Chapter 6

DATA ANALYSIS

6.1. What is data Analysis?

Data analysis is the body of methods that helps to describe facts, detects patterns, develop explanations and test hypotheses. It is used in all of the sciences. It is used in business, administration, and in policy (Machintosh, 1996).Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. Data analysis is the most crucial part of any research. Data analysis summarizes collected data. It involves the interpretation of data gathered through the use of analytical and logical reasoning to determine patterns, relationships or trends.

In analysis an attempt is made to convert the symbolic behavior into scientific data. In social research it is useful in several ways, but there are several problems in it. It can be applied to available material and material produced for particular reason problems. The units of analysis are words, themes, characters and space and time measures. All analysis is potentially quantifiable.

In the words of Daniel Katz, "Analysis is a research technique for the objective, systematic and qualitative description of manifest content of communication".

Aims of Analysis

The following are the aims of analysis:

- To help in the conversion of qualitative data into scientific form.
- To help in creating objective data susceptible to measurement and quantitative treatment.
- To create significance to the systematic theory.

There are a number of issues that researchers should be cognizant of with respect to data analysis. These include:

- Having the necessary skills to analyze

- Concurrently selecting data collection methods and appropriate analysis

- Drawing unbiased inference

- Inappropriate subgroup analysis

- Following acceptable norms for disciplines

- Determining statistical significance

- Lack of clearly defined and objective outcome measurements

- Providing honest and accurate analysis

- Manner of presenting data

- Environmental/contextual issues

- Data recording method

- Partitioning 'text' when analyzing qualitative data

- Training of staff conducting analyses

- Reliability and Validity

- Extent of analysis

For the present study 17 Special libraries have been surveyed and collected different information and data related to the effectiveness of ICT application towards the development of library services. In the present study the software "IBM SPSS" static version 24 have covered the area where the data collected from the users has been analysed. And with the help of Microsoft Excel 2007 data collected directly from the Librarians of the libraries have been tabulated and analysed here in the starting of the data analysis . Data are organized in a tabular form and analyzed below. In the tabular forms short forms of the institutes' name have been used for the convenience. And the analysis of the us

6.2 Institutes covered in the study with the name of libraries

The study is confined to all types' central and state government special libraries of Assam. There are vast numbers of special libraries all over the state. The study has been further delimited to the status of ICT infrastructure and computerized services in the particular area of Special libraries in Assam. There are more than seventy numbers

of special libraries in all over Assam which are attached to various organization and works under society, government and business forum. For the convenience of the study special libraries attached to R&D and government organizations governed by society, state or central government have been taken for the systematic study. Table-2 shows the selected institutions for this present study.

Table- 2: Institutes covered in the Study

Sl. no.	Name of The Institute	Year of Establish ment	Name of the Library	Place
1.	Assam Legislative Assembly (ALA)	1937	ALA Library	Guwahati
2.	Assam State Museum	1940	Ananda Chandra Agarwala Library	Guwahati
3.	The Institute of Advanced Study in Science & Technology (IASST)	1979	Knowledge Resource Centre	Guwahati
4.	National Institute of Rural Development &Panchayati Raj (NIRDPR)	1983	NIRDP Library	Khanapara, Guwahati
5.	Gauhati High Court	1948	Judges' library	Guwahati
6.	Indian Council of Forestry Research and Education (ICFRE)	1988	RFRI Library	Jorhat
7.	Tata Institute of Social Science (TISS)	2012	TISS library	Guwahati
8.	Indian Institute of Bank Management (IIBM)	1982	IIBM Library	Khanapara, Guwahati
9.	North East Institute of Science & Technology (NEIST)	1961	Knowledge Resource Centre	Jorhat
10.	Tocklai Experimental Station of Tea Research Association (TRA)	1911	Tocklai Tea Research Centre Library	Jorhat
11.	Assam Institute of Research for ST &Sc	1977	AIR ST & SC Library	Khanapara, Guwahati
12.	National Institute of Public Co-Operation & Child Development (NIPCCD)	1978	NIPCCD RCG Library	Khanapara, Guwahati
13.	Indian Institute of Entrepreneurship (IIE)	1994	IIE Library	Guwahati
14.	Institute of PLASMA physics	1991	PLASMA Physics Library	Guwahati
15.	Department of Historical & Antiquarian Studies (DHAS)	1928	DHAS Library	Guwahati
16.	Central Institute Of Plastic Engineering and Technology (CIPET)	1999	CIPET Library	Guwahati
17.	Assam Science, Technology and Environment Council (ASTEC).	1987	ASTEC AEDA	Guwahati

6.3 Library personnel

Table-3 shows about the library personnel. From the table it is observed that in all the libraries surveyed professional staffs are less in number. Most of the libraries are operated by one professional with one or two non-professionals. And some of the libraries even don't have professional staff, among them Ananda Chandra Agarwala Library of Assam State Museum, NIRDP Library, ASTEC, Tocklai Tea Research

Centre Library are found. This hampers the working and the services to be impacted by the libraries. In a library personnel should be professional. Because to run a library properly its staff should aware about library science and well trained about library.

