
Application of Information and Communication Technology in VNMAU Library

D.Y.Gawli

Professional Assistant, Knowledge Resource Center
Dr. Babasaheb Ambedkar Marathwada University
Aurangabad-431004
dattagawli84@gmail.com

D.K.Veer

Director, Knowledge Resource Center
Dr. Babasaheb Ambedkar Marathwada University
Aurangabad-431004
librarian@bamu.ac.in

G.P.Khiste

Information Scientist, Knowledge Resource Center
Dr. Babasaheb Ambedkar Marathwada University
Aurangabad-431004
khistegajanan@gmail.com

Abstract

Present article emphasis on Application of Information and Communication Technology in Vasanttrao Naik Marathwada Agricultural University Library, Parbhani. The authors has analyzed the data regarding Library Collection, Library Budget, Budget for ICT, Library Services related to ICT, Information and Communication Technology Infrastructure etc. The ICT have been found in issues and returns of documents, control on the number of books to be issued, renewal and reservation of documents, sending reminder notices, calculation of membership records, maintenance of membership records, circulation statistics and stock verification.

Keywords

VNMAU Library; Collection development; Infrastructures; ICT

Electronic access

The journal is available at www.jalis.in



Journal of Advances in Library and Information Science
ISSN: 2277-2219 Vol. 6. No.3. 2017. pp.243-251

1.Introduction

In the modern age, libraries have become multimedia due to adoption of technology advanced and changing nature of their services. If we look into the past, we find our libraries have transformed themselves to merge into present technology environment. It is a fact that all type of libraries are involved today in a period of revolutionary change. The exponential growth of information and communication technology has greatly influenced the methods media and format of information technology have highly revolutionized in the field of library and information services.

2.Significance of the study

The present study will helpful for VNMAU library to identify their several recent initiatives and developments programs offer due importance and focus on providing information and technology (ICT) system as an enable and access to information. From information management view point. We can emphasize that providing information and enabling ICT system. Is an major effort in birding the gap between knowledge have and knowledge have not. This is because the ability to use. Information reside in capacity and capability to create knowledge from such Information for ICT to beneficial, it is imperative that we develop knowledge process capability at influenced the information services in the university libraries considerably, to promote the quality of information services in the VNMAU university libraries.

3.Objectives of the study

The study entitled 'Application of information and Communication technology in Vasanttrao Naik Marathawada Agriculture Library, Parbhani carried out during the year 2009-10 to 2013-14 with the following specific objectives.

1. To check the present position of information and communication technology application in the VNMAU library.
2. To know the basic requirement for application of ICT i.e. hardware and software.
3. To identify and analysis the specific factors that promoted or hindered the use of electronic information resources in VNMAU libraries.
4. To suggest measures for improvement of existing ICT based resources and services.
5. To know the technologies application in information services.

The data have been gathered, with the help of well structured questionnaire, analyzed and presented into tabular and graphical forms. Based on finding of the study, the following conclusion can be drawn.

4.Vasantrao Naik Marathwada Agricultural University Library

Vasantrao Naik Marathwada Agricultural University is one of four agricultural universities in the state of Maharashtra prior to original Marathwada Agricultural Universities; it was established on May 18, 1972 to fulfill the regional as privation of agrarian growth. It is entrusted with the responsibilities to pro-vide education in agriculture and allied fields, undertake research and facilitate technology transfer in Marathwada region of Maharashtra. It was renamed as Vasantrao Naik Marathwada Agriculture University (VNMAU), Parbhani on 1st June, 2013. The first college agriculture was established in this region at parbhani in 1956 by Hyderabad State Government just before state reorganization. The Vasantrao Naik Marathwada agricultural university library situated in the central place of the university campus. Vasantrao Naik Marathwada agricultural university library has been established as a library of the college of agriculture and from its inception library had been specially growing in size and services.

