of methods for conducting research. But broadly, there exist two types of methods: Quantitative and Qualitative (MacDonald and Headlam[2]):

1. Quantitative methods are concerned with trying to quantify things. They ask questions such as 'how long', 'how many' or 'the degree to which'. Quantitative methods look to quantify data and generalise results from a sample of the population of interest. They may look to measure the incidence of various views and opinions in a chosen sample for example or aggregate results.

2. Qualitative methods are concerned with a quality of information, qualitative methods attempt to gain an understanding of the underlying reasons and motivations for

actions and establish how people interpret their experiences and the world around them. They provide insights into the setting of a problem, generating ideas and/or hypotheses.

However, according to Chu[3] following methods are used in conducting researches in library science**.**

- ➢ Bibliometrics (including citation analysis, informetrics, and scientometrics)
- ➢ Content analysis (including discourse analysis)
- ➢ Delphi study
- ➢ Ethnography/field study
- ➢ Experiment
- ➢ Focus groups
- ➢ Historical method
- ➢ Interview
- ➢ Observation
- ➢ Questionnaire
- ➢ Research diary/Journal
- ➢ Theoretical approach, for example the conceptual analysis, modelling and theory building etc.
- ➢ Think aloud protocol
- ➢ Transaction log analysis
- ➢ Webometrics (including link analysis, cybermetrics, altmetrics)
- ➢ Other methods, for example action research, card sorting, and information horizon etc.

Survey is a popular and easy way to conduct research work that collects information in an organized and methodical manner about characteristics of interest from some or all units of a population using well-defined concepts, methods and procedures, and compiles such information into a useful summary form.

Surveys are characterized by the selection of random samples from large and small population to obtain empirical knowledge of contemporary nature. This knowledge allows generalization to be made about characteristics, opinions, beliefs, attitudes, and so on of the entire population being studies. The methods of survey research allow investigators to gather information about target population without undertaking a complete enumeration (Busha and Harter[4]).

Surveys can be thought to consist of several interconnected steps which include: defining the objectives, selecting a survey frame, determining the sample design, designing the questionnaire, collecting and processing the data, analysing and disseminating the data and documenting the survey. But surveys are not cure-alls, "they are also not claimed to be more than the application of knowledgeability to a given situation in order to resolve serious and incipient problems, to devise blueprints for the future, and to focus attention on the program of the library. When performed on a high level, and when the library staffs involved have a willingness to experiment and to change, they can be helpful in up-grading library service" (Tauber[5]).

In a survey, attempts are made to select a sample of respondents from a population and administer a standardized questionnaire to them. Questionnaires may be a written document that is completed by the person being surveyed, or an online questionnaire, a face-to-face interview, or a telephone interview.

Questionnaire is a best method to conduct research when the survey size is too big and it is not feasible to approach them personally. However, there are advantages and disadvantages of using questionnaire (http://libweb.surrey.ac.uk/library/skills/ Introduction%20to%20Research%20and%20Managing%20Information%20Leicester/page_5 1.htm).

But all questionnaires should take into account:

- Questionnaires can be administered face-to-face by an interviewer, by the telephone or completed independently by the participants. The distinction between these methods is important because it has profound effects on the questionnaire design. A questionnaire which is to be completed by the respondent needs to be very clearly laid out with no complex filtering and simple instructions. Whereas a questionnaire to be administered by an interviewer can be much more complex;

- Obviously respondents with low literacy levels will have greater difficulty completing a self-completion or postal questionnaire. In this case a face-to-face or telephone interview survey would be advisable;

- The more motivated the respondent, the more likely you are to get a questionnaire returned in a postal survey. If you anticipate a very good response rate then a postal survey may do. If on the other hand, you expect a low response rate, then a personal interview survey is likely to achieve higher acquiescence;

- One person would take a very long time to interview large number of people, however one person could carry out a postal survey of the same number of respondents with relative ease;

- Finally it is important to bear in mind that you do not need to reinvent the wheel. Increasingly there are ready-made questionnaires and scales available to measure patient need and outcome. Many of these are commonly used, have been well validated and can also offer useful normative data for comparison.

3.2. Types of Questionnaire

Broadly, the questionnaires are restricted to two basic types of question:

- Closed – ended, and
- Open – ended

Closed ended questionnaire is that in which a researcher provides a suitable list of responses (e.g. Yes / No). This produces mainly quantitative data.

While in open-ended questionnaire the researcher does not provide the respondent a set answer from which to choose, rather, the respondent is asked to answer "in their own words". This produces mainly qualitative data.

3.2.1. Advantages of Questionnaire Method

1. This is more practical method of conducting research.
2. Large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way.
3. It can be carried out by the researcher or by any number of people with limited affect to its validity and reliability.
4. The results of the questionnaires can usually be quickly and easily quantified by either a researcher or through the use of a software package.
5. Can be analyzed more 'scientifically' and objectively than other forms of research.
6. When data has been quantified, it can be used to compare and contrast other research and may be used to measure change.
7. Positivists believe that quantitative data can be used to create new theories and / or test existing hypotheses.

3.2.2. Disadvantages of Questionnaire Method

1. But it is argued to be inadequate to understand some forms of information - i.e. changes of emotions, behaviour, feelings etc.
2. Phenomenologists state that quantitative research is simply an artificial creation by the researcher, as it is asking only a limited amount of information without explanation.
3. It is also believed that this method asks validity.
4. There is no way to tell how truthful a respondent is being.
5. There is no way of telling how much thought a respondent has put in.
6. The respondent may be forgetful or not thinking within the full context of the situation.

7. People may read differently into each question and therefore reply based on their own interpretation of the question - i.e. what is 'good' to someone may be 'poor' to someone else, therefore there is a level of subjectivity that is not acknowledged.

Besides, there is a level of researcher imposition, meaning that when developing the questionnaire, the researcher is making their own decisions and assumptions as to what is and is not important; therefore they may be missing something that is of importance.

4. Research Methodology for Present Research

Research methods play a central role in scholarly endeavours in the field of library and information science. The proposed research is survey type of work that was conducted using questionnaire method, which consists of research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Because, a questionnaire is simply a 'tool' for collecting and recording information about a particular issue of interest and it is mainly made up of a list of questions, but should also include clear instructions and space for answers or administrative details (https://www.kirklees.gov.uk/community/yoursay/questionnaires.pdf).

The questionnaires were prepared section-wise covering data about the libraries, users, staff findings/demographic, library management, staff pattern and library-information resources and services. However, some interviews were also conducted to supplement the collection of data and facts about the respective libraries; and also efforts were made for observation on the spot.

The study is supplemented by the use of related published and unpublished literature. Besides, the government and university publications are also used for elaborating the study.

5. Population/ Limitations of the Study

The study population consists of Open Universities existing in the country. But only four states – namely Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat and a one Union

territory– Delhi were included in the study. Thus, Open University library from the each state and union territory was selected for the study, as follows:

(i) **Rajasthan**

- *Vardhamaan Mahaveer Open University, Kota.*

(ii) **Uttar Pradesh**

- *U.P. Rajarshi Tandan Open University, Allahabad*

(iii) **Madhya Pradesh**

- *Madhya Pradesh Bhoj Open University, Bhopal*.

(iv) **Gujarat**

- *Dr. Baba Saheb Ambedkar Open University, Ahemdabad.*

(v) **Delhi**

- *Indira Gandhi National Open University, New Delhi*

The data collected so far were used for analysis and for testing of the hypothesis and also to conclude the result and recommendations.

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Chapter 4

Library Organization, Management and Collection Development

The word 'organization' has different connotations, such as the activity which is an important function of management and it also implies people working together in order to reach at a common goal in any organization. Organizational structure simply pertains to the named positions in an organization and the authority and responsibilities that each position has. It is about the patterns of relationships between roles, individuals and groups within the organization. The people who keep the organization going will eventually move on, so the key to keeping things going is to develop the organization so that it is not too dependent on any one person.

Drucker[1] has viewed organization both from mechanical and human aspects. It is important to mention here that, that an organization has two aspects designing and maintaining. It means that it concerns itself not only with allocating the works to be accomplished to individuals and departments but also synchronizing their activities into a harmonious role.

Massie[2] has defined the organization as a process by which cooperative group human beings allocates its task among its members, identifies the relationship and integrates its activities towards common objectives.

Therefore, the organization is human resources system with a life of its own, which is designed to achieve desired objectives and integration of efforts. So, designing a sound organizational structure is thus an important activity and hallmark to achieve efficiency in terms of pre-determined objectives. However it is a complex task and every care must be taken into account while building up the organization.

There are six types of organizational structure (Simon-Brown[3]). They are:

- Rigid Organization – that is organized for stability, and its focus is on maintaining the system.

- Senior Management Team- This model is similar to the first one, but requires a stable environment, and standardization is important.

- Project Team and Task Force – Here teams of people from different organizations work together toward a specific goal. Generally, the team members have a lot of expertise but little real power. Problems are delegated upward through the chain of command.

- Matrix Organization - The matrix organization model is organized for flexibility and change, and it acknowledges that the environment is changing rapidly. It is focussed on the end product.

- Project Organization - Here, the teams have free rein within clearly stated, agreed-upon parameters. Allegiance is to the project, not necessarily to the organization. All systems are designed to focus on the end product. Decisions are by consensus. Frequent cross-fertilization of ideas infuses the organization.

- Organic network – This model is more of an open-ended system of ideas and activities than an entity with a clear structure and definable boundary. A core group of members sets a strategic direction, provides operational support, and then steps out of the way as others take over the idea and move it forward.

4.1. Library Organization

University syndicate is responsible for the upper running of a University and it is through, the Syndicate that anyone else may be responsible for the management of the University or any part of it. A competent Syndicate with devoted, dedicated and efficient members; therefore, is conducive for the success of the organization.

Figure 4.1: A Typical Library Organizational Chart
[Source: IGNOU BLIS Study Material on Library Management (Block 1 BLIS-02)]
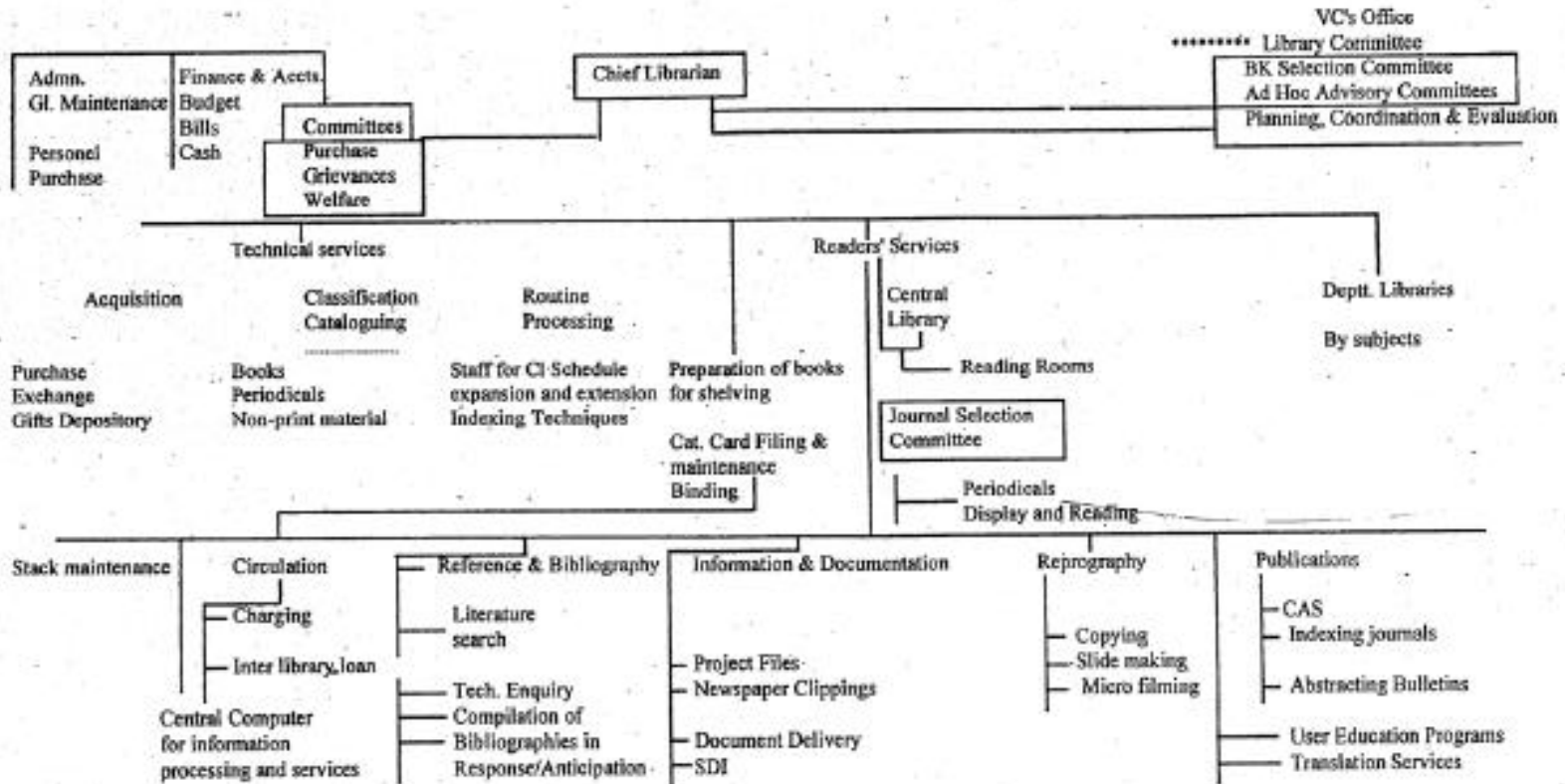
Vice chancellor, who is appointed by the Chancellor, is the chairman of the university syndicate. The Syndicate as the policy-making organ and derives its powers from the Universities Act. Librarian being the statuary post, is governed by the Syndicate of the university.

A university library exists to serve the needs of its clientele primarily teachers, students and scholars, and no University library can exist without clientele and thus clientele are fundamental to the study of a University library system.

There are three components namely complexity, formalization and centralization. Robbins[4] mentions that the complexity is the degree to which activities within the organization are broken up or differentiated. The second component is formalization which means the degree to which rules and procedures are utilized. The third component of the structure is centralization which considers where decision making authority lies. These three components combinedly make up an organizational structure.

Most commonly second model of organization structure – senior management team model is followed in library and information centres. However, in general libraries are usually structured between two main areas: technical services (behind the scenes) and public services (reference, instruction, and circulation) but it is closely tied to the culture of an organization and its mission statement. But University Grants Commission (UGC[5]) has recommended following departments or sections for a university library:

> - Book section
> - Periodical section
> - Documentation section
> - Technical section (Acquisition and Processing)
> - Reference section
> - Maintenance section
> - Administrative section and
> - Supervisory section.

University library system top managers make all the decisions and the managers at the lower level only carry out the directives of the top management. University library system becomes more operational only through delegation which means some power is given to lower subordinates to overcome the problem of overload and to enable the selected services to be more effective. So, delegation of authority has undoubtedly an effective role to play for an efficient management. But the barriers in delegation, if there is any should be reduced through proper communication and understanding between Librarian and Sub-ordinates. organizations but they are put on criticism so many time and new organization designs have been emerged but hierarchical structure will continue although they will be flatter.

4.2. University Library Staff and Qualification

A university library at least has to possess following type staff with requisite qualifications as given below:

4.2.1. University Librarian

A University Librarian has to play a crucial role in achieving purpose and objectives of University Libraries and parent institution; therefore, he is expected to have better qualifications, requisites, qualities so that they may perform their work in a better way. There is to some extent uniformity in the qualifications, recruitment, promotion, scale of pay, etc., of the professionals of UGC Cadre but for the remaining three categories there is no uniform pattern. Their qualifications, recruitment procedure and promotion policy are varies from university to university.

UGC Regulation of 2010 (UGC[7]) has given the following qualifications for University Librarian:

- Master's degree in Library Science /Informationϖ Science with at least 55% of the marks or its equivalent grade for 55% where grading system is practiced;
- A Ph.D. degree in the above discipline and / or allied discipline with a consistently good academic record;

- A minimum of 15 years of teaching/librarian experience of which at least 5 years experience as a Deputy Librarian in a University Library or 10 years' experience as Assistant Librarian in the University or as College Librarian. Evidence of innovative library service and organization of published work and ICT modernization of library;
- Evidence of published work with a minimum of 5 books and / or publications in indexed/ISBN/ISSN numbered journals/books and University developed ISBN/ISSN numbered list of journals hosted on the website of the concerned University; and
- A minimum score as stipulated in the Academicϖ Performance Indicator (API) based Performance Based Appraisal System (PBAS) developed by UGC in these Regulations.

However, the success of the library system depends upon the qualities of librarians and qualities of librarians depend on quality of education and training provided by Library Institutions (Yusuf[8]).