Table- 3: Library Personnel

Sl. No.	Name of the Library	Total No. of Staff	Name of the Librarian	Qualification	Designations of personnel
1.	ALA Library	10	NA	NA	NA
2.	Ananda Chandra Agarwala Library	3	Jiten Kumar	B.A.	Library cum Publication Officer, Jr. Asstt& Library Bearer.
3.	Judges' Library	10	Vacant	NA	Asst. Librarian(1), Library Asst.(2), Current Attendant(5), Librarian(0)
4.	Knowledge Resource Centre(IASST)	5	Dr. Tarini Dev Goswami (Asst.)	MLISc, M.Phil, PhD.	Asst. Librarian(1), Library Asst.(1)
5.	NIRDP Library	2	Pushpanjali Deka (In Charge)	MLISc	In Charge. Asst. Librarian(1), MTS
6.	TISS Library	6	Dr. Satish Kanamadi	MLISc	Librarian(1), Asst. Librarian(1), Library Asst.(NA) & Library Bearer
7.	IIBM Library	2	Dr. Rupali Sharma (Asst.)	B.Sc, MLISc, PhD.	Asst. Librarian(1) & Attendant(1)
8.	NIPCCD RCG Library	2	SabitaHaloi	MLISc	Asst. Librarian(1) & MTS(1)
9.	IIE Library	4	Shri D.K. Gogoi	M.Sc, MLISc.	Librarian, Asst. Librarian & Other Staff(2)
10.	DHAS Library	4	Pradip Kr. Choudhury	MLISc	Asst. Librarian & Bearer(2)
11.	ASTEC/AEDA	1	Vacant	NA	Peon
12.	CIPET Digital Library	3	Sri Mukut Kakati (In charge)	BLISc.	Librarian, Professor. In Charge. & Helper
13.	Institute of PLASMA Physics Library	1	Tarulata Deka	MLISc	Asst. Librarian
14.	Directorate of AIR ST & SC Library	3	Sanjib Kr. Tarafdar	MLISc	Librarian(1) & NA
15.	RFRI Library	4	Mrs. Pritimoni Das Bharali(Asst.)	MLISc	Library Information Asst.(3) &Bearer(1)
16.	Knowledge Resource Centre(NEIST)	NA	ProdipHazarika	B.Com, B.Lib.	NA
17.	Tocklai Tea Research Center Library	10	Rituraj Sharma (In charge)	M.A. & MASS Com & Journalism	Library Cum Information Officer., Senior Asst. & Attendant

6.4 (a) Library Organization

Table- 4(a) shows the number of working days of the libraries in the whole year. Among the libraries 94% remain closed on Sunday. Only TISS library remain open on Sunday too but timing gets change from rest of the days. 41% libraries remain closed on Saturday too; those are KRC (IASST), IIE Library, CIPET Digital Library, PLASMA Physics Library, AIR ST & SC Library, KRC (NEIST) and TTRI Library. It is found from the study that TISS library having the highest number of working days in the whole year.

Table- 4(a): Library Organization

SL NO	Name of the Library	Timing	Normal Working Days	Sunday/Holiday
1	ALA Library	10:00 am-5:00 pm	Yes	No
2	Ananda Chandra Agarwala Library	10:00 am-5:00 pm	Yes	No
3	Judges' Library	10:00 am-5:00 pm	Yes	No
4	Knowledge Resource Centre(IASST)	9:00 am-5:30 pm	Yes(5 Days)	No
5	NIRDP Library	9:00 am-5:30 pm	Yes	No
6	TISS Library		8:00 am-7:00 pm	9:00 am-6:00 pm
7	IIBM Library	9:00 am-5:30 pm	Yes(6 Days)	No
8	NIPCCD RCG Library	9:00 am-5:30 pm	Yes	No
9	IIE Library	9:00 am-5:30 pm	Yes(5 Days)	No
10	DHAS Library	10:00 am-5:00 pm	Yes	No
11	ASTEC/AEDA	10:00 am-4:30 pm	Yes	No
12	CIPET Digital Library	9:00 am-5:45 pm	Yes(5 Days)	No
13	Institute of PLASMA Physics Library	9:00 am-5:30 pm	Yes(5 Days)	No
14	Directorate of AIR ST & SC Library	10:00 am-5:00 pm	Yes(5&6 Days)	No
15	RFRI Library	9:00 am-5:30 pm	Yes	No
16	Knowledge Resource Centre(NEIST)	8:30 am-5:00 pm	Yes(5 Days)	No
17	Tocklai Tea Research Center Library	8:30 am-5:00 pm	Yes(5 Days)	No