This library is growing day to day with the inception of new colleges of food science and technology. Home science, agricultural engineering, horticulture and also by the creation of post graduate faculty in all disciplines. Apart from it, the research activities on the campus as well as at all the research centers under this university have been intensified with sanction of more research schemes by the state as well as central governments. The library also build up information search strategies and to use modern tools (Internet, Intranet, OPAC , e-resources, databases, researching, web etc.) of information search. This is the single library to support the entire teaching, research and extension activities under this university campus at Parbhani.

Library Collection

Library collection of the VNMAU, Parbhani library includes books, thesis bond volumes of journals, newspapers, magazines, database, CD/DVD, Video-cassettes, audio visual and others.

Table 1: Library Collection In VNMAU Library, Parbhani.

Sr. No.	Collection type	Number
1	Books	74700
2	Thesis	6444
3	Bound volumes of journals	25765
4	a. Current journals b. National c. International	321 221 100
5	Newspapers	17
6	Magazines	10
7	Database	13
8	CD/DVD, (including database)	12
9	Video cassettes	01
10	Audio visuals	01
11	Any other	NIL

Table No: 1 reveals the type of library collection availability in the Vasantrao Naik Marathwada Agriculture University Library, Parbhani. It has been reported from the above table that 74700, 6444, 25765, 17, 10, 13, 12, 01 and 01 books, thesis, bond volumes of journals, newspapers, magazines , database, CD/DVD, (including database), Video cassettes and Audio-visuals respectively were available as a collection respectively. Similarly out of the total available 321, current journals, 221 national and 100 international standards were available in the university.

ICT Skill development programme to library staff

ICT skill development programme to the library staff of the VNMAU, Parbhani such as Digital library and slim library management software.

4.1 Library Users

Table 2: Library Users of the VNMAU Library, Parbhani

Year	U.G.	P.G.	Ph.D.	Library staff	Other members	Total
2009-10	1018	659	493	12	140	2322
2010-11	1105	640	420	12	135	2312
2011-12	1085	598	465	10	135	2313
2012-13	1150	542	464	8	140	2304
2013-14	1186	557	510	5	145	2403

Table 2 reveals the strength of VNMAU, Parbhani library users i.e. undergraduate and post graduate students Ph.D. scholars, library staff and other members.

4.2 Library Budget (Financial resources)

State, ICAR and other sources of finance have been considered as a financial resource of the VNMAU library, Parbhani.

Table 3: Amount received to the VNMAU, Parbhani from various financial resources

Year	State	ICAR	Other	Total
2009-10	35.23	No	2.18	37.41
2010-11	37.95	30	2.25	70.20
2011-12	38.50	275	2.32	315.82
2012-13	43.30	250	2.32	395.62
2013-14	43.30	75	2.32	120.62

Table 3 reveals the financial resources received to the Vasantnao Naik Marathwada Agricultural University Library, Parbhani. From various resources during the last five years Rs. 0, Rs.30 lakhs, Rs. 30 lakhs, Rs.275 lakhs, Rs.250 lakhs and Rs.75 lakhs have been allotted to the university library by the Indian council of agricultural research (ICAR) New Delhi. For the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

4.4 Budget for ICT

It has been observed that the allocation of separate budget for ICT Rs. 40 Lakhs has been earmarked for the year 2013-14

4.5 Library Services

The university library provides lending services, references services, reading room facility, book bank, photocopying service, bibliographic service, current awareness services (CAS), monthly list of additions , display of books / periodicals, or periodicals book exhibition, SDI service , online database searches, indexing /abstracting services, internet based services, CD-ROM database search to its users. The table further revealed that the university library has no provision of ILL, book talk, translation service to its users.

4.6 User Education Programme to Encourage Users to ICT Use

The university library has provision to encourage users to enhance the ICT user i.e. training from time to time, awareness of new database, addition of new

ICT and evaluating the users feedback to improve the ICT services in the library.