4.2.2. Deputy Librarians

The minimum qualifications for deputy librarians are as follows:

- A Master's Degree in library science/information science/documentation with at least 55% of the marks or its equivalent grade of B in the UGC seven point scale and a consistently good academic record.
- Five years experience as an Assistant University Librarian/College Librarian.
- Evidence of innovative library service and organization of published work and professional commitment, computerization of library.
- **Desirable**: A M.Phil./Ph.D. Degree in library science/Information science/Documentation/Archives and manuscript-keeping/computerization of library.

4.2.3. Assistant Librarians

The qualifications for the appointment of Assistant Librarians in university libraries are as under:

- A Master's Degree in Library Science / Information Science / Documentation Science or an equivalent professional degree with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed) and a consistently good academic record with knowledge of computerization of library.
- Qualifying in the national level test conducted for the purpose by the UGC or any other agency approved by the UGC.

The pay scales for university librarians, deputy librarians and assistant librarians are the same as the university teachers are drawing except that the retirement age that is 62 in case of librarians as compared to 65 years of the teachers.

Generally, the librarians are the policy makers in the university library system and deputy librarians are there to assist him. While, the assistant librarians are the heads of different sections in the university library system. Besides, professional staff comprising of cataloguer and technical assistants and semi-professional staff comprising of semi-professional assistants and library assistants are also there in university library system along with fourth class/assisting staffs.

As far as the non-UGC cadre is concerned, there may be technical assistants, professional assistants and semi-professional assistants in different pay scales and grade pay. Generally, there needs at least one staff each in the following sections of a library.

- Acquisition
- Periodicals
- Technical Processing
- Database Maintenance
- Reference
- Circulation
- Documentation and Publication
- Inter Library Services
- Network and Online services

Thus, a formula is proposed by Francis[9] for identifying the number of non-UGC staff needed in a library. It is as follows:

S = U + D + B

where;

S = Total number of professional staff
U = User component
D = Document component
B = Budget component

$$U = \frac{(UG \times 1)+(PG \times 2)+(RS \times 3)+(OM \times 1)+(IM \times 10)}{100}$$

where;

UG = Under Graduate students
PG = Post Graduate students
RS = Research Scholars
OM = Other members including External Members
IM = Institutional Members

$$D = \frac{(PD \times 1)+(CD \times 50)+(MF \times 5)}{20,000}$$

where;

PD = Printed Documents
CD = CD-ROMs
MF = Micro Film/Fiche and other micro documents

$$B = \frac{\text{Library Budget excluding salary and inclusive of equipment budget}}{10,00,000}$$

The number of professional staff so arrived may be grouped into two categories, ie., UGC Cadre and Non-UGC Cadre. The number of staff needed in each category may be arrived at considering the qualifications, level of technical competency, experience, etc. required to perform the various functions in a university library. He has also suggested that a minimum of 50 percent of the total professional staff may be in the UGC Cadre.

Besides, the supporting staff is also needed with wide range of skills and responsibilities, handle the routine work of most library departments and varying education and experience levels. This may be assisted by the part-time employees which generally are often are students and perform mostly repetitive tasks.

4.3. Library Management

Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. Library management encompasses normal managerial tasks, as well as intellectual freedom and fundraising responsibilities.

The planning, organizing, leading and controlling are generally four components which need to be emphasized in library management process. *Planning* is about systematically making decisions about the library goals. *Organizing* is about assembling and coordinating human, financial, physical, informational, and other resources needed to achieve library goals. *Leading* is about functions that involve efforts on the part of the librarian to stimulate high performance by employees, and *controlling* about monitoring various library operations and services.

Dhawan[10] has given following step-by-step approach for managing a library and each of them is discussed after him:

- Step 1: Defining library policies for collection development
- Step 2: Defining library authority and library advisory committee
- Step 3: Define procedures for library organization and administration
- Step 4: Defining library space, equipment and tools for library operations and services
- Step 5: Defining procedures for maintenance of library collections.

Step-1: Defining Policies for Collection Development

Collection development can be defined as the process of building or improving a collection of library materials. It is an on-going process that changes as the community changes, whereby each purchase, and each candidate for discard, is carefully evaluated in terms of the needs it meets and its place in the collection.

Step-2: Library Authority and Library Advisory Committee

Library authority is a most powerful that can be comprised of a person or group of persons in the library. It acts as a direction controlling, decision making, and making

coordination between personnel and distribution of rights and responsibilities. Besides, it also helps to motivating the library staff. While, the Committee should comprise members mainly drawn from the organization, and representing various user groups on the Committee. Its terms of reference could be worked out on the following lines (Dhawan[10]):

- To formulate policy for developing library resources for reading, reference and projects.
- To develop a general program of library services to suit the interests and requirements of different categories of users
- To frame, review and approve library rules
- To recommend suitable budgetary provisions for the library and resource centre; and
- To make recommendations for proper functioning of library as knowledge centre

Step 3: Procedures for Library Organization and Administration

Library organization and library administration are the closely related terms but the organization comes before administration and the latter starts when the organization ends.

Step 4: Library Space, Equipment and Tools for Library Operations and Services

The library buildings as a general rule, are to be constructed in the central places of the organization so that the readers could approach at own conveyance. Besides, the surroundings of the building should be peaceful to make the reading environment calm. As far as the library equipments and tools are concerned, furniture, fittings and accessories should of standard pattern and design, so that users feel comfortable in using them.

The following is the list of essential furniture and fittings for an adult education set up:

- Reading tables
- Chairs for pupils
- Librarian's table
- Circulation or charging desk and chair
- Book supporters

- New arrivals display case

- Dictionary stands

- Periodicals display stand

- Newspaper display stand

- Storage cabinet for work room

- Filing cabinets Atlas stand

- Wall clock etc.

Besides, the library may acquire radio and television set, tape recorder/player, VCR and VCP, slide and film projector, overhead projectors, computers with internet connection, Xerox machine, etc. and now also the computers and related equipments.

Step 5: Procedures for Maintenance of Library Collections

Books and other reading materials comprising of periodicals, newspapers, audio-video collection are organized into different collections such as book collection, rare book collection, periodical collection, and reference collection, etc. Generally, the books and reference books are arranged according to classified order but the periodicals are arranged by journal title. Shelving and shelf rectification of reading material in different collections must be done preferably every day to ensure that shelf arrangement of books and other reading material is as per prescribed order. Shelf rectification is undertaken to ensure that books and other reading are kept on the shelves as per prescribed order. In case they are not, necessary rectification is done to restore their order on the shelves.

However, the other activities of library maintenance may include the taking out of worn books and other material for repair or binding, sending new books and journals for binding, display of new books and other reading material received in the library, preparing stack room guides, and shelving volumes returned after use, etc. Library may also perform stock verification on periodical basis, with a view to weed out books, as per its policy, and writing off books, etc.

While discussing about the effects of organization structure and management certain important structural variables of the organizational structure are conceived which are as follows:

- o Horizontal differentiation.
- o Vertical differentiation.
- o Centralization.
- o Line & Staff.
- o Organization size, technology & environment- Span of control.
- o Unity of command.
- o Unity of direction.
- o Scalar chain.

4.4. Collection Development

Collection development is one of the most challenging and an imaginative process of the library profession whereby, the library staffs acquires a variety of materials to meet the demand of its users.

Harrods's Librarians Glossary[11] defines collection development as " the process of planning a stock acquisition programme not simply to cater for immediate needs but to build a regular and reliable collection over a number of years to meet the objectives of the services".

Collection development is a very important function of a library. Users need, collection development policy, selection, acquisition, management-evaluation, weeding, storage and preservation of collection are the important areas of collection development.

4.5. Sources for the Collection building

The collection development in the medical college library depends on a number of sources. These sources can be broadly categorized in to two as follows:

4.5.1. Human Sources: These sources will include the Librarian himself, the library staff, the members of the library committee and other subject experts, heads of the departments, research scholars, students and other library users.

4.5.2. Documentary Sources: Documentary sources are the important sources for framing the collection development policy. Documentary sources include Subject Bibliographies, National Bibliographies, Universal bibliographies, Union Catalogues, periodicals, Newspapers and the publishers' catalogues etc.

Generally, a university library may consist of following types of the books and other reading materials:

- Circulating Books pertaining to books related to the branches of all disciplines depending up on the courses provided by the university.
- Electronic textbooks which are to be accessed remotely via the web, or searched from computers located on the library itself. For example, the databases and e-journals related to library science.
- Reference Books consist primarily of directories, indexes, encyclopaedias, dictionaries, bibliographies, and other resources. Generally, these books do not lent outside the library,
- Electronic journals are the digital surrogates of printed journals. But today's many of the journals are coming online only without having their print counterparts. They are accessible through electronic subscription on the Web, or as a part of the library consortium purchase.
- Print Journals are shelved alphabetically by title, and can be identified in the Library Catalogue through "title" search for the journal title in OPAC or traditional catalogue.
- Archival Section also exist in many of the libraries which include the rare, valuable or fragile historical texts; and memorabilia such as photographs, graduation records, school catalogues, department newsletters, annual reports, medical instrumentation.
- Audiovisuals collection may include the audiotapes, videotapes, and slides on a variety of subject areas. All audiovisuals can be identified by using the Library Catalogue to search for the author, title, or subject.

Besides, a library may have electronic indexes and knowledge databases such as ___ In addition, free-of-charge web access to a variety of databases may also be provided by the library.

Additionally, the library may own a number of print indexes depending upon the nature of the library.

4.6. Role of library committee in Collection Development

It is well known fact that a lone man cannot do all work and so is the case with the librarians. He alone cannot bear the heavy burden of policy making and managing a library rather he may be assisted by his deputies in the routine of the library, but the administrative and policy issues are to be shared by some more persons. Here the role of library committee seems to come in picture.

A library committee of a university is the representative of the university; so its members should be chosen for their interest in the development of the resources and services of the library; and its functions should be informative and advisory rather than administrative and executive. Library committees are concerned with library policy and do not interfere in library administration but they may serve as an advisory capacity and in cooperation with the librarian formulates policies for the development of higher learning and research. It may allocate the funds for the library needs of different departments. In most of the universities, the vice-chancellor will be the chairman and deans of schools or heads of departments and some senior faculty members will constitute the Library Committee.

But it is better to have a collection development policy to run and develop the collection of the library smoothly.

4.7. Collection Development Policy

There should be a written collection development policy, which can functions as a guide to the librarian. But it is to be adopted according to the needs of the users , size of the library and the availability of funds.

4.7.1. Pre requisites of a Collection Development Policy

- The quality and quality of the existing collection.
- The number of students enrolled.

- The number of teachers engaged.
- The nature of teaching methods.
- The availability of funds.

4.7.2. Steps in Collection Building in a University Library

The collection building in a university library may involve the following steps (Patel[12]):

- Analysis of information need of the users.
- Formulation and implementation of selection policy to suit the objectives of the library.
- Acquisition programmes to build-up a balanced collection.
- Resource sharing and its impact on collection development.
- Weeding out programmes to ensure effectiveness of collection.

However, more commonly collection development implies selection, acquisition and evaluation of the library collection in order to see that both print and non print materials that are available in a library are really useful to the clientele. Its purpose is to find out the users information needs to; find out the users information needs, select and acquire documents, that are really useful to the clientele, periodically review the collection for weeding out unwanted and outdated documents from it (Dhiman and Sinha[13]).

4.8. Challenges of Collection Development in Digital Era

Information and communication technology has changed the scenario and working of library system very much and they keeping on the changes. Information and Communication Technology (ICT) has enormously increased the capabilities of library services, creating options for networking to provide access to vast stores of electronic information, for more sophisticated library housekeeping systems, and for greater bibliographic access through services.

Midda et al.[14] are of the opinion that the changes in management and in organizational structure in response to changing needs of users affect the roles and responsibilities of staff who are expected provide a more consumer-centred service. Further, the pressures of factors like economics, technology, higher education and organisation had led to the resource sharing between libraries and the development of networking such as INFLIBNET, DELNET,

CALIBNET, NICNET, INDONET etc. and cooperative consortia i.e. UGC-INFONET and INDEST Consortium etc. (now E-Shodhsindhu).

Many issues have been existing for collection development in traditional libraries but new librarians should be aware of specifically related to electronic resources. These issues may include the trend towards electronic publishing, information packaging and the technology used to deliver it, archiving including perpetual archives, access to last print, potential loss of content; electronic claiming and check-in, and copyright (Tucker and Torrence[15]).

But continuing enhancement of the skills required to identify, evaluate, and select new materials in a wide variety of formats is a primary element for the advancement of both career and collection. Only with practice and research can one hope to make the best decisions for a library and its users.

4.9. Open University Library System

Though the organization structure of central library of the open university is more or less is similar to that of regular university library system but open library network operates "through three-tier hierarchical system having Central Library at the zenith acting as the main coordinating link with the nodes i.e. the branch libraries at the Regional and Study Centres. The Central Library at the Headquarters combines the features and functions of both, an academic as well as a special library. This dual responsibility increases the complexities of library policies regarding collection development, selection of multimedia resources and acquisition management as well as rendering library and information services to its varied clientele at the Central Library and the branch libraries of the Regional and Study (R & S) Centres" (Jagannathan[16]).

The central library in Open University system may provide a variety of manual as well as electronic services to its users consisting of regular and distance users. Thus, apart from the conventional library services such as reading, lending, reference, referral, bibliography, documentation i.e. indexing and abstracting, reprography, spiral binding and lamination, the library also renders electronic services by retrieving information through OPAC, CD-ROM

search, microform search and internet search. It may also provide inter-library loan service through which the users can access the union catalogue and borrow books for a short period from other participating libraries in neighbouring areas.

Further, the user community in the Open University library basically consists of the faculty members whose main responsibility is to design course materials for the different programmes launched by the university. Therefore, the collection is mainly developed on their advice. Besides, the central library and study centre libraries have to collaborate to provide services completely to different categories of users. However, the collection developed at these libraries by employing selection and acquisition policies may be varied (Jagannathan[17]).

Besides, the library professionals should be equipped for the advent of different technologies and provide better services to uses as suggested by Galbo and Laspinas[18]. They further add that it is possible with the help of change management. For this, organizational culture that is a collective understanding, a shared and integrated set of perceptions, memories, values, and attitudes which have been learned over time and which determine expectations of behavior that are taught in their socialization into the library organization, is imperative in the library setting especially on in identifying the dominant current and preferred organizational culture type of the academic libraries toward library culture change and improving effectiveness

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Chapter 5

Library Services & Resource Sharing and Library Finance

The library's main function is to support their parent organization in achieving the organizational objectives. This is possible only when libraries are ready to provide services to their users. A library service is defined as "the facilities provided by a library for the use of books and the dissemination of information" (Harrod's Librarians' Glossary of Reference Books[1]).

5.1. Different Sections of a University Library

A typical university library may possess the following departments or the sections:

Administration Section — It is common to larger libraries of any type. This is the section where the librarian and his office staff sit.

Acquisition Section — It is one of the common sections in all types of the library. It keeps a complete and up-to-date record of all books in the library. Acquisition work includes selecting, ordering and receiving library materials while cataloguing work consists of two components namely, descriptive and subject cataloguing.

Technical Section — Once the books are accessioned, they are passed to the technical section where they are properly classified and catalogued based on the system used by the library. This department is responsible for deciding where in the collection to put the material. Classifier assigns the call number to books.

Circulation Section — This section is said to serve as the backbone of the whole library since this is where library users go when they need to read and keep themselves updated. This section

is responsible for several tasks such as registering new members and renewing old ones, issuing borrowers' cards and reading materials, collecting fines for books returned late, and many more. This section is in charge of helping users find the references they're looking for as well as conducting regular inventory of books.

Periodical Section — This section manages all aspects of serial publications (magazines, scholarly journals, etc). is the go-to section of the library if you're interested in reading the latest news and events happening around the world. This is where you can find local and international newspapers and magazines.

Reference Section — It is the reference section of a library that serves as the home of encyclopedias, dictionaries, handbooks, yearbooks, atlases, almanacs, and much more. This is the place where you can find and read literally just about anything under the sun. Most of these references are bulky and very heavy which is why they're not allowed to be borrowed by users outside the library. Reference service is provided by this section that is the most needed aspect in research and information purpose.

Computer / Digital Library Section — Now a days, one more section that is known as Digital Library Section is being developed as a separate section in most of the university libraries, where the users can access internet and as well as the other digital assets – comprising of offline and online both. It may also house the visual aids, microfilms etc. Photocopying machines, scanners, DVD/CD player and a television are also found in this section. This is also where users can access online resources for free.

This section renders ICT driven services in the library and assistance on user's request, acquiring or sourcing for any intellectually based document/information electronically anywhere in the world.

5.2. Library Classification

The term 'Classification' is a derivation from the Latin word "Classis" which connotes 'Grouping'. Classification is a procedure of grouping similar items and objects and is essential in

formulating groups that is known as classifying which results in Classification. Classification process helps the user to arrange, organize and make a logical sense of articles which also assists the user to locate them in an easy manner.

The main objective of the classification is to ensure that optimum use is made of their collections by leading each user as directly as possible to the material he or she requires.