6.4(b) Library Organization

Table- 4(b) is showing about the library building and type of institutes. It is found from the study that 23% institutes under the State govt. these are Assam Legislative Assembly, Assam State Museum, DHAS and AIR ST & SC. 41% institutes are under the Central govt. these are IASST, IIE, NIRDPR, NIPCCD, Institute of PLASMA

Physics, RFRI and NEIST. TISS and ASTEC are under Semi govt. And IIBM and CIPET is autonomous institute. It is found from the study that 18% libraries are having separate building for Library and rest 82% libraries are attached with the main building of the institutes. 59% libraries are having separate reading room facility and 41% libraries do not have any reading facility. From the study it is found that 59% libraries have AC facility, among them AIR ST & SC Library's AC facility have done partially.

Table- 4 (b): Library organization

Name of The Libraries	Type of Institute	Separate Building For Library	Reading Room	AC Facility
ALA Library	state govt.	No	Yes	Yes
Ananda Chandra Agarwala Library	state govt.	Yes	Yes	No
Judges' Library	others	No	No	Yes
Knowledge Resource Centre(IASST)	central govt.	No	No	Yes
NIRDP Library	central govt.	No	Yes	Yes
TISS Library	semi govt.	No	Yes	Yes
IIBM Library	autonomous	No	Yes	Yes
NIPCCD RCG Library	central govt.	No	Yes	No
IIE Library	central govt.	No	Yes	No
DHAS Library	state govt.	Yes	Yes	Yes
ASTEC/AEDA	semi govt.	No	No	No
CIPET Digital Library	autonomous	No	Yes	No
Institute of PLASMA Physics Library	central govt.	No	No	Yes
Directorate of AIR ST & SC Library	state govt.	Yes	Yes	Yes (partially)
RFRI Library	central govt.	No	No	No
Knowledge Resource Centre(NEIST)	central govt.	No	No	Yes
Tocklai Tea Research Center Library	others	No	No	No

6.5 Library Governance

Table-5 shows about the Library Governance, which includes Library committee, Constitutor of Library committee, Number of committee members and frequency of committee meeting. It is found from the study that 53% libraries have library

committee. It is seen in the table that not every library has mentioned about the constitutor of library committee. Except in ALA library Speaker of ALA constitute the library committee with 15 members, in ASTEC/AEDA director of ASTEC constitute the Library committee, in PLASMA Physics library Centre Director constitute the library committee, and in KRC NEIST authority of NEIST constitutes the library committee. It is found from the study that 24% libraries conduct committee in every year. Again 24% libraries conduct meeting quarterly in a year. And 18% libraries conduct meeting every month in a year.

Table- 5: Library governance

SL NO.	Name of The Libraries	Library Committee	Who Constitute it	No. of Committee members	Frequency of Committee meeting
1	ALA Library	Yes	Speaker of ALA	15	yearly
2	Ananda Chandra Agarwala Library	No	NA	NA	NA
3	Judges' Library	Yes	NA	NA	quarterly
4	Knowledge Resource Centre(IASST)	Yes	NA	7	As per requirement
5	NIRDP Library	Yes	NA	5	Monthly
6	TISS Library	Yes	NA	5	Monthly
7	IIBM Library	Yes	NA	3	quarterly
8	NIPCCD RCG Library	Yes	NA	NA	yearly
9	IIE Library	No	NA	NA	yearly
10	DHAS Library	No	NA	NA	NA
11	ASTEC/AEDA	No	Director, ASTEC etc.	NA	yearly
12	CIPET Digital Library	No	NA	NA	NA
13	Institute of PLASMA Physics Library	Yes	Centre Director	NA	quarterly
14	Directorate of AIR ST & SC Library	No	NA	NA	NA
15	RFRI Library	No	NA	NA	NA
16	Knowledge Resource Centre(NEIST)	Yes	Authority of NEIST	NA	Monthly
17	Tocklai Tea Research center Library	Yes	NA	5	quarterly

6.6 Sources of fund

Library funds are accumulated from a mixture of local, state, federal and other sources. While the majority of funds for libraries come from sate, and local sources, federal funding provides critical assistance, giving libraries across the country the financial support they need to serve their communities. Like water and air, libraries have become an integral part of human existence.