4.7 Customers Relation and User Education

The communication medium, list serve, chat rooms, virtual, communities or tools, online feedback systems: survey, peer to peer communication and educational technology as a customer relation and user education have been taken as a measures by the Vasantnao Naik Marathwada Agriculture University Library, Parbhani.

4.8 Outside E-Resources Access

The provision of outside E-Resources access to the VNMAU, Parbhani university library regularly and there is no occasionally and rarely outside e-sources access.

4.9 Computerization

Library computerization, library management software, use of module, library software replacement and upgradation performance of the library software, solving technical problems faced by the library software, after sale service and problem and performance of library software have been considered as a main components of computerization.

4.9.1 Library Management Software

SLIM and RFID were the Library Management Software applied to the Vasantnao Naik Marathwada Agricultural University Library, Parbhani.

4.9.2 Use of Module

Regarding the use of module by the Vasantnao Naik Marathwada Agricultural University Library, Parbhani. The acquisition, cataloguing, serial control, circulation, OPAC, web OPAC and RFID were used. The special module available in the library was smart library card.

4.9.3 Library Software Replacement and Upgradation

Replacement and Upgradation of the Library Software by the VNMAU Library, Parbhani have been presented in above table. Vasantnao Naik Marathwada Agricultural University Library, Parbhani have only one time replaced and upgraded library software.

4.9.4 Performance of Library Software

The performance of the library software used by the Vasantnao Naik Marathwada Agricultural University Library, Parbhani was 100% percent.

4.9.5 Solving Technical Problems faced by the Library Software

The solutions to technical problems faced by the library software after purchase. It has been reported that university library faces difficulties or problems after the purchase of library software. To address the problems, university library administration applied the means such as upgrading the software, upgrading the hardware and approaching to the vendor consultant for services.

4.9.6 after sale service problem and performance of Library software

There is after sale service problem of library software and its performance was Good.

5. Assessment of Library Automation

Assessment of VNMAU, Parbhani have been except very good, the library automation have not been assessed as excellent, good, fair and poor.

5.1 Internet & Telecommunication Networking

Table 4 : Availability and use of Internet Infrastructure Providers in the VNMAU Library

First internet installation	No. of computer	Average users per day	Library member	Library staff	Other member	Charges
2009-10	08	10	2200	12	140	Nil
2010-11	03	15	2200	12	135	Nil
2011-12	12	20	2200	10	135	Nil
2012-13	25	30	2300	08	140	Nil
2013-14	Nil	30	2300	05	145	Nil

Table 4 reveals that the first internet installation in the Vasantrya Naik Marathwada Agriculture University Library, Parbhani was during the year 2009-10. In the year, the number of computers average users per day, library members, library staff, other members and charges were 8,10,2200,12, 140 and Nil respectively. During he yeas 2011-2014 the same fact was 3, 15, 2200, 12, 135 and Nil (2010-11), 12, 20, 2200, 10, 135 and Nil (2011-12) 25, 30, 2300, 8, 140 and nil (2012-13) and nil, 30, 2300, 15, 145 and nil (2013-14).

7. Telecommunication and Networking

Telephone, fax, independent library network and library is a part of institute network as telecommunication and networking facilities were available in the university. Regarding type of networking facilitations, LAN, MAN, BHARATI, WAN, WIRELESS, DELNET, INFLIBNET networks facilities were available. INTERNET, EXTRANET, ERNET and RELIANCE networks were not available in the VNMAU, Parbhani library.