Ranganathan[2] has detailed out the library classification as "the translation of the name of the subject of a book into a preferred artificial language of ordinal numbers, and the individualization of the several books dealing with the same specific subject by means of further set of ordinal numbers which represent some features of the book other than their thought content."

5.2.1. Purpose of Library Classification

The following are the main purposes of library classification (Sharma[3]):

Helpful Sequence - Classification helps in organizing the documents in a method most convenient to the users and to the library staff. The documents should be systematically arranged in classes based on the mutual relationship between them which would bring together all closely related classes. The basic idea is to bring the like classes together and separate these from unlike classes. The arrangement should be such that the user should be able to retrieve the required document as a result it will make a helpful sequence.

Corrected Replacement - Documents whenever taken out from shelf should be replaced in their proper places. It is essential that library classification should enable the correct replacement of documents after they have been returned from use. This would require a mechanized arrangement so that arrangement remains permanent.

Mechanized Arrangement - It means to adopt a particular arrangement suitable for the library so that the arrangement remains permanent. The sequence should be determined once for all, so

that one does not have to pre-determine the sequence of documents once again when these are returned after being borrowed.

Addition of New Documents - Library would acquire new documents from time to time therefore library classification should help in finding the most helpful place for each of those among the existing collection of the library. There are two possibilities in this regard. The new books may be or a subject already provided for in the scheme of library classification, or it may be or a newly emerging subject that may not have been provided in the existing scheme.

Withdrawal of Document from Stock - In this case, the need arises to withdraw a document from the library collection for some reason, and then library classification should facilitate such a withdrawal.

Book Display - Display is adopted for a special exhibition of books and other materials on a given topic. The term is used to indicate that the collection in an open access library is well presented and guided. Library classification should be helpful in the organization of book displays.

Besides, some purposes of classification may include the compilation of bibliographies catalogues and union catalogues; classification of information; classification of reference queries; classification of suggestions received from the users; filing of non book materials such as photographs, films, etc.

There are various schemes of classification used in classifying the documents. But a good classification scheme has a number of objectives:

- To provide a shelf address – to assign a specific location for every document on the library's shelves.

- To collate items – placing documents on the same or similar subjects together on the library's shelves to facilitate users to find items on the same subject in one place within the library.

- To link items – to enable users looking for items through a library catalogue can use call numbers as references to locate items on the shelves; classification is used as a link between the catalogue record of an item and the item itself on the shelf.

- To enable browsing facilities – using the structure of a bibliographic classification to browse a collection on the library's shelves or in an electronic or in an electronic collection.

There are three important classification schemes which are used worldwide. They are shown in table 5.1:

Table 5.1   : Different Types of Classification Schemes

S.N.	Name of Classification Scheme	Inventor	Year of Invention
1.	Dewey Decimal Classification (DCC)	Melwil Dewey	1876
2.	Expansive Classification (EC)	C.A. Cutter	1891
3.	Library of Congress Classification (LC)	Library of Congress	1904
4.	Universal Decimal Classification (UDC)	Paul Otlet and Henri La Fountaine	1905
5.	Subject Classification (SC)	J.D. Brown	1906
6.	Colon Classification (CC)	S.R. Ranganathan	1933
7.	Bibliographic Classification (BC)	H.E. Bliss	1935
8.	Library Bibliographic Classification (LBC)	Lenin Library, Moscow	1959
9.	International Classification (IC)	F.Rider	1961
10.	Broad System of Ordering (BSO)	FID/UNESCO	1978

But most popular of them are DDC, CC and UDC.

5.2.2. Dewey Decimal Classification (DDC) [4]

DDC is the most popular of all the modern library classification schemes. It was devised by Melville Dewey in 1876. It provides a systematic arrangement of all the materials mechanized by notation of great simplicity and apparent flexibility. With the emergence of DDC, the principle of relative location of books on shelf according to the subject became perfectly feasible and it replaced the then existing practice of a fixed location, when a certain number of shelves were allotted to each subject and each book was identified by the shelf number and its position on the shelf. As a matter of fact, all our decimal fraction notation, but for the convenience of remembering the number, the decimal point is inserted after the third digit. Sub-divisions are carried out decimally and all numbers are read as decimals. At each stage, there are nine coordinate divisions whenever there are more than nine divisions of equal status, the eight are named and the remaining are covered in the nine division i.e. 'others'. The use of simple and pure notation that is Indian numbers, provision of form division and relative index has made DDC very popular.

Recently in 2011, 23rd edition of the DDC came in the market. Its various features include (https://www.oclc.org/content/dam/oclc/dewey/versions/print/new_features.pdf):

- New provisions in 004–006 Computer science and elsewhere to reflect changes in technology;
- Updates to provisions for the Orthodox Church and Islam in 200 Religion;
- Improved provisions in 340 Law for legal systems based on civil law;
- Updated provisions for food and clothing;
- Updates to 740 Graphic arts and decorative arts;
- A new location and expanded development for cinematography and videography at 777;
- Significant expansions throughout 796 Athletic and outdoor sports and games;
- Significant expansions in Table 2, with parallel provisions in 930–990, for the ancient world, Italy, Switzerland, Sweden, Finland, Turkey, Indonesia, Vietnam and Canada;
- Updated historical periods throughout 930–990.

Web Dewey20 Users of DDC who started with the print version and later moved on to the Electronic version had long been requesting for more frequent institutional update of the Dewey database, hypertext linking and many other enhancements that are most effectively delivered in a browser-based setting. Apart from this, there is a very strong general trend from CDS to the Web today. Hence, Web-based access to an enhanced version of the DDC database is available through what is known as Web Dewey. The key features of Web Dewey include:

- An easy to use, browser based interface that allows you to search the DDC (and related terminology) efficiently and navigate intuitively.
- Thousands of Relative Index terms and built numbers not available in the print DDC.
- Library of Congress Subject Headings (LCSH) that have been intellectually mapped to Dewey headings by DDC editors. 162
- Selected LCSH mappings from the new OCLC Forest Press publication, People, Places & Things.
- LCSH that have been statistically mapped to Dewey numbers from records in the World Cat (the OCLC Online Union Catalogue).
- Links from mapped LCSH to the LCSH authority records.
- Quarterly updates, incorporating the latest changes to the Classification and new LCSH mappings, index terms and built numbers.
- An annotation capability, which allows you to add your own notes into Web Dewey to reflect local classification practices. The Web Dewey database includes the most current version of the DDC (DDC 22 and all updates since its publication in 2003), plus supplemental data. It is updated quarterly and mainly contains records for Dewey entry numbers from the schedules and tables, records for entries in the DDC manual, the DDC Relative Index and Library of Congress Subject Headings (LCSH) associated with Dewey class numbers. The Web Dewey is available through the Dewey Services.

5.2.3. Universal Decimal Classification (UDC) [5]

UDC scheme of classification was developed in the year 1895 by the Belgium Barrister Paul Otlet and Nobel Prize winner Henri La Fountaine. The UDC is peculiar in the sense that it

consists of a combination of both enumerative and faceted character of the schemes and hence it is designated as an Almost-Faceted Scheme of Classification. The UDC is derived from DDC as universal since it encompasses the whole field of knowledge. It is the multi-lingual general classification tool for organizing all kinds of recorded knowledge in the library. It is an international classification system mainly developed for the purpose of indexing and arranging an enormous card bibliography which not only includes books but also all kinds of documents, periodical articles, patents, trade catalogues, abstracts and other micro documents in more than 28 different international languages.

UDC is designed to serve the following purposes:

- To provide a method for arranging books on library shelves in an order which would be helpful to the users i.e. shelf arrangement.
- To provide a method of arranging sub-titles of the books themselves in a catalogue and printed bibliographies.
- To classify the recorded knowledge.
- To retrieve the document or locate the document.

UDC include following important features:

- It is a practical scheme based on the demands of pamphlets, reports and periodical literature rather than the framework of a theory.
- It is based on DDC and claims to be the first Analytico-synthetic classification scheme.
- It lays more stress to achieve co-extensive class numbers i.e. detailed specification than the achievement of a sequence of subjects for optimum helpfulness.
- It avoids the lacunae of numerous private classification schemes by providing a standard system covering all the disciplines and may be used in any type of library.
- It is a general classification scheme and not a bundle of special classification. It is rather an integrated whole.
- It reflects exhaustive enumeration in the schedule with due provision for synthesis or coordination.

- It is amenable to adjustments to meet the special needs because a citation order in any given class allows alternative treatment.
- It uses synthetic devices like colon (:), permits coordination of concept in different permutation, thereby minimizing the rigidity in the enumerated classification scheme.
- An International body for its maintenance and revision with full cooperation of its users guarantees the continual existence of the system as a current and up-to-date one.
- The terminology used in UDC helps in a comprehensive vocabulary of terms for indexing purposes.

In January 1992, the overall responsibility of UDC has been taken over by the Consortium. Since then UDC is being operated as a Consortium under the Dutch law in the form of a non-profit organization and is known as UDCC. It is governed by an Executive Committee consisting of five leading publishers of Belgium, Japan, Netherlands, Spain, and United Kingdom, sixth member being the FID. The Secretariat of the UDCC is the Royal Library, at The Hague. The consortium is collectively responsible for funding, developing and managing the classification. The UDCC is making all necessary efforts to develop UDC as a tool for knowledge organization; to transform it in a versatile tool which may meets the needs of its users in a variety of different circumstances and areas; and a tool for information retrieval. UDC, therefore, is being developed revised keeping in view the following:

- To develop UDC into a fully faceted classification system;
- To remove those inconsistencies that permeate in the classification and hinder in providing a synthetic structure;
- To eliminate compound concepts and enumerate only simple terms leaving synthesis part for the classifier; and
- To radically revise the schedules.

UDC is universal in the sense because it is a general scheme of classification covering all aspects of knowledge and it aims to specify any combination of concepts necessary whether derived from within a subject field or between different subjects.

5.2.4. Colon Classification (CC)[6]

CC is one of the most systematic schemes of Library Classifications used in many libraries in India and a few libraries abroad as well. This was devised by the late Dr. S.R. Ranganathan in 1944. He found the existing scheme of library classification unable to cope with the multidimensional dynamic growth of universe of subjects. Colon Classification proceeds in a different manner in spite of enumerating all possible subjects and their sub-divisions, it analyses the subject in its various components and places them under five fundamental categories known as personality, matter, energy, space and time. To connect or to synthesize the various components of a subject, different connection symbols have been provided. Readymade class numbers are also available, but to build a class number, one has to analyze and pick up the possible isolates belonging to different fundamental categories which are then put together with the help appropriate connecting symbols. Colon Classification involves analysis and synthesis that is why it is known as the `Analytico-synthetic' scheme of classification. The number building makes the scheme somewhat complicated and difficult to work with, but once understood and followed it works efficiently and effectively.

Colon Classification is a general scheme which aims to classify by subject all kinds of documents - books, periodicals, reports, pamphlets, microforms and electronic media in all kinds of libraries. CC is a landmark in the modern classification thought and has greatly influenced the modern classification research and developments.

The important features of CC are as follows:
- It provides schedules for different facets in each basic class.
- It provides special schedules for common subdivisions, geographical divisions and language divisions.
- It provides rules for the construction of class numbers by means of combining the number taken from different facets within a given basic class.
- It uses mixed notation, consisting of capital letters, small letters, Arabic numerals and the colon.

- It uses decimal fraction notation, as well as octave notation for the purpose of hospitality in array.
- It uses eight special devices the colon device, geographical device, chronological device, favoured category device, classic device, alphabetical device, subject device and bias number device.
- It gives a new phenomenon for constructing the book number so that the books having the same class number could be individualized, and
- It uses the concept of phases.

Its seventh edition came into the market in 1987. The schedule of its seventh edition has been given by A. Neelameghan, M.A. Gopinath and S. Seetharama.

- CC-7th edition provides the small schedule of basic classes, the isolate going with each facet in different basic classes are given. In addition, common isolates are also listed thus the class numbers are not readily provided, but have to be constructed.
- It consists of certain standard unit schedule, corresponding to standard pieces in a meccano set. By combining these standard pieces, one can construct a variety of objects. Similarly, by combining the standard unit schedule through various permutations and combinations, one can construct the class numbers for different specific subjects.
- It is a freely faceted analytic synthetic scheme, because the sequence of component ideas in a compound subject can be analyzed on the basis of a set of guiding principles, and not merely determined with the help of the pre-determined facet formula.

5.3. Library Cataloguing

Books and other documents are useless unless their access is not provided. This is provided through cataloguing, which provides access to all acquired information resources of the library for it allows people to find information needed for their personal and professional growth and development. It also provides access points to information resources in a way that users will be able to find the need information or resources.

Library catalogue is a list of all bibliographic items found in a library or group of libraries, such as a network of libraries at several locations. In a narrow sense, it is the compilation of heading and bibliographic descriptions for use in the catalogue and in broader sense, it is the process that encompasses descriptive cataloguing which may include in addition to bibliographic descriptions, the choice and form of author headings and subject headings (Chollom and Daniel[7]).

Cataloguing process consist of descriptive and subject cataloguing. Descriptive cataloguing is concerned, with the identification and description of information materials; describing the material physically and determining the choice of access point (headings). Subject cataloguing involves determining the 'aboutness' of a particular work in hand. It usually involves assigning one or more subject headings from a specified subject thesaurus.

Cutter[8] in 1876 on his first explicit statement in respect to explaining objectives of a bibliographic system declared that his "Rules for a Printed Dictionary Catalog". According to him, the objectives were:

- To enable a person to find a book of which either is known, the author, the title, the subject or the category
- To show what the library has by a given author on a given subject, in a given kind of literature.
- To assist in the choice of a book as to its edition (bibliographically) or as to its character (literary or topical).

However, now a days, the prime functions of a library catalogue are to enable the library users to determine:

- Whether the library has a certain item;
- Which works by a particular author are in the collection;
- Which editions of a particular work the library has; and

- What materials the library has on a particular subject

As far as the physical forms of the catalogues are concerned, the following forms of catalogue exit.

- Book catalogues
- Card catalogues
- Microform catalogue and
- Online catalogue

Book catalogue is the oldest type of catalogue which was commonly used in American libraries. The characteristic of this type was expensive to produce and quickly became out of date or inflexible in changing of the collection. The libraries using this type should provide more copies, this is due to provide access for more users. Thus this type was gradually replaced by card catalogues.

Card catalogue is the library most often found in the worldwide. Each entry is prepared on a standard 7.5 x 12.5 cm. card. These cards are then filed in alphabetically order by author, subject, title, or call number in the drawers to provide access to the collection. The card catalogue is very flexible, it can be easily added or removed whenever necessary. Changing can be made on cards and they can be refiled. It can be provided by references. In large library, however, filing a large of new entries takes a long time and, of course, it needs more spaces. Other disadvantages are any changing is made manually and the users tend to manipulate the trays or drawers, so that other users may have to wait them.

Microform catalogues have become much more popular with the development of computer-output microform (COM). COM catalogues are produced in microfilm or microfiche. It provides a complete data of library holding which is periodically updated. Both book and COM are inflexible in changing; they cannot be added or deleted until the new editions are produced. But, by which they are computer-produced, they are flexible in making changes of entries. With a certain command can be made to change many entries. To meet the users

demand, COM should be made in many copies. They are also easy to be sent to other libraries or information agencies.

Online catalogue is the most flexible and current. Additions, deletions, and changes of entries can be made at any time, and the results are immediately available to the users. However, it is quite expensive to build up compared with other three types. But it possesses following advantages over traditional catalogues.

- The database can be searched in almost any item of information of interest to the users.
- Users can retrieve information in a variety of ways
- It provides very rapid search. d. it can be used from far a way location, so that the users can access a local, national and international cataloguing database
- The filing of indexes is no longer a consideration f. database in online catalogue can be updated online or at frequent intervals, as needed; provided instructional help
- it provides links to the card form catalogues, reference help and circulation h. in this the online database with a certain instruction in the system, can be produced in any other physical form of catalogues; and global changing can be made.

But there are some disadvantages are also associated with the online catalogues. These include the following:

- It is much more sensitive in spelling. If misspelling is there irrelevant hits will occur and user will not able to get his desired document.
- Any error indicates unexpected or different information is printed on the computer screen
- Users get frustrated by getting a quite few citations or sometimes too many citations
- It requires a new way of getting information or training for its users e. it will be unavailable if there is no power or if the computer breaks downs.

5.3.1. Cataloguing Codes

There exist various types of the codes which are used for library cataloguing purpose. Important of them are listed below in table 5.2.

Table 5.2: Different Cataloguing Codes

S.N.	Name of Cataloguing Scheme	Inventor	Year
1.	British Museum Code	British Museums	1841
2.	Rules for Dictionary Catalogue	C.A. Cutter	1876
3.	Anglo American Code	ALA	1908
4.	Vatican Code	-	1927
5.	Classified Catalogue Code	S.R. Ranganathan	1934
6.	ALA Code	ALA	1949
7.	American Library Association	ALA	1949
8.	Anglo American Cataloguing Rules – I	ALA	1967
9.	Anglo American Cataloguing Rules – II	ALA	1978
10.	Anglo American Cataloguing Rules – IIR	ALA	1988

But Anglo American Cataloguing Rules (AACR) and Classified Cataloguing Rules (CCC) are the two main cataloguing schemes that are being used worldwide.