Finance is the backbone of any library. Special libraries are having a special attention, therefore investment of the sources of fund which play a vital role in making the libraries globalized. Libraries can earn its fund from different sources such as fee, gifts, donations, fines, UGC funds, etc. and the aid provided by the Government. In the Table- 6 and fig: 1different sources of fund of Special libraries have been found.

In the list of Special libraries as mentioned in the Table 2, 47% of libraries collect funds from Central Government, such as Knowledge Resource Centre (IASST), NIRDP Library, NIPCCD RCG Library, IIE Library, RFRI Library, Institute of PLASMA Physics Library, Knowledge Resource Centre (NEIST) and Tocklai Tea Research Centre library. 23% libraries collect fund from State Government, such as Ananda Chandra Agarwala Library, Judge's Library, DHAS Library and ASTEC/AEDA, Whereas 2 library collects fund from both central and state government, namely Assam Legislative Assembly Library and Directorate of AIR ST & SC Library. And some of the libraries collect fund from library fee, UGC fund and gifts. And as an autonomous institute IIBM Library collects its funds from 8 sponsored banks.

Table- 6: Sources of fund

SL NO.	Name Of The Institution	Name of The Libraries	sources of Fund
1	Assam Legislative Assembly	ALA Library	central govt. India& state govt. grant
2	Assam State Museum	Ananda Chandra Agarwala Library	state govt. grant
3	Gauhati High Court	Judges' Library	state govt. grant
4	The Institute of Advanced Study in Science & Technology (IASST)	Knowledge Resource Centre	central govt. India
5	National Institute of Rural Development &Panchayati Raj (NIRDPR)	NIRDP Library	central govt. India
6	Tata Institute of Social Science (TISS)	TISS Library	UGC & Gifts
7	Indian Institute of Bank Management (IIBM)	IIBM Library	Banks' Special
8	National Institute of Public Co-Operation & Child Development (NIPCCD)	NIPCCD RCG Library	central govt. India
9	Indian Institute of Entrepreneurship (IIE)	IIE Library	central govt. India
10	Department of Historical &Antiquarian Studies (DHAS)	DHAS Library	state govt. grant
11	Assam Science, Technology and Environment Council (ASTEC)	ASTEC/AEDA	state govt. grant
12	Central Institute Of Plastic Engineering and Technology (CIPET)	CIPET Digital Library	Library fee
13	Institute of PLASMA Physics	Institute of PLASMA Physics Library	central govt. India
14	Assam Institute of Research for ST &SC	Directorate of AIR ST & SC Library	central govt. India & state govt. grant
15	Indian Council of Forestry Research and Education (ICFRE)	RFRI Library	central govt. India
16	North East Institute of Science & Technology (NEIST)	Knowledge Resource Centre	central govt. India
17	Tocklai Experimental Station of Tea Research Association (TRA)	Tocklai Tea Research center Library	central govt. India & others

Fig 1: Sources of Fund
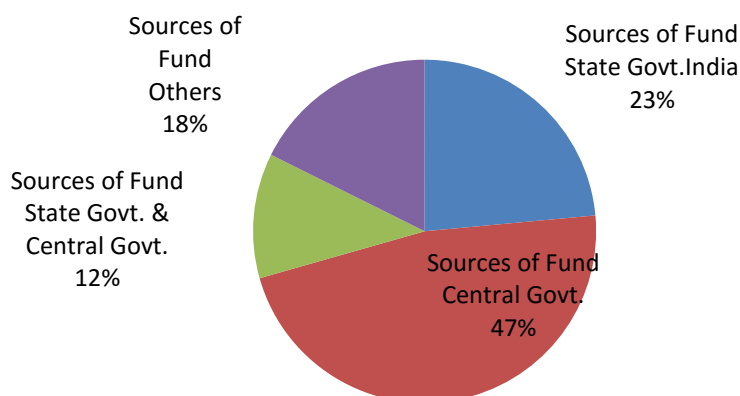
6.7 Library Services

Table -7 and fig: 2 below shows the services provided in the respected libraries. The services which are mostly offered in libraries are Circulation Service (82%), Reprographic Service (65%), Bibliographic Service (76%), CAS (65%), SDI (71%), Documentation Service (65%) and Internet Service (65%). Indexing/Abstracting service (47%) is offered by few libraries. Inter Library Loan service (35%) is also provided by some of the libraries when it is required. OPAC (41%) facility is also there in some libraries. A very few number of libraries offered translation service (24%), such as Knowledge Resource Centre (IASST), IIBM library, NIPCCD RCG library and DHAS library.