Internet, type of internet connection, internet browser, internet library operation and services, internet service provider, internet infrastructure telecommunication and networking, e-consortia and website are the major components of internet telecommunication and networking. The types and nature of internet facilities available in the VNMAU, Parbhani library. The above Table reported that there is internet connectivity in the library or information centre. The NICNNET, BSNL and Wi-Fi are the internet services providers to the university. ISDN dialup, VSAT. Internet facilities were available over the network of library and there was not a single nodes of configuring with internet. Netscape / Navigator, Internet explorer, Mozilla, Linux, Opera and Neoplanet were the internet browser & others Google Chrome available in the Vasantrya Naik Marathwada Agricultural University Library, Parbhani

6. Internet Infrastructure

8. E-Consortia

Vasantrya Naik Marathwada Agricultural University Library, Parbhani has access to E-Consortia and the name of the E-Consortia was CeRA- JCCC.in

9. Website

The separate Availability of website in the Vasantrya Naik Marathwada Agricultural University Library, Parbhani. The purpose is Library profile, web OPAC online database and audio / video.

10. Information and Communication Technology Infrastructure

The components of information and communication technology includes ICT infrastructure, ICT services available to the users it's application on application of ICT on housekeeping library activities, in online public access catalogue services, various. Services, ICT based new library information services, ICT based library services, developments of ICT resources have been included.

10.1 ICT infrastructure

a. Hardware and Software resources.

Table 5: Availability of ICT Infrastructure in the VNMAU Library

Sr. No.	Category	Name of the Item	No. of Items.
1.	Computers PCs/Desktops/ Workstations	Services / CD-servers	03
		PCs/ Desktops/Workstations	40
		Laptops	02
2.	Printers	Inkjet	
		Laser / Color laser	09
		Barcode Printer Identity card Printer	01 01
3.	Scanners	Scanners	03
		Barcode Readers	02
		Scanner for Digitization	00
4.	Digital Equipments	Digital Camera	
		Digital Video Camera	
		Web Camera	02
5.	Security System	Electronic Surveillance System (EAS)	01
		Radio Frequency Identification (RFID)	01

It has been reported from Table No: 5 that out of the total availability of computers PCS/desktops/workstations,3 services/CD services 40 and PCS/desktops/workstations Laptops 2. Regarding printers-9, Laser / Colour laser bar, code printer – 1 and identity card printer-1 3 scanners and 2 barcode readers were available. About digital equipments only 2 digital video cameras were available. In case of security system, 1 electronic surveillance system and 1 radio frequency identification were available.

10.2 ICT Electronic Gadgets Multimedia Resources

The availability of electronic gadgets multimedia i.e. CD/DVD Drive, CD/ DVD writer, modem / networking equipment, LCD projector, overhead projector, VCR/VCP, television , film slide projector, recorder / Players, creamers (Data Projector) in the Vasantrao Naik Marathwada Agricultural University Library, Parbhani. Similarly flash memory sticks as electronic gadgets/ multimedia were not available.

10.3 Application of ICT on Housekeeping Library activities

Table 6 : Application of ICT in the VNMAU Library

Sr. No.	Housekeeping library activities	Yes
A. Acquisition		
1	Pre order searching	Yes
2	Approval process	No
3	Placement or orders	No
4	Receiving and accessioning documents	No
5	Invoice processing and payment arrangement	No
6	Order follow up and online enquiries	No
7	Preparation of reports	Yes
B. Cataloguing		
1	Catalogues cards production	Yes
2	Catalogues maintenance	Yes
3	Thesaurus construction	Yes
4	Indexes authors, keywords, etc.	Yes
5	OPACs	Yes
C. Serial control		
1	Processing new subscriptions	Yes
2	Processing renewal subscription	Yes
3	Order placing and invoice processing	Yes
4	Receiving and recording issues	Yes
5	Claiming missing issues	Yes
6	Maintenance of list of periodicals	Yes
7	Serial holdings	Yes
8	Circulation of periodicals	Yes
D. Circulation		
1	Issues and returns of documents	Yes
2	Control on the number of books to be issued	Yes
3	Renewal and reservation of documents	Yes
4	Sending reminder notices	Yes
5	Calculation of membership records	Yes
6	Maintenance of membership records	Yes
7	Circulation statistics	Yes
8	Stock verification	Yes
E. Information services		
1	Information services	Yes
2	Information search services	Yes
3	Bibliography and indexing services.	Yes
4	Inter library loan services	No
5	Current awareness services (CAS)	Yes
6	Selective dissemination of information (SDI)	Yes