5.3.2. Anglo – American Cataloguing Rules (AACR) [9]

American Library Association asked Seymour Lubetzky, of the Library of Congress in 1951, to analyse the 1949 ALA code. An approach was also made to the Library Association regarding co-ordination of revision of the 1949 code. In 1953 Lubetzky's report (Cataloguing Rules and Principles) was published. This work advocated a move towards a principle-based rather than case-based code. In 1956 Lubetzky was appointed editor of the revised code, and in 1960 he produced the draft Code of Cataloguing Rules; Author and Title Entry. The International Conference on Cataloguing Principles was held in Paris in 1961 to examine the choice and form of headings in author/title catalogues. The outcome was a statement of 12 principles known as the Paris Principles. In 1962 C. Sumner Spalding, of the Library of Congress, became the new editor of the code. The American Library Association and Library Association co-operated by exchanging minutes and working papers, and attending each other's meetings. In addition, the Library of Congress assisted with revision of the descriptive cataloguing rules, and the Canadian

Library Association was involved in reviewing drafts of the rules. In 1967 two versions of the Anglo-American Cataloguing Rules (AACR) were published, a North American text and a British text.

Later on, Anglo-American Cataloguing Rules, Second edition (AACR2) was published in 1978. AACR2 was divided into two parts: Part I, Description – Based on the ISBD (G) framework. – Included a general chapter (chapter 1), and chapters for individual formats, including new chapters for machine-readable data files (chapter 9) and three dimensional artefacts and realia (chapter 10). – The rules for non-book materials were based on alternative codes that were published in the 1970s. Part II, Entry and Heading – Rules were brought more closely into line with the Paris Principles.

AACR-2 was adopted by the Library of Congress, the National Library of Canada, the British Library, and the Australian National Library in January 1981. In 1981 an abridged version, the Concise AACR2 was published [22]. Revisions to AACR2 were adopted in 1982, 1983 (published 1984), and 1985 (published 1986). A draft revision of AACR-2 chapter 9 (renamed: Computer Files) was published in 1987.

Its last revision came in the year 2002 which incorporated the 1999 and 2001 amendments, and changes approved in 2001, including complete revisions of chapter 3 (Cartographic Materials) and chapter 12 (renamed: Continuing Resources). The revision of chapter 12 arose from a recommendation of the International Conference on the Principles and Future Development of AACR, and IFLA-led efforts to harmonize ISBD (CR), ISSN practice, and AACR2. In 2002 AACR was published only in loose-leaf format.

5.3.3. Classified Catalogue Code (CCC) [10]

Classified Catalogue Code (CCC) was developed by Dr. S. R. Ranganathan and it was first published in 1934. The 5th edition of the Classified Catalogue Code with "Additional Rules for Dictionary Catalogue Code" appeared in 1964. It is a code which can be used for the

preparation of classified catalogue as well as dictionary catalogue. It possesses following features:

- ➢ The classified catalogue code is free from the restriction of language, unlike the other codes in spite of their non-local nature. The CCC has achieved this by taking into account basic concepts: (a) Language of the library, (b) Scale of languages, in which the language of the library comes first and the others come in the descending sequence of interest.
- ➢ CCC is altogether a distinct cataloguing code based on canons and principles evolved by Dr. S. R. Ranganathan. There is special provision of rules for compilation of union's catalogues, periodical publications, national bibliographies, indexing and abstracting periodicals.
- ➢ The chain procedure is the unique device in CCC which is the most important contribution of Dr. Ranganthan to the art of cataloguing. This is a mechanical device to devise the subject headings, from class number either for class index or for subject headings, to be used for a dictionary catalogue.
- ➢ CCC attaches a lot importance to the title page and its overflow pages in order to get details to be incorporated in catalogue entries.
- ➢ CCC does not allow the use of imprint and collation in the catalogue entry which are considered to be part and facet of an entry for identification of the documents.
- ➢ The book number constructed in accordance with the Colon Classification of Dr. Ranganathan, indicates the year of publication of the document. An additional information to the title statement of the entry in CCC is the edition of the books.

But additionally, it has some limitations too. These are:

- ➢ It lacks in providing complete bibliographical information which sometimes causes confusion and difficulties.
- ➢ There are no rules for cataloguing of non-book materials have been provided that are essential for cataloguing such materials.

5.4. Reference Service[11]

Reference service is the process of establishing contact between a reader and his documents in a personal way. 'His documents' means every one of the precise documents needed by him at the moment. It also means all the documents Likely to be of use to him at the moment. It further means establishing the contact without any loss of time for him. It is not possible to do all this for a reader without an intimate understanding of his precise interest at the moment.

It can be of two types: Short Range Reference Service and Long Range Reference Service. In short range reference services, the query are satisfied in short time, generally with the help of ready reference sources. But in case of long range reference service, the reader's queries are satisfied comparatively in along time which may take a one day or the whole of the week.

5.5. Circulation Service

Circulation services in the libraries are comprised of the activities which are related to the lending of library books and other material to users of a lending library. Usually, a circulation or lending department is one of the key departments of a library.

It assists library patrons with the location and circulation of library materials (http://www.library.kent.edu/about/departments/circulation). Adebowale, Okiki and Yakubu[12] mention that libraries have to formulate policies which can guide their operations. Like other Library operations, charging, renewal and discharging of Library stock are guided by certain policies in order to enable the Library provide timely and efficient circulation services and prevent loss of materials. Among the policies of the library relating to charging, renewal and discharging are the following:

- That registration with the Library is a prerequisite for the eligibility of a user to lend Library materials
- That the category of a user determines the number of books he/she can borrow
- That the category of a user also determines the length of time he/she qualifies to keep the borrowed material in his/her custody
- That at the expiration of the lending period (date due), the borrower is expected to return or renew the material in his or her possession

- That materials to be borrowed must be in good condition and must similarly be returned in good condition etc.

5.6. Abstracting and Indexing Services

Abstracting and Indexing was started in the early part of the 19th century to assist the researcher keep abreast of increasing current developments in his field of interest which may be difficult to achieve as a result of information explosion (Landes[13]).

Abstracting and indexing (A&I) services unlock the content of scientific journal articles and the books using indexing and abstracts.

Abstracts are formal summaries writers prepare for their completed work. However, Encyclopaedia Britannica defines an abstract as a complete citation, condensation and summary of essential facts of theories and opinions presented in an article or book.

An abstract may be of following types:

- Descriptive / Indicative Abstract
- Informative Abstract
- Critical Abstract
- Descriptive – Informative Abstract
- Mini or Highlighted Abstract

Whatever the types may be but an Abstract majorly serves five main goals (Akinwumi[14]):

- It helps the readers to decide whether they should read an entire article or not? In this case, readers are able to see if a piece of writing interests them or relate to a topic they are working on instead of tracking down hundreds of articles. Therefore, readers rely on abstracts to decide quickly if an article is pertinent.
- It helps the readers and researchers to remember key findings on a topic. Even after reading an article, readers often keep abstracts to remind them of which sources support

conclusions. This is simply because abstracts include complete bibliographic citations which help readers when they begin writing up their research and citing sources.

- It helps readers to understand a text by acting as a pre-reading outline of key points. In this respect, it helps readers anticipate what is coming in the text itself; and makes reading of the text easier and more efficient.

- It also index articles for quick recovery and cross-referencing. This has helped librarians and researchers to find information more easily. The beauty of this is that with so many indexes now available electronically, abstracts with their keywords are even more important because readers can now reviewed hundreds of abstracts quickly to find the ones most useful for their research.

- Abstracts allow reviewing the technical work without becoming monotonous. Little time is spent looking at large volume of work and only the summary or abstract of such work is required which make the work sift the major things that will become useful to readers.

While an **indexing service** is a service that assigns descriptors and other kinds of access points to documents. Indexing service is today mostly used for computer programs, but may also cover services providing back-of-the-book indexes, journal indexes, and related kinds of indexes. However, the function of an index is to give users systematic and effective shortcuts to the information they need indexes are needed for any information collection, except the very smallest.

Citation index is most common form of indexing. A citation index is a kind of bibliographic index, an index of citations between publications, allowing the user to easily establish which later documents cite which earlier documents. Current Contents which were published by the ISI, Philadelphia (USA) were the major example of citation indexes that was started by Eugene Garfield. These were published in three major disciplines as :

- Current Contents: Agricultural, Biological, and Environmental Sciences
- Current Contents: Arts and Humanities
- Current Contents: Clinical Practice
- Current Contents: Engineering, Technology, and Applied Sciences

- Current Contents: Life Sciences

- Current Contents: Physical Chemical and Earth Sciences

- Current Contents: Social & Behavioral Sciences

But with the change in information and communication technology, now we have digital environment where following three are the most suitable examples of citation indexing (https://en.wikipedia.org/wiki/Citation_index):

- Web of Science by Clarivate Analytics (previously the Intellectual Property and Science business of Thomson Reuters)

- Scopus by Elsevier, available online only, which similarly combines subject searching with citation browsing and tracking in the sciences and social sciences.

- Indian Citation Index is an online citation data which covers peer reviewed journals published from India. It covers major subject areas such as scientific, technical, medical, and social sciences and includes arts and humanities. The citation database is the first of its kind in India.

Besides, stock verification and reprography are other two important functions and services of the libraries.

5.7. Reprography Services

Reprography is "the art of producing single or multiple copies of documents whether by photographic or other means" (Landau[13]). It broadly includes "photocopy, micro-copy, duplicating, and in-house printing and in general, is characterised by its small scale of operations and non professional nature of its operatives" (Rangra[15]).

Today, a separate section is devoted to the reprography, where a photocopier is installed for making multiple copies of the documents or relevant portion of them on the demands of users.

5.8. Stock Verification

Stock verification is the periodic verification of books and other reading material. Though the concept is applicable to store   in government and commercial concerns, it forms as one of the components of library management that balance the library service and is a process of physically counting and checking inventory in the unit, against its book balance at least once in a year.

There are numerous benefits of the stock verification but Kumar[16] has enumerated them as below:

- Periodic stock verification and write – off of resultant loss helps to reduce unnecessary escalation in book value of assets.
- Physical verification also helps in replacing relevant, useful and on 628 Transforming Dimension of IPR: Challenges for New Age Libraries demand documents with new copies wherever lost or mutilated.
- Stock verification is the time to introduce new ways of arrangement of stack, modified or new lending system and other procedures.
- Stock verification helps to review the precautionary measures already taken in preventing loss and mutilation as well as to identity any deficiencies in the existing procedure of maintenance of library and vigilance.
- Stock verification provides an opportunity to the staff members to acquaint themselves with the holdings of the library which results is the better reference service to the users.

But the libraries being the public institutions are subjected to accounting and checking, verification and reporting. Therefore, it can be said that stock verification is an insignificant aspect of librarianship as far as teachers, researchers and library experts are concerned. Further, CD/DVDs pose some challenges among the library professionals as narrated by Dhiman[17].

Traditionally the procedures adopted for inventory checking are:

(i) Verification by Accession Register

(ii) Using a separate register with Accession Numbers

(iii) Slips containing Accession Numbers

(iv) Numerical counting

(v) Shelf registers cards or shelf list cards

But with the advancement in information and communication technology (Dhiman and Rani[18]), now automated stock verification is done with the help of integrated library management system. It is done with the help of hand held scanner that is based on:

(i) Barcode technology or

(ii) RFID based technology

Jeevan[19] mentions that **barcode technology** has originated out of the need of retail stores and big industries to track down their inventory errors in a faster way. Barcode technology is essentially a data transfer device and hence it works in perfect harmony with any of the computerized database systems. Barcodes are a pattern of bars and spaces of varying width that represent digits, letters or other punctuation symbols to identify an item or object. Barcode by itself is not a system but an identification tool that provides an accurate and timely support of data requirement for sophisticated management systems.

The bar coding setup consists of barcode scanner to read the barcoded information and its interfacing with the library computer, and the software to convert the requisite information into the barcode and the printer.

But the use of barcode technology in library stock verification is a bit tedious process as compared to RFID technology. RFID technology is more users friendly, accurate and fast.

Radio Frequency Identification (RFID) technology is a wireless technology, mainly consists of three components, RFID tag or smart label, RFID reader, and an antenna. RFID tags contain an integrated circuit and an antenna, which are used to transmit data to the RFID reader

also called an interrogator. The reader then converts the radio waves to a more usable form of data. Information collected from the tags is then transferred through a communication interface to a host computer system, where the data can be stored in a database and analyzed at a later time.

Each document should be uniquely identified for the purpose of inventory. As the accession number of a book is unique it can be chosen to identify the RFID tags of the books. RFID tagging of library materials has multiple roles such as check-out/in, theft deduction and inventory function.

However, Wi-Fi handheld scanner or the inventory reader for capturing the accession number of book available on shelves at the time stock taking is must. The data are captured very quickly and accurately from the RFID tagged books. Figure 5 shows the inventory data capturing method.

The inventory reader consists of two parts the reader and inventory antenna. The inventory reader is supplied power by a rechargeable battery pack providing a minimum of two hours autonomous use in continuous operation. The reader is configured to a Tablet. While scanning the tag affixed in books client software installed in tablet PC receives the data as per the order of scanning.

Each and every document of library must be catalogued in the database in order to compare the scanned data with book database. Also, it is must to maintain the holding status of each document up-to-date, that is, issued, missing, lost, sent for binding, on display, damaged, written-off, withdrawn, etc. in the database. At later stage, a 'Verification Report' is generated for missing accession numbers and a list is obtained against the captured data file.

However, the more reasonable way of clearing the deadlock of responsibility is to treat the loss of library documents like any other loss in the organization and the competent authority write-off the same unless the situation warrants an enquiry about negligence and dereliction of

duty on the part of librarian and library staff. The rules governed by the institution would indicate the financial powers and limits for write-off and the extent of loss allowed. Anyhow, A loss of 3 volumes per 1000 volumes issued/consulted in a year is proposed as reasonable limit for loss unless the loss is attributable to dishonesty or negligence on the part of librarian. Loss of a book of the value exceeding Rs.200.00 and the books of – special nature and rarity shall invariably be investigated and consequential action taken.

Recently, Grover[20] mentions that the Government of India in 1981 called a meeting under the chairmanship of _____ in respect of losses of books in libraries due to open access system and weeding out of books, where it was accepted in this meeting that due to open access system in libraries, there will be some inevitable loss; it is difficult to say that what the limit of acceptable loss is in open access system in a particular library. However, the Joint Director of College Education Department ____ did however bind in a survey conducted by the department that in college libraries, the quantum of the losses of books varies from 6 to 18 books per 1000 books issued. Keeping in view this, it was resolved to recommend that as a unified policy, 4 books per 1000 issued be treated as inevitable loss in the open access system and this loss should be written-off by the any authority concerned.

5.9. Co-operation and Resource Sharing among the University Libraries

Cooperation simply means the people working together with common interest and intention. In terms of resource sharing, and collection development, the co-operation is one way to satisfy the users. It is an essential facet of modern library management in most of the countries. Cooperative collection development is one of the oldest forms of collaboration between libraries. Skipper[21] mentions that programs for the cooperative collection development were designed to assign responsibility for the acquisition of new serial subscriptions of secondary importance to one member in the interest of the others. Serial cancellations were reviewed to assure that no unique title of scholarly interest was inadvertently dropped and made inaccessible to the other members.

Nfila and Darko-Ampem[22] are of the opinion that the library cooperation developed from sharing of union catalogue information, storage facilities, collection development, and

human resources at local, national, and regional levels. Another form of co-operation has been based mainly on inter-library lending services where co-operating libraries agree to enter into reciprocal borrowing and use of materials from other libraries. This form of co-operation enabled libraries to borrow books and periodical articles which were not available locally.

Resource sharing aims to make the resources of one library available to users of other library and vice-versa. Kaula[23] has listed the main objectives of resource sharing as under:

- increase availability of resources
- extend the accessibility of resources
- diminish cost, and
- promote full utilization of resources

Resource sharing is considered as one of the pillars of modern librarianship. The main objective of resource sharing is to maximize the availability of materials and services and to minimize expenses. Availability of a variety of electronic tools for document identification such as access to online OPACs, publishers' catalogues, contents pages, and bibliographic databases has enhanced the awareness of library users about literature produced in their areas of interest. Rapid growth in world literature along with problems such as shrinking library budgets, steady increase in document prices, and depreciating currencies have made it increasingly difficult for individual libraries in developing countries to acquire and retain everything their users might like to read (Majid et al., [24]).

But with the advancement in information and communication technologies, this took the speed and various forms of library cooperation, especially the "Library Networking" and "Library Consortia' become very popular.