7	Document deliver services	Yes
8	E-mail	Yes
9	Internet	Yes
10	Preparing reader's profile	Yes
11	File transfer	Yes
F.	Management support	
1	Budgetary control	No
2	Preparation of accounts	No
3	Maintenance of records	No
4	Generation of library statistics	No
5	Generation of reports	No
6	Preparation of staff profile	No

- A. In case of acquisition as a house keeping activities Table No: 4.25 reveals the applications of ICT in the library have been found in pre order searching and preparation of reports. Whereas ICT application have not be applied to approval process, placement of orders, receiving and accessioning documents, invoice processing and payment arrangement and order follow up and online enquiries.
- B. In cataloguing, as the house keeping activities, the application of ICT have been found in catalogues cards production, catalogues maintenance, thesaurus construction, indexes authors, keywords, etc and OPACs.
- C. In serial control as the house keeping activities, the application of ICT have been found in processing new subscriptions, processing renewal subscription, order placing and invoice processing, receiving and recording issues, claiming missing issues, maintenance of list of periodicals, serial holdings and circulation of periodicals.
- D. In circulation as the house keeping activities, the application of ICT have been found in issues and returns of documents, control on the number of books to be issued, renewal and reservation of documents, sending reminder notices, calculation of membership records, maintenance of membership records, circulation statistics and stock verification.
- E. In information services as the house keeping activities, the application of ICT have been found in information services, information search services, bibliography and indexing services, current awareness services (CAS), selective dissemination of information

(SDI), document deliver services, E-mail, Internet, preparing reader's profile and file transfer. The service have not been applied in inter library loan services.

- F. In management support as the house keeping activities, the application of ICT have not been found in budgetary control, preparation of accounts, maintenance of records, generation of library statistics , generation of reports and preparation of staff profile.

10.4 Application of ICT in Online Publication Access Catalogue Services

The multiple search, remote access, multi-user, fast updating and retrieval, variety of output format , data exchange and sharing , more information , additional services, web OPAC, use common web browser and access via internet have been applied as online public access catalogue services.

10.5 ICT Services Available to the Users

The renewal, recall, reserve, register membership, e-reserve , e-books loan, request for book list and user guide services were available to the users with the help of ICT in Vasantao Naik Marathwada Agriculture University Library, Parbhani.

10.6 Application of ICT in Various Services

I. Use of ICT in reference service

e-mail books, subject gateway, e-libraries, digital libraries and ask a library as a reference services have been applied by ICT in the Vasantao Naik Marathwada Agriculture University Library, Parbhani.

II. Use of ICT in Bibliographic Services

ICT have been applied in bibliographic services as browse, limit search, embedded links, specialized search engine, intelligent searching, output format and customization and SDI. There is no application of ICT in quality and range of content, search range and speed, full text search, transmission and repackaging as bibliographic services.

III. Availability of CAS and SDI Services

Simple complex, reusability, customization, online, offline, hybrid delivery and compilation as CAS and SDI services were available in the Vasantao Naik Marathwada Agriculture University Library, Parbhani.

IV. Use of ICT in Document Delivery

Holding lists, full text electronic journals, aggregators services, internet, automated document delivery services and local hosting of contents have been applied as documentary delivery with the help

of ICT in the Vasantnao Naik Marathwada Agriculture University Library, Parbhani.

V. Application of ICT in the Inter Library Loans and Union Catalogues Services.

ICT have been applied in automatic updating, distributed catalogues and distributed searches through single interface as inter library loans and union catalogues services. Similarly, the same service have not applied to centralized union catalogues and online updating by partner librarians.

VI. ICT and Audio Visual Services.

analogue > digital, storage medium, life, transmission, exchange and sharing, access: players, desktop, internet and multimedia as audio visual services have been tagged with ICT in the Vasantnao Naik Marathwada Agriculture University Library, Parbhani.