Rao[25] mentions that the establishment of the connectivity with the help of technology and linking together with resources of all types resulted in to a discernible change in the information scenario in India. Hence, a large number of library resource sharing networks like the Metropolitan Area Networks such as CALIBNET in Calcutta, DELNET in Delhi, BONET in Bombay, PUNENET in Pune, MALIBNET in Madras, HYLIBNET in Hyderabad, ADNET in

Ahmedabad, and countrywide ones like ERNET, INFLIBNET for Universities and Research Institutions and DESINET for Defence Laboratories, and sectorial ones like BTISNET for Biotechnology Networks etc. are under various stages of conceptualization, design, development and implementation. The objectives, services, functions, future prospects and stages of completeness of these library resource sharing networks are special in one to one networks.

Further, many library consortia which are to refer as the "cooperation, co-ordination and collaboration between, and amongst, libraries for the purpose of sharing information resources". have emerged throughout the world and our country too. To name few are: CSIR Library Consortium, FORSA Consortium, CeRA Consortium, but UGC-INFONET Digital Library Consortium and INDEST-AICTE Library Consortium are the two major library consortium working in the country.

5.9.1. Inter-Library Loan

Inter-library loan is a technique by which one library lends material indirectly to an individual through another library. In essence, therefore, it is merely a means through which a library may broaden its lending service to include those materials which are made available by other libraries (Reynolds[26]).

Here, a patron of one library can borrow books, DVDs, music, etc. and/or receive photocopies of documents that are owned by another library. The user makes a request with their home library; which, acting as an intermediary, identifies libraries with the desired item, places the request, receives the item, makes it available to the user, as well as arranges for its return. The lending library usually sets a due date and overdue fees of the material borrowed. Although, books and journal articles are the most frequently requested items, some libraries will lend audio recordings, video recordings, maps, sheet music, and microforms of all kinds. In some cases, nominal fees accompany the interlibrary loan services (https://en.wikipedia.org/wiki/Interlibrary_loan).

5.9.2. Library Consortium

A library consortium can be defined as a group of libraries who partner to coordinate activities, share resources, and combine expertise.

Advantages of Consortia: Library consortia offer numerous benefits to its member institutions regarding e-resources. Evans[27] has listed some of them as under:

- A comprehensive collection is possible
- Building communication among different libraries
- Avoid duplication of core collection especially for core journals
- Scope of electronic archives
- Easy access to resource sharing on Internet by developing common resources database
- Reduce cost of information and time saving
- Improved resource sharing
- More professional services to users and help to develop a competitive professionalism among LIS professionals.
- It becomes a vehicle for distance learning.
- It is a tool for distribution of education material and journals to remotest of areas.
- It is a resource for researchers and scholars for tapping most up-to-date information.
- It forms a medium for collaboration among teachers and students, not only within the country but all over the world.
- It is on Intranet for university automation.
- It establishes a channel for globalization of education

Disadvantages of Consortia: On one hand, library consortia provide numerous benefits to the member libraries but on the other hand, they are not untouchable of disadvantages. Some of their disadvantages have been listed by Moghaddam and Talawar[28] as under:

- Duplication of efforts
- Wastage of resources

- Confusion for libraries /publishers and

- Reduction in purchase power

However, the major drive for co-operation arose when there was increase in the output of publications or the information explosion, the rise in the cost of publications coupled with stringent budget allocations, and growth in student enrolment. Increasing demand for service from users together with the need to improve inter-lending services and the library collection are additional factors.

5.10. Resource Sharing among Open University Libraries

Resource-sharing normally follows a network of libraries with decent rules and regulations and provides a common platform for libraries and library staffs to come together, communicate, and extend help to enhance access to information and fulfill the unexpected demands of users (Panda and Mallappa[29]).

According to Ved Prakash[30], there are 18 to 20 per-cent of enrolment in higher education is in the programmes offered by the Indira Gandhi National Open University (IGNOU) and State Open Universities. However, there is a substantial number of students who are enrolled in various correspondence courses with the State Universities and the Central Universities. The Distance Education Council (DEC) is authorized to regulate the standards of distance education programmes run by the IGNOU and the State Open Universities. The correspondence courses offered by the State and the Central universities are regulated by the universities concerned. Thus, he feels that there is an opportunity to exploit the Open and Distance Learning (ODL) mode, particularly with the advances in technology.

There are one National Open University and 14 state Open Universities, and above 200 dual-mode universities catering to the educational needs of above 25% higher education students in the country (Santosh and Panda[30]). Therefore, a networking of all the state open universities and national Open University needs to be developed. A model for that is given by Brindha[32] that is depicted below in figure 5.1. He detailed out that : all the open universities should come to an understanding regarding digitization of the material and networking of the resources for

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implementation in a phased manner. Digital libraries of ODE institutions should aim at providing the following services to the learners:- Digital / virtual reference service Information service through e-mail Powerful search tools to retrieve the whole or parts of a digital document, etc.
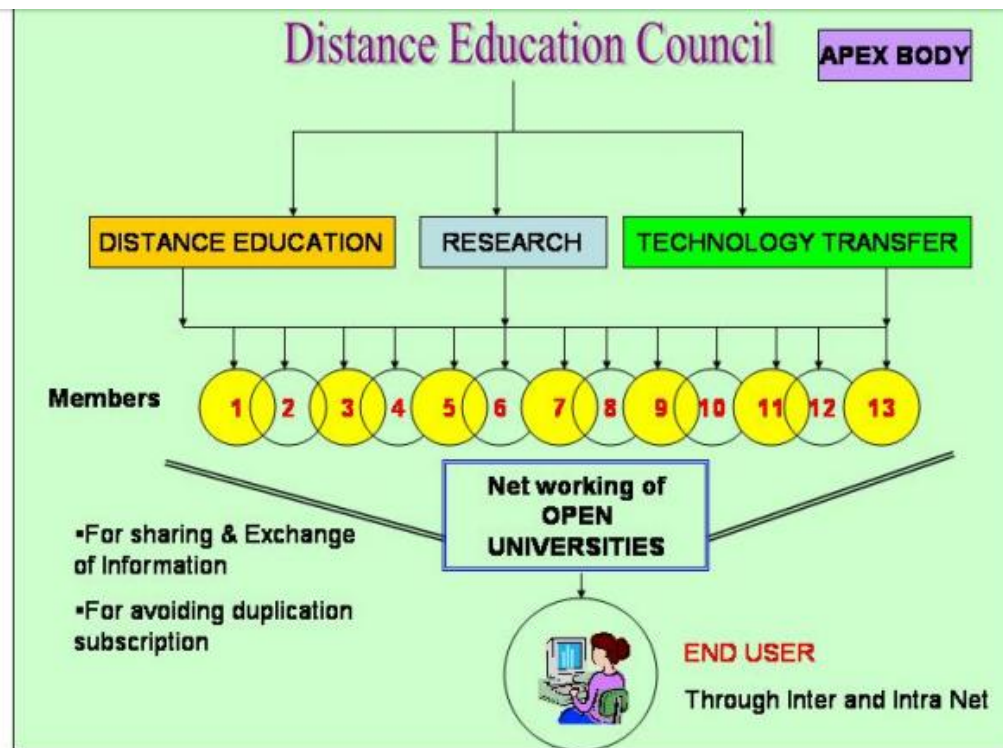
Figure 5.1: Model of Digital Library Network of ODE

He further adds that apart from providing wider access and free flow of information to distance learners and to all those involved in open distance education, the proposed digital library provides several advantages. Some of these are – Networking and sharing of resources can be done easily; It provides cost effective solutions to libraries; More information can be provided at the press of a button. The user do not have to travel long distance and his/her time and resources will be saved; Information can be updated continuously much more easily; Collaboration and exchange of ideas is possible; Improved preservation of resources.

5.11. Library Services in Open University Libraries

Open University system is somewhat different from the traditional university library system because the users in Open University system do not come regularly and most of them are

distance users. The provision of library and information services is one of the essential support systems involved in any distance education program. Further, the quality of distance education programs is enhanced by its library that is one key indicator in quality assurance. As universities establish higher education centers in communities around the country, it is important that their students be supplied with the research tools necessary to ensure them the potential for success" (Bibb[33]). Significantly, it is noteworthy to mention that information and technologies have facilitated the virtual library for distance learners and have demolished the barriers of physical distance and other drawbacks associated with distance education.

Thought it is observed that "members of the distance learning community are entitled to library services and resources equivalent to those provided for students and faculty in traditional campus settings" (ALA[34]), the guidelines clearly state that the traditional on campus library services themselves cannot be stretched to meet the library needs of distance learning students and faculty who face distinct and different challenges involving library access and information delivery.

Open learning library services refers to those library services in support of college, university, or other post-secondary courses and programs offered away from a main campus, or in the absence of a traditional campus. These courses may be taught in traditional or non-traditional formats or media, may or may not require physical facilities, and may or may not involve live interaction of teachers and students. Thus, issue − return is the main services being provided by the Open University libraries. Guidelines for Distance Learning Library Services issued by the Association of College & Research Libraries, USA (ACRL[35]) prescribes the following essential services:

- Reference assistance.
- Computer-based bibliographic and informational services.
- Reliable, rapid, secure access to institutional and other networks, including the Internet.
- Consultation services.
- library user instruction designed to instil independent and effective information

- Literacy skills biased the learner-support needs of the distance learning community.

- Assistance with and instruction in the use of non-print media and equipment.

- Interlibrary loan services using broadest application of fair use of copyrighted materials.

- Prompt document delivery, such as a courier system and/or electronic transmission.

- Access to reserve materials in accordance with copyright fair use policies.

- Adequate service hours for optimum access by users promotion of library services to the distance learning community, including documented and updated policies, regulations and procedures for systematic development, and management of information resources.

However, special funding arrangements, proactive planning and promotion are necessary to deliver equivalent library services and to achieve equivalent results in teaching and learning and generally to maintain quality in distance learning programmes. Similarly ILA 'Guidelines for Library Services to Distance Learners' argues that traditional library services designed for on-campus users will not meet the requirements of distance learners (ILA[36]). ILA has also highlighted some services that are supposed to be provided by a open university library to its distance learners.

- Reference services in person or through telephone/fax/email
- Manual and computerized bibliographic services to faculty
- Borrowing and reading room facilities
- Book bank services
- Mobile library services
- Document delivery services
- Interlibrary loan services
- Preparation of "readings of articles"
- Remote access to OPAC, website and networks like DELNET, INFLIBNET
- Password enabled access to online journals and electronic databases
- Learning resource centres at public and private libraries

National knowledge Commission (NKC[37]) has also recommended to set up a national Information and communication technology (ICT) infrastructure through government support for networking of all open and distance educational institutes. Further a 'digital broadband Knowledge Network' is also proposed by NKC that should have provision for interconnecting the major ODE institutions and their study centres in the first phase itself. It is presumed that a national ICT backbone would enhance access and e-governance in ODE, and enable the dissemination of knowledge across all modes, that is, print, audio-visual and internet based multimedia.

National Knowledge Commission has further recommended to develop a web-based repository of high quality educational resources and web-based common open resources. Open educational resources (OER) must be created online through a collaborative process, pooling in the efforts and expertise of all major institutions of higher education.

5.12. Open University Library Consortium

Tripathi and Jeevan[38] has proposed a National Open and Distance Learners' Library Network for distance learners at par with the current national initiatives for campus based learners, under the name NODLINET. Under which, national Open University, state Open Universities and dual mode institutions - directorates of distance education in campus universities, will participate in the country.

They are of the opinion that NODLINET may provide accredited standards and guidelines for the establishment of distance learning library facilities, apart from e-resource access and digitization. This national network and consortium will help to establish linkages with other national library networks and will deliver information to the various stakeholders of open and distance learning system - faculty, counselors, researchers and students in remote settings across the country. The target beneficiaries of this project will be distance learners dispersed in remote and far flung areas, academic counsellors and faculty members and researchers in the distance education stream who are otherwise deprived of information resources and services.

The network is visualized to provide strong academic support system to distance learners by extending seamless access to information; both licensed content and indigenously generated content. Three core groups have been formed for smooth execution of the project:

- Technology Group - To technical aspects such as which technology to be deployed for facilitating services along the length and breadth of the country.
- Content Evaluation Team - The team will comprise experts who will evaluate and decide upon the quality, authenticity of the content apart from planning the different information resources and services to be provided.
- Finance and Management Team - This team will look in to the financial and managerial aspects. The services being planned under NODLINET :

  ➢ To develop a portal for providing complete information related to distance education
  ➢ To consolidate web resources of interest to distance learning
  ➢ To provide virtual reference service
  ➢ To supply e-documentation support
  ➢ To provide interlibrary loan and document delivery within the purview of IPR.
  ➢ To develop online tutorials for distance learners.
  ➢ To develop a consortium of e-resources for open and distance learning institutions.

Tripathi and Jeevan presumed that the network will provide access to more than 10,000 resources; but restricted and authorized access to remote learners according to the programmes and courses which they have opted for, will be given 24 hours x 7 days. As far as the e-resources are concerned, the following e-resources may be required for open university library system (Jeevan[19]).

(a) Full text
- Lecture notes, research reports and course material produced by the university
- Proceedings of the conferences held locally.

- Full text access of subscribed journals, commercial electronic database, and
- E-journals, e-books etc. both free and paid.

(b) Bibliographic Resources

- Online Public Access Catalogue of the library and union databases from other similar facilities.
- Subject discipline specific commercial electronic databases such as the Econ.it for economics, ERIC for education etc.

5.13. Library Finance

A library is about creating and managing budgets, setting policies for staff and patrons, providing customer service to your patrons, and communicating with local community leaders and government (http://www.ala.org/tools/atoz/librarybudgetfinance/ budgetfinance). But today, librarians are compelled to work with the budgets they have and to modify the elements of the budgets in order to cope with their changing environment.

The financial resources of the library may include the following sources of finance (Jout[39]):

- Government budget,
- Grants from other development agencies,
- fees,
- fines,
- donations,
- gifts,
- sales of products,
- and budget for salaries of library staff

A budget is must for proper running a library but before going for final budgeting, all universities produce estimates as a means of assessing their financial position and seeing where reductions must be made or (in the case of the fortunate) what scope there is for expansion and development. Budget is affected by the following factors:

- Size of library in terms of collection, users, staff and scale of its cooperation

- Location and its physical arrangement

- Kinds of library services

- Types of users served

- Rising costs and the

- Period covered that is usually it will be one year

Ranganathan[40] has mentioned that the annual recurring expenditure of a university library should be as follows:

Expenditure on reading materials	40%
Staff Salary	50%
Binding	4%
Insurance	1%
Others	5%

However, the budgeting process is a continuous process and it involves many persons at different levels in the library but it is the chief librarian, who is responsible for the budget estimate for the consideration of higher authorities. The form of presentation and methods of approval of budget is the deciding factors regarding the degree of power of decision making given to the librarian regarding use of funds granted to the library. However, a librarian must realize the context in which he is supposed to work in the organization. For university library Zero Based Budget must be followed.

But before going to prepare the library budget, a librarian must understand the values, strategy and plans of the library, understand what it means to be cost effective and cost efficient and understand what is involved in generation and rising funds. However, recently, it is observed very fastly we are moving towards digital libraries. There are at least three things academic libraries should do (Lewis[41]):

o Digitize special collections. Most academic libraries are doing this already and the result is the open and easy availability of much important content that has in the past been available only to those who could travel to distant libraries and archives.

o Establish repositories to provide access to and archive the digital documents and data that result from the research done on or of importance to the campus. There has been an ongoing debate concerning the merits of institutional versus disciplinary repositories that tends to cloud the real issue, which is that universities need to support repositories of both types.

o Provide the infrastructure for open access publishing, particularly of journals. This is best done in conjunction with university presses, but if necessary it can proceed without them.

While there is sometime external funding available for digital projects, it is important that the curation of digital content be base funded but if it is not available than librarians should see towards making some room for digital collection and digital services in regular budget. Therefore, if we want to move towards digital revolution that has boosted the library user's demand for accessing the wide range of library services at 24/7, librarians have to face the kinds of financial pressures to outline them. They have to ensure to providing the high levels of services and continue to same.

5.14. Conclusion

Farnes[42] feels that Digital libraries and new technology generally are not distance learning systems. They can provide a means of facilitating learning but do not provide the value added by a learning system. Value added functions may include: entry, admission, registration, a learning contract of some kind; definition of the curriculum, knowledge and skills, what is included; Series of tasks, instructions, learning activities; motivation, progression and commitment; feedback, support and guidance and accreditation, certification. But to organise these services a learning system with infrastructure, management, operational logistics, resources and scale is required. He says that the idea that all that is needed for resources can be loaded onto the Web and learners can simply access this material is attractive to policy makers.

Therefore, he floated an idea to develop an "International Centre for Distance Learning" which may be located in the Open University's Institute of Educational Technology. Likewise, an international centre for distance learning can be developed at the Indira Gandhi Open University, New Delhi so that effective library support to distance learners could be provided for qualitative delivery of instruction and learning.

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Chapter 6

Data Collection, Tabulation and Analysis

This chapter discusses the state of art of the universities surveyed and data analysis is done to check the hypotheses formed and to verify the objectives of the study.

6.1. State of Art of the Universities Surveyed

Under this section, state of art of the university is discussed of which the libraries are surveyed in the present problem. The details of the universities are taken from the respective sites of the university. They are acknowledged at the end of chapter.

6.1.1. Dr.Babasaheb Ambedkar Open University (BAOU), Ahemdabad

Dr.Babasaheb Ambedkar Open University came into existence in 1994 by the Act No.14 of 1994 passed by the Gujarat State Legislature that got assent of the Governor of Gujarat on 27th July, 1994. BAOU is the seventh Open University in the country in terms of their establishment. The headquarters of the university is located at Ahmedabad. The University has established Regional Centre on the campus of South Gujarat University, Rajkot and has initiated the process of another establishing Regional centre on the campus of North Gujarat University, Patan. The University has more than 507 study centers. It has jurisdiction over the whole state of Gujarat. It is open to all persons irrespective of classes, castes, creed, religion or sex.

The major objectives of the BAOU are to:

• Advance and disseminate learning and knowledge by a diversity of means, including use of any communication technology,

• Provide opportunities for higher education to a large segment of the population,

- Promote the educational well-being of the community generally, and

- Encourage the Open University and distance education system in the education pattern of the state.

The University offers 72 programmes with an enrolment of more than 1, 00,000 learners.

6.1.2. Indira Gandhi National Open University (IGNOU)

Indira Gandhi National Open University was established by an Act of Parliament in 1985 to offer high-quality teaching through the Open and Distance Learning (ODL) mode. It began by offering two academic programmes in 1987, i.e., Diploma in Management and Diploma in Distance Education, with strength of 4,528 students and now it serves the educational aspirations of over 3 million students in India and other countries through 21 Schools of Studies and a network of 67 regional centres, around 2,667 learner support centres and 29 overseas partner institutions.

The mandate of the University is to:

- Provide access to higher education to all segments of the society;
- Offer high-quality, innovative and need-based programmes at different levels, to all those who require them;
- Reach out to the disadvantaged by offering programmes in all parts of the country at affordable costs; and
- Promote, coordinate and regulate the standards of education offered through open and distance learning in the country.
- To achieve the twin objectives of widening access for all sections of society and providing continual professional development and training to all sectors of the economy, the University uses a variety of media and latest technology in imparting education. This is reflected in the formulated vision of IGNOU, keeping its objectives in focus, which reads:

The university offers about 228 certificate, diploma, degree and doctoral programmes, with strength of nearly 810 faculty members and 574 academic staff at the headquarters and regional centres and about 33,212 academic counsellors from conventional institutions of higher learning, professional organizations, and industry among others.

Today, Indira Gandhi National Open University has achieved the status of National Resource Centre for Open and Distance Learning, with international recognition and presence, is providing seamless access to sustainable and learner-centric quality education, skill upgradation and training to all by using innovative technologies and methodologies and ensuring convergence of existing systems for large-scale human resource development, required for promoting integrated national development and global understanding.

University is committed to quality in teaching, research, training and extension activities, and acts as a national resource centre for expertise and infrastructure in the ODL system. The University has established the Centre for Extension Education, National Centre for Disability Studies and National Centre for Innovation in Distance Education, to focus on specific learner

groups and enrich the distance learning system. Further, with the launching of EduSat, a satellite dedicated only to education, on 20th September, 2004, and the establishment of the Inter-University Consortium, the University has ushered in a new era of technology-enabled education in the country.

A View of IGNOU Library

Thus, it can be said that the IGNOU library is the most resourceful information centre in the country in the field of Distance Education. The library has the largest collection of books, journals and other related materials in the field of Distance Education, throughout the country. It was established in 1986 in tune with the objectives of IGNOU.

6.1.3. Madhya Pradesh Bhoj (Open) University

M.P. Bhoj (Open) University was formed in 1991 under an act by the state legislature. This university aims to spread and promote higher education among the underprivileged and has set up study centres in remote rural areas. It has collaboration with institutes like the Rehabilitation Council of India, Indian Institute of Tourism and Travel Management and Indian Institute of Material Management, etc.

A View of M.P. Bhoj University

University aims to provide easily accessible system of teaching and learning through education inputs like practical classes, distance teaching, satellite communication teaching, etc. Bhoj University gives special emphasis to target groups of learners coming from rural areas and especially those with disability.

It provides various master and undergraduate courses including health sciences programmes and diploma courses.

6.1.4. U.P. Rajarshi Tandon Open University (UPRTOU)

U.P. Rajarshi Tandon Open University, Allahabad, was established in the year 1999 by the Act No. 10/1999 passed by U.P. Legislature that got assent of the Governor of U.P. on March 24, 1999. It is named after Bharat Ratna Rajarshi Purusottam Das Tandon, an illustrious son of India.

A View of UPRTOU Library

University aims to provide access to higher education for large segments of population and, in particular, disadvantaged groups such as those living in remote and rural areas including working people, homemakers and other adults who wish to upgrade or acquire knowledge through studies. It will also make efforts to promote acquisition of knowledge in a rapidly developing and changing society and continually offer opportunity for upgrading knowledge, training and skills in the context or innovations, research and discovery in all fields of human endeavour.

University offers various masters and undergraduate programmes along with Diploma and Certificate courses for its students.

6.1.5. Vardhman Mahavir Open University (VMOU)

Vardhaman Mahaveer Open University (VMOU) (previously known as Kota Open University) renamed through a Gazette notification by the Government of Rajasthan on 21st September 2002 came into being in 1987 as a pioneering institution for open learning in Rajasthan.

A View of VMOU Library

The establishment of Vardhaman Mahaveer Open University took place with the amalgamation of two institutes of correspondences courses viz. Institute of Correspondence Studies and Continuing Education Jaipur and (College of Correspondence Studies) Udaipur with a view to strengthen and achieve proper coordination among the scattered vast distance education resources and to serve the people of State a uniform high quality education.

The university conducts undergraduate courses, master courses, diploma courses, management programmes along with Master of Philosophy in various disciplines.

6.2. Data Collection, Tabulation and Analysis

The information on the various points related to the study is obtained through questionnaire method. Now, these are tabulated and analysed under different heads. The abbreviations used for different universities are:

- BAOU for Bhimrao Ambedkar Open University, Gujarat
- IGNOU for Indira Gandhi National Open University, New Delhi
- MPBOU for Madhya Pradesh Bhoj Open University, Bhopal
- UPRTOU for Uttar Pradesh Rajrishi Tandon Open University, Allahabad
- VMOU for Vardhman Mahavir Open University, Kota

6.2.1. Working Hours of the Libraries

Open University libraries being different kind of the academic libraries, are expected to serve the users after the normal timings and on the holidays, thus, first the working hours of the university libraries were asked in the survey. It results are shown in table 6.2.1.

6.2.1: Working Hours of the Libraries

Days / Library Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Monday to Friday	10.30-6.10	9.30-6.00	10.30-5.30	10.00-5.00	10.00-5.00
Saturday	10.30-6.10	9.30-4.00 (IInd & IVth Holiday)	10.30-5.30	10.00-5.00 (IInd closed)	10.00-5.00
Sundays	Closed	Not mentioned	Closed	Closed	Closed
Holidays	Closed	Not mentioned	Closed	Closed	Closed

It is seen from the analysis of the data that all university libraries do not open on Sundays and the holidays. Further, during normal time, most of them observed office timings, i.e., from 10.00 to 5.00 or 10.30 – to 6.00 for all working days. IGNOUR remain closed on 2nd and 4th Saturdays and UPRTOU on 2nd Saturday.

This is not healthy trend, libraries should be opened at least on Sundays and holidays as the distance learners are also working professionals and they can make use of libraries only in holidays and the Sundays.

6.2.2 Staff Details

Staff details of different university libraries surveyed are depicted in table 7.6.2. It is seen that out of 05 libraries, only 02 libraries have full time librarians. Rest IGNOU and Vardhman Mahavir Open University, Kota have no full time librarians rather Professor Incharge is there and in MP Bhoj Open University, Director is there instead of librarian.

6.2.2 Staff Details of the University Libraries

Staff/University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Librarian	01	No (Prof I/C)	Director	01	Prof. I/C
Deputy Librarians	-	02	-	-	-
Assistant Librarians	-	-	01	-	-
Professional Staff	02	04	-	-	01
Semi-Professional Staff	01	09	01	02	06
Non-Professional	02	10	01	03	03
Total	06	25	04	06	10

As far as other staff is concerned, it is also less in number as per the staff formula provided by Dr. Ranaganathan or the UGC – where at least 01 deputy librarian, 01 assistant librarian for each section should be there. Also the number of professional staff and non-professional staff is less in number (Krishan Kumar, 1987), i.e., either 10 or below in 04 universities out of the 05 surveyed.

6.2.3. Details of the Traditional Collection of the Libraries

Further, the details about the traditional collection of the libraries were asked on the questionnaire. Table 6.2.3 gives the details of the traditional collection as collected personally on the questionnaire.

It can be seen that maximum traditional reading material exists in the library of IGNOU, where 134932 books area there along with 13751 back volumes of the periodicals and 81 popular magazines.

Table 6.2.3: Traditional Collection of the Libraries

Collection /University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Books	49600	134932	18272	43000	100000
Back Volumes of Periodicals	130	13751	01	-	2500
Popular Magazines/ Newspapers	6019	81	08	12	26
Non-Book Material	-	-	401	-	-
Others	156	-	-	200	-
Total	55905	148755	18682	43212	102526

It is followed by the collection of VMOU, where 100000 books and 2500 back volumes of the periodicals and 26 popular magazines are there. However, BAOU possesses a total collection of 55905 (49600 books and 130 back volumes of the periodicals and 6019 popular

magazines) followed by the collection in UPRTOU consisting of 43000 books, 12 periodicals and 200 other documents. Least collection is with the MP Bhoj Open University that is only 18272 books and 08 periodicals and 401 non-book materials.
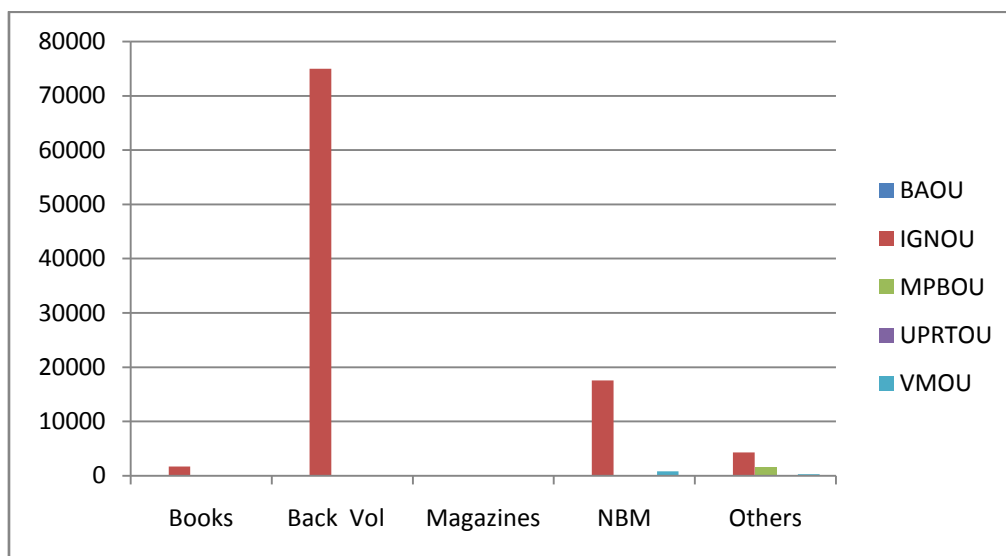
Figure 6.2.1: Traditional Collection in Libraries

Figure 6.2.1 also depicts the picture more clearly about the traditional collection in 05 university libraries surveyed.

6.2.4. Details of the Collection in Electronic Format in the Libraries

Today's libraries are transforming themselves into digital libraries; hence they were also asked to know whether they are possessing any collection in electronic / digital format. It is clear from table that BAOU and UPRTOU do not possess any collection in digital format.

Table 6.2.4: Collection in Electronic Format in the Libraries

Collection /University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Books	-	1711	-	-	-

Back Volumes of Periodicals	-	75000	-	-	-
Popular Magazines/ Newspapers	-	-	-	-	-
Non-Book Material	-	17558	-	-	850
Others	-	4321*	1525	-	300
Total	-	98590	1525	-	1150

* 199 Microforms+4122 CDs

However, there are around 1, 00000 (98590) collection in IGNOU and 1525 in MP Bhoj Open university but only 1150 number of non-book material and other m material exit in VMOU, Kota.

6.2.5. Details of Primary Periodical Subscribed

Periodicals are the most important collection of any library because they provide uptodate and current information about the latest development in any field of knowledge.

Table 6.2.5 depicts that all university libraries subscribes periodicals but out of 05 universities surveyed, only (03) BAOU, IGNOU, and VMOU possess both Indian and foreign periodicals. However, there are no foreign periodicals being subscribed in MP Bhoj Open University. Further, there are no periodicals in UPRTOU.

Table 6.2.5: Primary Periodicals Subscribed

Periodicals /University Name	BAOU		IGNOU		MPBOU		UPRTOU		VMOU	
	I	F	I	F	I	F	I	F	I	F
Social Science	10	02	110	-	-	-	-	-	72	13
Science	-	-	52	-	-	-	-	-	08	07
Commerce	02	01	12	-	-	-	-	-	41	01
General	03	-	-	-	01	-	-	-	28	02
Others	02	-	127	259	-	-	-	-	54	-
Total	17	03	301	259	01	-	-	-	203	23

6.2.6. Details of Secondary Periodical Subscribed

Secondary periodicals are also important. That's why libraries were also asked to disclose the number of secondary periodicals subject wise. But it is a pity condition, no library except IGNOU possess secondary periodicals. Further, IGNOU has not provided their number discipline wise.

Table 6.2.6: Details of Secondary Periodical Subscribed

Periodical/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Social Science	-	Not possible to breakup discipline wise	-	-	-
Science	-	-	-	-	-
Commerce	-	-	-	-	-
General	-	-	-	-	-
Others	-	-	-	-	-
Total	-	-	-	-	-

6.2.7. Mode of Acquiring the Books in Libraries

There exist a vast collection of books in most of the libraries surveyed that consists of Indian and foreign books as well. Whether the books are of Indian publication or foreign publication, they must come in the library quickly. Thus, there mode of acquirement is important because it fastens the delivery that is important from library point of view.

Table 6.2.7 clearly indicates that most of libraries purchase books from local vendors. But IGNOU and VMOU also subscribes directly from the publishers. Both of them are quick mode of acquirement of the books but local vendors are more appropriated because they direct provide the delivery of books in the library. While in case of receiving them directly from the publishers, library staff may have to go to get delivery from the post office or railway station as the case may be.

Table 6.2.7: Mode of Acquiring the Books in Libraries

Agency/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Direct from Publishers	-	Yes	-	-	Yes
Through Agent	-	Yes	Yes	-	Yes
Book Sellers / Local Suppliers	-	Yes	Yes	Yes	Yes
Tenders	Yes	-	-	-	-
Others, if any	-	-	-	-	-

However, Bhimrao Ambedkar University also invites tenders for books procurement.

6.2.8. Mode of Acquiring the Periodicals in Libraries

Likewise, periodicals form a major part of the collections in any library and they are more important to receive immediately just after their publication because they provide update information in any subject. So they can be subscribed through local agent or agency or direct from the publishers.

Table 6.2.8: Mode of Acquiring the Periodicals in Libraries

Agency/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Direct from Publishers	-	Yes	Yes	-	Yes
Through Agent	Yes	Yes	-	Yes	Yes
Book Seller/ Local Seller	-	-	-	-	-
Others, if any	-	-	-	-	-

Table 6.2.8 depicts that almost all the libraries subscribe them direct from the publishers because as and when the new issue of periodicals is published, publisher immediately send it to

the library. But the problem is that every time the library has to issue bank draft or transfer the money to each publisher that may create burden over the library staff because one person is to make spare for this work only.

Other mode to get them is from either through the agency like Central News Agency, New Delhi or through book seller which is the more appropriate mode because the library has not to bother about the foreign exchange or money transfer etc. It is seen from the table that except that IGNOU, other libraries also subscribe periodicals through agent also.

6.2.9. Who select the Books / Periodicals for Libraries?

The collection of any library whether it consists of books or the periodicals of other items must be of that kind that it could satisfy the needs of its customer, i. e., the users comprising of students, faculty members and other employees. But in academic libraries, the needs of students and the faculty members is given weight age. Therefore, the collection must be developed on the basis of requirement of the students.

Table 6.2.9: Selection of the Books/Periodicals for Libraries

Agency/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Library Committee	-	-	Yes	-	-
Librarian	Yes	-		-	-
Users/Students	Yes	Yes		-	-
Other, if any	Staff members	-	-	-	-

Table 6.2.9 depicts that in BAOU and IGNOU students are given importance and also the librarian selects the documents for Bhimrao Ambedkar University library. But in MP Bhoj Open University, library committee is solely responsible for selection of the books and other reading materials.