10.8 ICT Based New Library Information Services

except patent, internet access, access to E-resources, e-journals, e-books, standards, course materials, subject gateway , provides links to the sources, usually on library web page, advanced gateways could provide search feathers , digital libraries of local contents, preservation and storage, use of E-dictionary , digitization of print documents, organization of electronic document and access control as ICT based new information services were available in the Vasantnao Naik Marathwada Agriculture University Library, Parbhani

10.9 ICT Based Library Service

CD-ROM searching, online searching, online networking, photocopying, online information service, news clipping scanning service and database searching service/own database services as ICT based library service and facilities were available. Whereas, Online searching reservation services as a ICT based library services was not available.

10.10. Development of ICT Resources

Table 7 : Development of ICT Resources in the VNMAU, Library

Sr. No.	ICT resources	2009-10	2010-11	2011-12	2012-13	2013-14
1	Computers	08	03	12	25	Nil
2	Computers connected to internet	08	10	15	30	40
3	CD-ROM	12	-	12	-	-
4	Audio cassettes	-	-	-	01	-

5	Video cassettes	-	-	-	01	-
6	Photocopier	01	-	-	02	-
7	Printer	05	-	02	04	-

Development of ICT resources during the years 2009-2014 have been presented in Table No: 7.

Computers: Only 8 computers were available in the year 2009-10 which has been increased to 3, 12, 25 and nil during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Computers connected to internet: The computers connectivity to internet which was only 8 during the year 2009-10 which has rising trends i.e. 10, 15, 30 and 40 during the years 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

CD-ROM : The availability of CD-ROM was 12 during the year 2009-10 which remains the same during the last year i.e. 2014-15.

Audio and video cassettes: The availability of audio cassettes and video cassettes was only one during the year 2012-13 remain same during the last year 2013-2014

10.11 Database

Subscription to international database, online database service and growth number of records in database were main components of database.

1. Subscription to International Database

The subscription to international data base of the Vasantnao Naik Marathwada Agricultural University Library, Parbhani. It has been found that CAB Abstract, AGRIS, Biological Abstract, Bio-Technological Abstract, food science and technology Abstract, current contents , agriculture and natural resources, chemical abstract, biological and agriculture index were the subscription where as AGRICOLA, water resources abstract, Indian harvest and aquatic sciences were not subscribed.

10.12 Online Database Services

Online database services such as DELNET, INFILIBNET, AGRIS DATABASE and CSIR have been provided by the Vasantnao Naik Marathwada Agricultural University Library, Parbhani

The major components of the database i.e. growth number of records in database i.e. growth number of records in database and subscription to international data have been considered.

10.13 Growth Number of Records in Database

Table 8 : Growth Number of Records in Database in the VNMAU, Library

Sr. No. Years wise	Total Library Collection			No. of records
	Book	Thesis	Journals	

1	2009-10	61346	6000	160	-
2	2010-11	63570	6586	175	-
3	2011-12	70666	6687	200	-
4	2012-13	75627	7050	220	Thesis database
5	2013-14	78816	7351	225	Thesis database

Table No. 8 indicate the library growth number of records database in terms of books, thesis and journals. The availability of books during the year 2009-10 was 61346 which has increased to 63570, 70666, 75627 and 78816 during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Thesis: The availability of thesis during year 2009-10 was 6000 which has increased to 6586, 6687, 7050 and 7351 respectively during the year 2010-11, 2012-12, 2012-13 and 2013-14 respectively.

Journals: The availability of journals during the year 2009-10 was 160 has increased to 175, 200, 220 and 225 in the years 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Thesis Database: Thesis database is also available.