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While, UPRTOU and VMOU did not reply on this point that means their mode of selection of the books is not proper.

6.2.10. Which System of books access is followed for Users?

There are two systems of stacking the books in library are in vogue, one is closed access and other is open access. Close access system was basically used in earlier times, when the cost of the books was very high and number of copies produced was also less. But now open access is being followed in most of the libraries worldwide because it provides a facility to the users to have the access of alternate material in case of particular item is not there in the library.

Table 6.2.10: System of Using Books in Libraries

System/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Open Access	Yes	Yes	Yes	Yes	Yes
Close Access	-	-	-	-	-
Others, if any	-	-	-	-	-

Table 6.2.10 depicts that all the libraries are following open access of system for the users where user can freely enter into the library and make use of the available documents/ items in library.

6.2.11. Do Library has Branch Libraries

Bhimrao Ambedkar Open University has 110 study centres and books are purchased from central library for them. While in IGNOU, upto 2013 the books were purchased through the central library but from 2014 onwards, the study centres have been authorized to purchase the books directly. But no data is available for MP Bhoj Open University, Bhopal. However, UP Rajrishi Tandon Open University, Allahabad has study centres and books / periodicals are sent after purchasing to them but they are also authorized to purchase the books and periodicals directly. However, no reply is given by VMOU on this point.

Thus, most of the university libraries purchase the books and periodicals for their study centres and branch libraries. Only one university that is UPRTOU has given the liberty to purchase directly and from 2014 onwards by the IGNOU.

Further, all central libraries were asked to know – whether they have any control over the branch / study centre libraries or not? It is noteworthy to mention that Bhimrao Ambedkar Open University, IGNOU, and UPRTOU have the control over them but other two libraries did not reply on this point.

Table 6.2.11: Branch Libraries

Branches/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Yes	Yes	Yes	NA	Yes	Not mentioned
No	-	-	-	-	Not mentioned

Table 6.2.11 depicts that majority of the university libraries are having branch libraries and most of them have control over them. Further, it is seen that non branch library at present is providing issue-return facility to its readers; however, postal loan service can be introduced for the benefits of the users.

6.2.12. Finance Management

Finance is the most important of the management to run any organization. It is the only finance that provides introduction of new services/extension of present services and also motivates the personnel working in any organization. So is the case with libraries. It is noted in the survey that out of 05 libraries surveyed, BAOU has not provided any data.

IGNOU is on the top of budgeting, it has 1 crore for book purchasing, 02 lakhs for printed journals and 1.5 crore for electronic items. However, UPRTOU has not mentions about

the ratio of expenditure, where they expend 60% on books, 30% on purchasing of the printed journals and 10% on other items.

6.2.12: Finance Management

Classification/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Books	NA	1 crore	20 lakhs	60 %	42 lakhs
Journals	NA	02 lakhs	NA	30 %	21 lakhs
Other items	NA	1.5 crore*	NA	10 %	NA
Other, if any	-	-	-	-	-

* For electronic resources

But VMOU also has a good budget for book purchasing (42 lakhs) and 21 lakhs for journals.

6.2.13. Technical Treatment / Work

Technical work is related to the processing (classification and cataloguing) of the books and other reading material so that after stamping work they can be sent to circulation counter. Thus, question was asked on the classification scheme being used and the catalogue codes used in cataloguing of the books in manual time.

6.2.13 A: Scheme of Classification Used

Classification/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
CC	-	-	-	-	-
DDC	Yes	Yes	Yes	Yes	Yes
UDC	-	-	-	-	-
Other, if any	-	-	-	-	-

6.2.13A details out about the scheme of classification being used by these libraries. It is seen that all the libraries are using Dewey Decimal Classification (DDC) scheme for classifying their documents. That is because DDC is a popular and worldwide using classification scheme.

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Table 6.2.13B: Scheme of Cataloguing Used

Cataloguing/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
CCC	-	-	-	Yes	-
AACR-2	-	Yes	Yes	Yes	Yes
Other, if any	-	-	-	-	-

When the librarians / library incharge were asked about the cataloguing scheme they were using in manual work timing, their answers were tabulated in Table 6.2.13B which shows that out of 05 university libraries, only 01 that is UPRTOU is using Classified Catalogue Code (CCC) for cataloguing their documents, but rest have been using the AACR-2 for catalogue their documents.

6.2.133C: Form of Catalogue Used

Form of Catalogue/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Card Form	-	-	-	-	Yes
Computerized Form	Yes	Yes	Yes	Yes	Yes
Other, if any	-	-	-	-	-

Further, format of the cataloguing was asked, it is seen from table 6.2.13C that amazingly VMOU uses both form of catalogue, i.e., card format and OPAC means computerized form. Others are now switching over to computerized system and their records are available over their OPACs.

6.2.14. Method of Issuing/Returning of the Books/Periodicals etc.

Once the books and periodicals and other reading materials are received in library, after processing they are transferred to the stack for circulating among the readers.

Table 6.2.14: Method of Issuing/Returning of the Books/Periodicals

Methods/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Browne	-	Yes	-	-	-
Newark	-	-	-	-	-
Ledger	-	-	-	Yes	-
Computerized	-	Yes	Yes	-	-
Other, if any	Yes	-	-	-	Register and Passbooks

Table 6.2.14 shows that different types of exist in these libraries. IGNOU has both forms– Browne as well as computerized issue-return. Whereas, MP Bhoj Open University has computerized and UPRTOU has Ledger system (for faculty members). However, VMOU is using register and passbook system for issue – return of the reading materials. But Bhimrao Ambedkar Open University chooses other system of issuing/returning of the books and other reading material from the library but did not disclose the name of the method.

6.2.15. Different Types of Services provided by the Libraries

Circulation service is the most important service and all the libraries are expected to provide this facility to its readers. Though, all the university libraries surveyed provide this service to their faculty members and other staff but as far as the students are concerned, no Open University library is providing this service to the users except that of IGNOU library which provides this service to their clients after depositing security money. A reader can get issued two books from the library at a time against this security. When, he leaves the university, it is refunded to him. But no other university library is providing this service to their students.

But other services, such as – reference service, inter-library loan, translation service, bibliographic service and current awareness service (CAS) & Selective dissemination of information service (SDI) etc. which varies from library to library.

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Table 6.2.15: Different Types of Services provided by the Libraries

Services/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Circulation Service	No	Yes	No	No	No
Reference Service	Yes	Yes	Yes	Yes	Yes
Inter-Library Loan (ILL)	Yes	Yes	-	-	-
Photocopy Service	Yes	Yes	-	-	Yes
Translation Service	Yes	-	-	Yes	-
Bibliography Service	-	On request	-	-	-
Current Awareness Service (CAS)	Yes	Yes	Yes	Yes	Yes
Selective Dissemination of Information (SDI) Service	Yes	Yes	Yes	Yes	Yes
Other, if any	-	-	-	-	-

Table 6.2.15 depicts that Bhimrao Ambedar Open University provides all types of services except that of bibliography service and circulation service. . Circulation is also not the part of MPBOU, UPRTOU and VMOU. IGNOU provides bibliography service on request but translation service is not there. While, MP Bhoj University provides only reference service and CAS & SDI only. UPRTOU provides all services than ILL, Photocopy and bibliographic services.

Further VMOU is providing reference service, photocopy and CAS & SDI services to its users. Figure 6.2.2 also depicts the situation of the services being provided by the university libraries surveyed to their users.
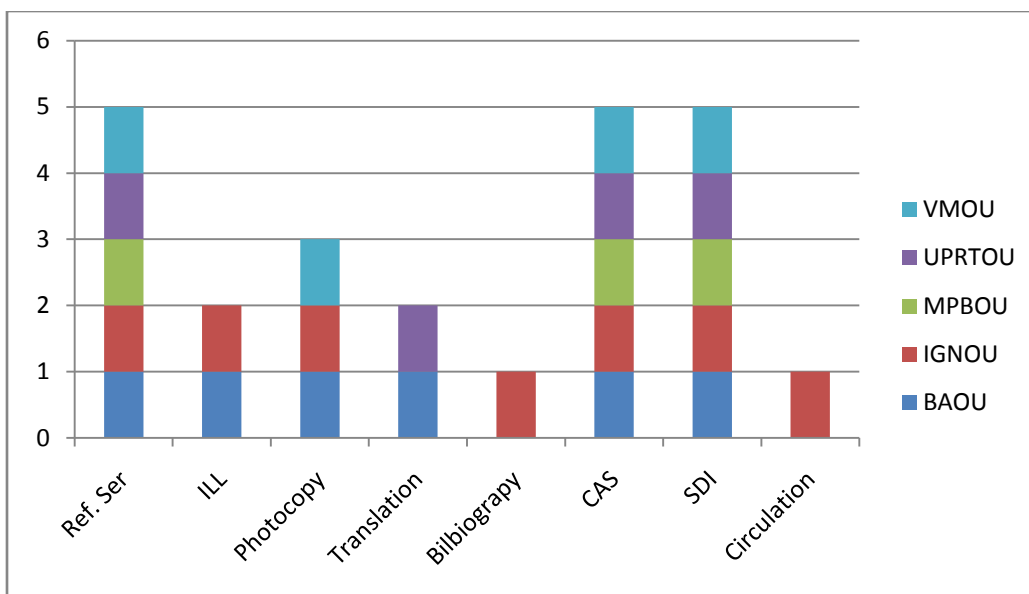
Figure 6.2.2: Different Types of Services provided by the Libraries

6.2.16. Membership of Library Consortium

Further, all universities were asked to know whether they are the members of any consortium for acquiring e-resources. It is noted that out of 05 universities, 04 universities, namely IGNOU, MPBOU, UPRTOU, and VMOU are getting e-resources through library consortium. Only Bhimrao Ambedkar Open University is not subscribing any e-resource independently or through any consortium.

Table 6.2.16: Membership of Library Consortium

Library Consortium/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
UGC-INFONET	-	Yes	-	Yes	Yes
DELNET	-	-	-	-	Yes
Others, if any	-	-	Yes*	-	

* But did not tell the name.

IGNOU is subscribing UGC-INFONET, JSTOR, Project Muse, Taylor & Francis, Springer Links, and JCCC. But MPBOU did not mention the name. UPRTOU is a member of UGC-INFONET, Emeralds and Taylor & Francis and VMOU, Kota is getting access of e-resources through DELNET, and UGC-INFONET. Thus, majority of the libraries are the member of UGC-INFONET and it is but natural because this consortium is for academic libraries and satisfies the needs of most of the users.

6.2.17. Computerization

It is also noted in the study that the university libraries those are having automated system of issue – return are using barcode for the purpose. UPRTOU has not computerized issue-return but have OPAC.

Further, all the universities libraries were surveyed about the computer infrastructure they have. Table 6.2.16A reveals the actual conditions of number of computers and their make.

6.2.17A: Computer Details

Computer/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Pentium-IV	-	100	02	04	09
Pentium – IV (Dual Core)	Yes*	-	-	14	
Other, specify	-	-	-	-	-
Total	-	100	02	18	09

* Number of Computer not mentioned.

It is seen that IGNOU has around 100 computers in its library but the conditions of other universities is not so good. MP Bhoj Open University has only 02 computers, UPTOU has 18 (04 Pentium and 14 Pentium – IV dual core) and VMOU has 09 computers respectively.

But Pentium computers are there in Bhimrao Ambdekar Open University; however, its librarian has not mentioned the number of computer they have. Further, how much computer

accessories, just like printers, scanners and UPS are there in the libraries, this question were also asked from the librarian. Once again, IGNOU has topped among the same, it is seen from the table 6.2.17B that 23 printers, 02 scanners and 55 UPS are there in addition to 02 servers.

6.2.17B: Computer Accessories in the Libraries

Accessories/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Printers	02	23	01	4	3
Scanners	01	02	-	1	1
UPS	01	55	Yes*	-	1
CVT Stabilizers	-	-	-	-	-
Server	-	2	-	-	-

* Number not mentioned.

However, there are no mentions of servers in other libraries case, it means they are not possessing their own server rather they are on the university server. BAOU has 02 printers, 01 scanner and 01 UPS; MP Bhoj has 01 printer and UPRTOU has 04 printers and 01 scanner. Besides, there are 03 printers in VMOU and 01 printer and 01 UPS in VMOU.

6.2.17C. Library Management Software

Since the introduction of computerization activities in the libraries, they were trying to automate their circulation activities also. Though, earlier software were introduced for creating databases only, but later on integrated library software came into the use.

Now – a – days, various library software are in market which are being used in different types of libraries, some of them are government creation just like the SOUL that is produced by Inflibnet, Ahemdabad and others are private / commercial production, just like Troodon, LibSys, Alice for windows etc.

Table 6.2.17C: Library Management Software

Software/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
LibSys	-	LibSys	-	-	-
SOUL	Yes		Yes	Yes	-
Other, specify	-	-	-	-	Yes*

* Name not mentioned.

It may be seen from the table 6.2.17C that LibSys is being used in IGNOU, New Delhi and SOUL in BAOU, MP Bhoj Open University, Bhopal and UPRTOU, Allahabad. While, VMOU is using software but the librarian could not tell the name of software, means that it may be the local software. However, all the libraries are automated and using library software to run their all activities.

6.2.18. Inter Library Networking

Networking is the essential feature of today's libraries, because without networking any library cannot provide digital / computer based services to its client.

6.2.18: Inter Library Networking

Network/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
LAN	-	Yes	Yes	Yes	Yes
MAN	-	-	-	-	-
WAN	Yes	-	-	-	-
Other, specify	-	-	-	-	-

Thus, the librarians were asked to ascertain which kind of the connectivity they are using in their library. It is seen that out of 05 universities surveyed, 04 except that of BAOU are using LAN – local area network connectivity to provide services to the users. But BMOU is using

WAN- wide area network connectivity. It means BMOU is more advanced in comparison to other universities.

Besides, Bhimrao Open University also has CD-ROM network to give access to local users of the CDs they have in their collection. While others do not have, they provide all the facilities over local area network.

6.2.19. Types of Connectivity

Connectivity is of much importance in the internet era, because it is the only speed of the internet that decides how quickly the information will be retrieved from the web.

Table 6.2.19: Types of Connectivity

Connectivity/ University Name	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Dial-Up	Yes	-	-	-	-
Leased Line			Yes	Yes	Yes
VSAT	-	Yes	-	-	-
Others, specify	-	-	-	-	-

Thus, all the university libraries were surveyed were asked about the speed of Internet they have, it is seen that BROU has 2 Mpbs, IGNOU has 100 Mbps, MP Bhoj has 01 Gbps, UPRTOU has 2 Mbps internet speed.

But VMOU did not reply on that point. Thus, it can be concluded that maximum internet speed exist in MP Bhoj Open University followed by 100 Mbps speed in IGNOU. Rest universities possess normal speed of Internet connection.

6.2.20. Internet / E-Resource Access Facility

Lastly, the questions were asked – whether the university libraries surveyed are providing internet access and / or e-resource access facilities to their clients comprising of faculty members and the students.

Table 6.2.20: Internet / E-Resource Access Facility

Types of Users	BAOU	IGNOU	MPBOU	UPRTOU	VMOU
Faculty Members	No	Yes	No	Yes	Yes
Students	No	Yes	No	No	Yes
PhD Scholars	No	Yes	No	Yes	Yes
Non-teaching Members	No	Yes	No	No	Yes

It is seen from the table 6.2.20 that IGNOU and VMOU are providing this facility to their all members whether they are faculty members, students or the Ph D scholars. Further, UPRTOU provides this facility to its faculty members and PhD scholars.

But other no university is providing this facility..

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Chapter - 7

Discussion and Conclusion

7.1. Objectives of the Study

Some objectives were framed to evaluate the information management system and other related activities of selected Open University libraries in the changing environment. They were meant:

(i)   To explore the infrastructure facilities, collection of various types of resources in selected Open University libraries.

(ii)   To study collection and its development in selected Open University libraries.

(iii)   To know the availability and users' awareness of different types of resources in the selected Open University libraries.

(iv)   To know the staff pattern among selected Open University libraries. Also to compare the staffing pattern of different selected Open University libraries.

(v)   To know the services being provided to their users by the selected Open University libraries.

(vi)   To find out the barriers being faced by the library professionals while developing the library services in selected Open University libraries.

(vii)   To know the major financial sources in selected Open University libraries.

(viii)   To study the level of library automation services in selected Open University libraries.

(ix) To analyse the use of information and technology in selected Open University libraries.

7.2. Major Findings of the Study

On the basis of the objectives the study was carried out using questionnaire method that is supplemented by the observation and personal contacts with the librarians. Major findings related to the objectives of the study are depicted below:

- Table 6.2.1 depicts that most of the libraries are remain closed on the Sunday and other holidays. However, a few like that of IGNOU and UPRTOU remain open for short timings on Saturdays. But they should be open on Sundays and the holidays.

- Table 6.2.2 shows that only 02 libraries have full time librarians but IGNOU, MPBOU and VMOU have Director or the Prof I/C for their libraries. Further, there is also a shortage of other staff including Deputy Librarians and Assistant Librarians at supervisory level and Professional Assistants and Semi-Professional assistants at professional level.

  The number of staff is also less in number as per the staff formula provided by Dr.Ranaganathan or the UGC – where at least 01 deputy librarian, 01 assistant librarian for each section should be there. Also the number of professional staff and non-professional staff is less in number.

- As far as traditional collection is concerned all the libraries are rich in collection comprising of books, periodicals and other material. On the top, there is IGNOU with 148755 number of documents and UPRTOU is at the last position with 43212 number of documents. But the number of collection is sufficient.

- But all the libraries are very weak in electronic collection. It is seen from the table 6.2.4 that only IGNOU is having a good number of electronic documents which are around 1 lac (98590) in number; while MPBOU is having 1525 and VMOU is having only 1150 number of electronic documents. However, they are totally absent in case of BAOU and UPRTOU.

- Table 6.2.5 depicts that all university libraries subscribe periodicals but out of 05 universities surveyed, only (03) BAOU, IGNOU, and VMOU possess both Indian and foreign periodicals. However, there are no foreign periodicals being subscribed in MP Bhoj Open University. No periodicals are being subscribed currently in UPRTOU. Further, no library (table 6.2.6) except IGNOU possesses secondary periodicals. Although IGNOU has not disclosed their number discipline wise.

- Table 6.2.7 shows that all the libraries get books from local suppliers but Bhimrao Ambedkar University also invites tenders for books procurement.

- Further, table 6.2.8 shows that except that IGNOU, other libraries also subscribe periodicals through agent also.

- Table 6.2.9 shows that BAOU, IGNOU give prime importance to students in book selection. While, UPRTOU and VMOU did not reply on this point that means their mode of selection of the books is not proper.

- It is seen that all the libraries (table 6.2.10) are following open access system for the users where user can freely enter into the library and make use of the available documents/ items in library.

- Table 6.2.11 shows that majority of the university libraries (03 out of 05) are having branch libraries and most of them have control over them.

- Further, table 6.2.12 shows that IGNOU is on the top of budgeting, it has 1 crore for book purchasing, 02 lakhs for printed journals and 1.5 crore for electronic items.

- Dewey Decimal Classification (DDC) scheme for classifying their documents (table 7.2.13A) is used by all libraries. Further, table 6.2.13B shows that UPRTOU is using Classified Catalogue Code (CCC) for cataloguing their documents, but rest have been using the AACR-2 for cataloguing their documents.

- As far as the issue-return schemes are concerned, it is very clear from table 6.2.14 which shows that different types of schemes exist in these libraries. IGNOU has both forms– Browne as well as computerized issue-return. Whereas, MP Bhoj Open University has computerized and UPRTOU has Ledger system (for faculty members). However, VMOU is using register and passbook system for issue – return of the reading materials. Bhimrao Ambedkar Open University chooses other system of issuing /returning of the books and other reading material from the library but did not disclose the name of the method.

- It is also observed that Bhimrao Ambedar Open University provides all types of services except that of circulation and bibliography services for the students. Circulation service is also not the part of library services in MPBOU, UPRTOU and VMOU for the students. However, IGNOU provides bibliography service on request but translation service is not there. While, MP Bhoj University provides only reference service, and CAS & SDI. UPRTOU provides all services except than ILL, Photocopy and bibliographic services. It is very clearly depicted in table 6.2.15.

- Further, out of 05 universities, only 04 are acquiring e-resources. Further, IGNOU, UPRTOU and VMOU are getting them through UGC-INFONET and MP Bhoj University did not disclose the name of library consortium. However, VMOU is also the member of DELNET (table 6.2.16).

- Table 6.2.17A depicts that IGNOU has around 100 computers in its library but the conditions of other universities is not so good. MP Bhoj Open University has only 02 computers, UPTOU has 18 (04 Pentium and 14 Pentium – iv dual core) and VMOU has 09 computers respectively. But Pentium computers are there in Bhimrao Ambdekar Open University; however, its librarian has not mentioned the number of computers the library possesses.

- Further, table 6.2.17B that IGNOU has 23 printers, 02 scanners and 55 UPS are there in addition to 02 servers. BAOU has 02 printers, 01 scanner and 01 UPS; MP Bhoj has 01

printer and UPRTOU has 04 printers and 01 scanner. Besides, there are 03 printers in VMOU and 01 printer and 01 UPS in VMOU.

- LibSys is being used in IGNOU, New Delhi and SOUL in BAOU, MP Bhoj Open University, Bhopal and UPRTOU, Allahabad. While, VMOU is using software but the librarian could not tell the name of software, means that it may be the local software (table 6.2.17C). However, all the libraries are automated and using library software to run their all activities.

- Table 7.2.18 depicts that 04 except that of BAOU are using LAN – local area network connectivity to provide services to the users. But BMOU is using WAN- wide area network connectivity. It means BMOU is more advanced in comparison to other universities.

- All the university libraries were surveyed were asked about the speed of Internet they have, it is seen that BROU has 2 Mpbs, IGNOU has 100 Mbps, MP Bhoj has 01 Gbps, UPRTOU has 2 Mbps internet speed. But VMOU did not reply on that point. Thus, it can be concluded that maximum internet speed exist in MP Bhoj Open University followed by 100 Mbps speed in IGNOU. Rest universities possess normal speed of Internet connection (table 6.2.19).

- Lastly, it is seen from the table 6.2.20 that IGNOU and VMOU are providing this facility to their all members whether they are faculty members, students or the Ph D scholars. Further, UPRTOU provides this facility to its faculty members and PhD scholars.

7.3. Hypothesis for the Study

Following hypotheses were formed for the present study. They are tested now.

    (i)   As less students use the libraries in open stream, hence, infrastructure and collection of various types of resources in selected Open University libraries are

not up to the mark as compared to collection an infrastructure available in traditional university libraries.

This hypothesis is proved correct because except IGNOU which is having a collection of 148755 documents, no other library possesses so huge amount of collection. Further, table 6.2.4 depicts the situation of electronic documents which is very pity except that of IGNOU that is having a good number of electronic documents which are around 1 lac (98590) in number.

Table 6.2.5 depicts the situation of periodicals but it is seen that out of 05 universities surveyed, only (03) BAOU, IGNOU, and VMOU possess both Indian and foreign periodicals. However, there are no foreign periodicals being subscribed in MP Bhoj Open University. Further, there are no periodicals in UPRTOU.

(ii)   Collection in the Open University libraries is not so organised, especially at their study centres.   No professional staff is provided for these centres.

Though, only central libraries of the universities are studied, but a bird's eye view is made on the collection of study centres libraries, the condition of their collection is very pity. Thus, this hypothesis is also correct.

(iii)   Open University libraries do not possess library staff according to standard norms, because no regular visitors use these libraries. Students come occasionally, more commonly during the personal contact or during exam time. That's why not so much staff is needed in these libraries.

Table 6.2.2 shows the details about the staff of the university libraries. It is seen that only 02 libraries have full time librarians but IGNOU, MPBOU and VMOU have Director or the Prof I/C for their libraries. Further, there is also a shortage of other staff including Deputy Librarians and Assistant Librarians at supervisory level and Professional Assistants and Semi-Professional assistants at professional level.

Further, the number of staff is also less in number as per the staff formula provided by Dr.Ranaganathan or the UGC – where at least 01 deputy librarian, 01 assistant librarian for each section should be there. Also the number of professional staff and non-professional staff is less in number.

Thus, the students, especially the local students who can use and avail the services of the libraries are being deprived for issue – return of the documents.

(iv)   Only essential services, like issue-return of the books to faculty members and facility of providing books in library premises to students for local consultation, are provided by the Open University libraries.

This hypothesis is not correct because table 6.2.15 shows that Bhimrao Ambedar Open University provides all types of services except that of circulation and bibliography services for the students. Circulation service is also not the part of MPBOU, UPRTOU and VMOU for the students. However, IGNOU provides bibliography service on request but translation service is not there. While, MP Bhoj University provides only reference service and CAS & SDI. UPRTOU provides all services than ILL, Photocopy and bibliographic services.

(v)   As open universities are established by state government, so major part of their budget come from state government.

This hypothesis is also correct except that the case of IGNOU which is considered as a national open university and whose budget is beard by the central government.

Table 6.2.12 clearly depicts that IGNOU is having more budget as compared to other state open universities. It has 1 crore for books, 02 lakhs for journals and 1.5 crore rupee budget for other items per year. While, MP Bhoj university has only 20 laksh of rupee for books, and VMOU has 42 lakhs for books and 21 lakhs for journals respectively.

(vi)   Automation of the library services is not the priority of Open University libraries because most of their services run in traditional mode.

        This hypothesis is not correct because LibSys is being used in IGNOU, New Delhi and SOUL in BAOU, MP Bhoj Open University, Bhopal and UPRTOU, Allahabad. While, VMOU is using software but the librarian could not tell the name of software, means that it may be the local software (table 6.2.17C). However, all the libraries are automated and using library software to run their all activities.

        Further, table 7.2.18 depicts that 04 except that of BAOU are using LAN – local area network connectivity to provide services to the users. But BMOU is using WAN- wide area network connectivity. It means BMOU is more advanced in comparison to other universities.

(vii)   ICT is not much used in Open University libraries, and no weightage is given to ICT based services including access of e-resources in Open University libraries as compared to traditional university libraries.

        This hypothesis is partially correct because all the open university libraries are the member of library consortium and out of 05 universities 04 are acquiring e-resources.

        Further, as seen through IGNOU, UPRTOU and VMOU are getting them through table 6.2.16, UGC-INFONET and MP Bhoj University did not disclose the name of library consortium. However, VMOU is also the member of DELNET.

7.4. Conclusion

        Thus it is concluded that the present study that was carried out for the comparative study of Open University Library System fulfils its objectives framed at the starting of the study. Also, some of the hypotheses formed proved correct but some not. It means the libraries are progressing slowly and the surely they will become the ideal centre of learning in near future.

It is seen – traditional library services are being organized and provided by all the libraries well but ICT based services are lacking. Thus, there are some suggestions which may be used to improve the present conditions of the libraries and also to improve the level of users' satisfaction.

- A networking of all Open University Libraries is needed, where IGNOU may act as the leading library.
- At present various library consortia are working in India, but no library consortium fulfils the requirement of the Open University system because the demand and nature of Open University system is different. So, a OPEN UNIVERSITY LIBRARY CONOSORTIUM is proposed for acquiring electronic resources.
- MOOCs which are the massive online open courseware should be uploaded by the libraries for the benefits of its students.

Last but not least all libraries are seen closed on the Sundays and the holidays, they should be open on these days, because most of the distance learners are working professionals and they can only make use of the library resources on these holidays. So, arrangements should be made to open libraries on Sundays, and the holidays.

7.5. Limitations of the Study

The study population consists of Open Universities existing in the country. But four only states – namely Rajasthan, Uttar Pradesh, Madhya Pradesh, Gujarat and a one Union territory– Delhi were included in the study. Thus, Open University library from the each state and union territory was selected for the study, as follows:

(vi) **Rajasthan**
- Vardhamaan Mahaveer Open University, Kota.

(vii) **Uttar Pradesh**
- U.P. Rajarshi Tandan Open University, Allahabad

(viii) **Madhya Pradesh**

- Madhya Pradesh Bhoj Open University Bhopal.

(ix) **Gujarat**

- Dr. Baba Saheb Ambedkar Open University Ahemdabad.

(x) **Delhi**

- Indira Gandhi National Open University, New Delhi

The data collected so far were used for analysis and for testing of the hypothesis and also to conclude the result and recommendations.

7.6. Future Prospects of the Study

The present study is carried out by taking only 05 open universities of the country. It can also be elaborated for all open universities working in the country.

Further, the study can be elaborated by taking a comparative study on the library services of open versus correspondence universities to make some concrete results.

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Appendix-1

Questionnaire

I - General

1- Name of the University _____

2- Year of establishment of the University _____

3- Name of the Library _____

4- Year of establishment of Library _____

5- Library Working Hours:
    a-Weekday (Monday- Friday) _____
    b-Saturday _____
    c-Sundays _____
    d-Holidays _____

6- Do you have Library Committee?
    a-Yes   ( )   b- No   ( )
    If yes, mention its members with designations

    _____

II - Library Personnel

7- Name of the Librarian/Library Incharge with qualifications _____
_____

8- How many Staff members do you have in your Library?
a- Other Library Professionals with qualification

_____

b- Semi professionals with qualification _____
c- Non-Professionals with qualification _____

III – Collection Development & Acquisition

9. Please mention the Collection of your Library
    A. Books _____
    B. Periodicals_____
    C. Non Book Material_____

10- Details of Book Collection

Collections	Numbers in Print Format	Numbers in Electronic Format
Books		
Books Volume/Journals		
Popular Magazines/News papers		
Non-Book Materials		
Others		
Total		

11- How many Journals do you subscribe annually? (If possible discipline wise)

Subjects	No of Journals	E Journals	No of Foreign Journals	E Journals
Social Science				
Science				
Commerce				
General				
Others				

Total				

12- Does your Library subscribe any Abstracting & Indexing Periodicals/Databases (Please tick)

Subject	No of Journals	No of Foreign Journals
Social Science		
Science		
Commerce		
General		
Others		
Total		

13- How do you acquire Books for your Library?
     a-Direct from Publishers   ( )
     b-Through Agent   ( )
     c-Book Sellers/Local sellers   ( )
14- How are Journals acquired in your Library?
     a-Direct from Publishers   ( )
     b-Through Agents   ( )
     c-Book Sellers   ( )
     d-Any other, specify _____
15- Who Selects the Books/Journals for your Library?
     a-Library Committee   ( )
     b-Librarian   ( )

c-User/Students   ( )

d-Any other, specify _____

16- Which system of access do you have in your Library?

       a-Open Access   ( )

       b-Closed Access   ( )

17- Do your library has any branch library/ies

       a- Yes   ( )

       b- No   ( )

       If Yes, please mention their name(s)_____

18- If your library has branch library, then how their collection is developed?

       a- Through University Library   ( )

       b- Direct subscribe/purchase books/journals etc.   ( )

19.   Is there any control of university library over the branch libraries?

       a- Yes   ( )

       b- No   ( )

       If yes, what methods are adopted in transferring books / journals in branch

       libraries_____

       If no, how they subscribe / purchase books / journals?

       _____

IV - Finance

20 - What is Annual Budget of your Library?

       a-Recurring _____

       b-Non-recurring_____

21- Please indicate allocation of funds:

       a-Books _____

       b-Journals _____

       c-Other items _____

22-   What is the annual budget of branch libraries, in case they are purchasing / subscribing books/journals directly. _____

V – Technical Treatment

23 - How do you classify your Books/Journals?

       a-CC   ( )

       b-DDC   ( )

c-UDC   ( )

d-Any other _____

24- Which Physical Form of Catalogue do you have in your Library?

a-Card Form   ( )

b-Computerized (OPAC)   ( )

c-Any other please specify_____

25- Which Catalogue Code do you follow for Cataloguing?

a-CCC   ( )

b-AACR-II   ( )

c-Any other, specify _____

26- Please indicate Method of Issuing Books/Journals etc., for home use.

a-Browne   ( )

b-Newark   ( )

c-Ledger   ( )

d-Computerized   ( )

e-Any other, specify _____

VI - Services

27- What types of Services you provide in your Library?

a-Reference Service   ( )

b-Inter Library Loan   ( )

c-Photocopying   ( )

d-Translation   ( )

e-Bibliography Compilation   ( )

f-Current Awareness services   ( )

g-Selective Dissemination of Information ( )

h-Any Other Services, specify_____

28- Is your library is member of any Consortium for acquiring e-journals?

a-Yes   ( )

b-No   ( )

29- If yes, give the name and also name important journals/databases subscribe under consortium

_____

_____

VII - Computerization

30 -Whether all the books are having bar codes_____

   1- Whether they are computer issued_____

   2- Computerized Catalogue_____

31- What types of Computers are available in your Library?

Name	No of Items
Pentium-IV	
Pentium-IV (Dual Core)	
Any other, specify	

32- Please mention the availability of the following with number of Items:

Name	No of Items	Specifications, if any
Printers		
Scanners		
UPS		
CVT Stabilizers		

33- Do you have Library Management Software?

   a-Yes ( )   b- No   ( )

   If yes, please name _____

34- Is your Library System work under Network Environment?

   a-Yes   ( )

   b- No   ( )

   If, yes, tick which types of the Network you have?

   a-Wide Area Network (WAN)   ( )

   b-Local Area Network (LAN)   ( )

c- Wire Less Network   ( )

35- Do you also have CD-ROM network?

     a-Yes   ( )

     b-No   ( )

36- What type of Internet connection do you have?

     a-Dial-up   ( )

     b-Leased line   ( )

     c-VSAT   ( )

     d-Any other, specify_____

37- What is your Connectivity speed?

     a- 1 Mbps   ( )

     b- 2 Mbps   ( )

     c- 10 Mbps   ( )

     d- Any other, specify_____

Dated_____   (Librarian's Signature with Institute seal)

Appendix-2