Recommendations

1. Based on the findings of the study, following recommendation can be drawn.
2. Considering the incoming pressure of students strength every year to various discipline it is mandatory to have a full fledged librarian who is well acquainted with ICT.
3. The management should give due importance to modernize the information service system with ICT facilities. The library staff is also inadequate which need to be increase. As per as possible, the recruitment must be based on high education and pursuing ICT qualification. The recruit trained staff must provide better ICT based services.
4. The university provides highly skilled agricultural related courses from under graduate to doctoral degree. As the VNMAU, Parbhani library is hub of all the courses, there is need to upgrade all the library staff to have latest and modern ICT related information pertaining to the courses. To counter the problems, student leader’s must be included in the library advisory committee.

5. AGRICOLA, water resources abstract, Indian harvest and aquatic sciences are the crucial international database which need to be subscribed.
6. It should reserve adequate fund for the development of library, especially automation and ICT facilities.
7. The automation of the library must be 75% percent. Library has minimum digital equipment and surveillance system which need to increased.
8. For digital library project, free web based open source repository software packages such as greenstone and DSpace is to be installed and used for collection for digitizing their collection.
9. The most important recommendation to the Vasantao Naik Marathawada Agriculture University Library Parbhani is to develop Mobile University Library Apps, Remote access Services, Wi-Fi Internet Services 24 Hours’

Conclusion

The library has separate budget for ICT and provides outside ICT training to the employees. The users of the library includes experts, technocrats, research scholars, undergraduate and post graduate students and temporary members. The library implements users education programme to enhance ICT use. There is outside e-resources access. The library automation is 75 per cent. SLIM and RFID are the main library management software. All types of module have been used by the library. Only once there was replacement and upgradation of library software and it’s performance was cent per cent. To counter the difficulties after the purchase of software, various ways and means have been adopted to correct the difficulties or problems. The assessment of library automation was very good. ICT based library services and facilities are also available. Reliable internet services providers like BSNL and NICNET had internet connectivity and has different type of internet connection. All types of internet browser are available. The separate website of the university performs various library functions. The ICT provides application of library activities and services in housekeeping library activities such as acquisition, cataloguing, serial control, circulation, information services, management support services, reference, bibliographic, CAS and SDI document delivery and audio Visual services. Development of ICT resources in the university is up to the mark. There is sufficient library collection in the form of books, thesis and journals. The library have been assessed as a very

good automation and is digitally initiated and various measures have taken to improve the digitalization.

REFERENCES

- [1]. Awuro, F. M., Rabah, K., and Maake, B. M. (2013). Hindrance of ICT adoption to library services in higher institution of learning in developing countries. *Computer science and information technology*, pp. 252-256.
- [2]. Bansal, S. K. 1998, *Dictionary of IT terms*, New Delhi, APH Publication, P.109.
- [3]. Bhagi, N. K. 2006, *International Library movement*, Ambala, ILM foundation publication, p.91.
- [4]. Chatopadhyay, T. and Ghatak, N.C. (2009), An analytical study of the dental college libraries in Kolkata in the age of information technology. *SRELS journals of information management* 45 (1), 45-53.
- [5]. Cholin, V. S. (2005). Study of the application of information technology for effective access to resources in Indian university libraries. *The international information and library review* 37(3), 189-197.
- [6]. Devrajan, G. 2005, *Library and Information studies in the digital Age*, New Delhi, ESS, ESS publication, P. 164.
- [7]. Gui-Zhi, Wang (2006). Establishment of public health emergency information service system in medical libraries of china. *World library and information conference : 72 IFLA General conference and council*, 20-24 August 2006. Soeoul Korea.
- [8]. Harkey Michael D., *The Webster international encyclopedia*, Trident Press, International Florida (USA), 1998, P. 635.
- [9]. Hicks, H. 2003, Digital libraries and education; trends and opportunities *D. Lib. Magazine*, 12 (2) : 78-85..
- [10]. Hitchcock, S. (1997) "Citation linking improving access to online journals", *Proc. 2nd ACM Int'I Conf. on digital libraries*. ACM Press. New York, 1997 pp. 115-122.