Table-7: Services

No. of Libraries	CAS	SDI	ILL	OPAC	Reprographic	Circulation	Bibliographic	Translation	Documentation	Internet	Indexing/ Abstracting	Lending
17	11 (65%)	12 (71%)	6 (35%)	7 (41%)	11 (65%)	14 (82%)	13 (76%)	4 (24%)	11 (65%)	11 (65%)	8 (47%)	4 (24%)

fig: 2 Library services

	No. of Libraries	CAS	SDI	ILL	OPAC	Reprographic	Circulation	Bibliographic	Translation	Documentation	Internet	Indexing/Abstracting	Lending
Series1	17	11	12	6	7	11	14	13	4	11	11	8	4
Series2		65%	71%	35%	41%	65%	82%	76%	24%	65%	65%	47%	24%
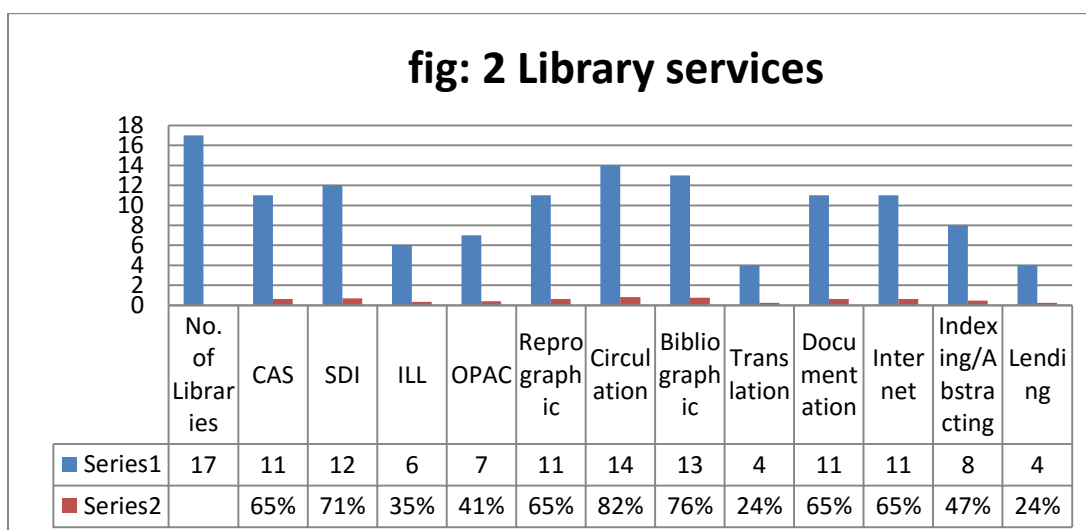
6.8 Library Budget

Budget of the library must increase at least by 10% every year so as to enable them to meet the ever increasing cost of documents it acquires. Particularly a special library in S&T mostly acquire foreign journals which are very costly due to two factors, viz, increase of publisher's price and increase of foreign exchange rates. The pattern of increase of budget of KRC NEIST, during 2012 to 2016 is shown in table-9 below.

Budget is the vital asset of the library. Libraries with high investment can increase all its necessary particulars; it may be infrastructure or collection. From Table- 8 and fig: 3 it has been found that few libraries had a budget. Most of the libraries have budgeted amounting to lacks of rupees except a few. Some of the libraries budget is with the institute's main budget. In the table it is shown that library budget, collection like books, periodicals, electronic resources, maintenance, staffs are compared with the basis of five different periods of the year. From the table it is found that libraries like Knowledge Resource Centre (IASST), NIRDP, IIBM, IIE, RFRI, KRC NEIST has well developed system of budget. The economically strong libraries can produce good collection of books, periodicals; as a result the works too increase. Compared to the above mentioned libraries NIPCCD library, DHAS library, Institute of PLASMA physics are having quite low budget. And libraries like ALA, ACA, Judge's library, TISS library, Tocklai Tea Research Centre library doesn't have separate budget. These libraries budget use to be with the Institute's main budget. The Assam State Museum's Library doesn't possess any kind of library budget, whereas most of their collections are donated.

Table- 8: Budget 2012-2017

Budget 2012-2017	
Library	Budget
ALA	-
ACA	-
JL	-
KRC(IASST)	13000000
NIRDP	1525000
TISS	-
IIBM	1590000
NIPCCD RCG	288,000
IIE	1832264
DHAS	700000
ASTEC/AEDA	300000
CIPET	-
PLASMA	435,000
AIR ST & SC	2465000
RFRI	726,241
KRC(NEIST)	78000000
Tocklai	-

fig: 3 Budget 2012-2017 Budget
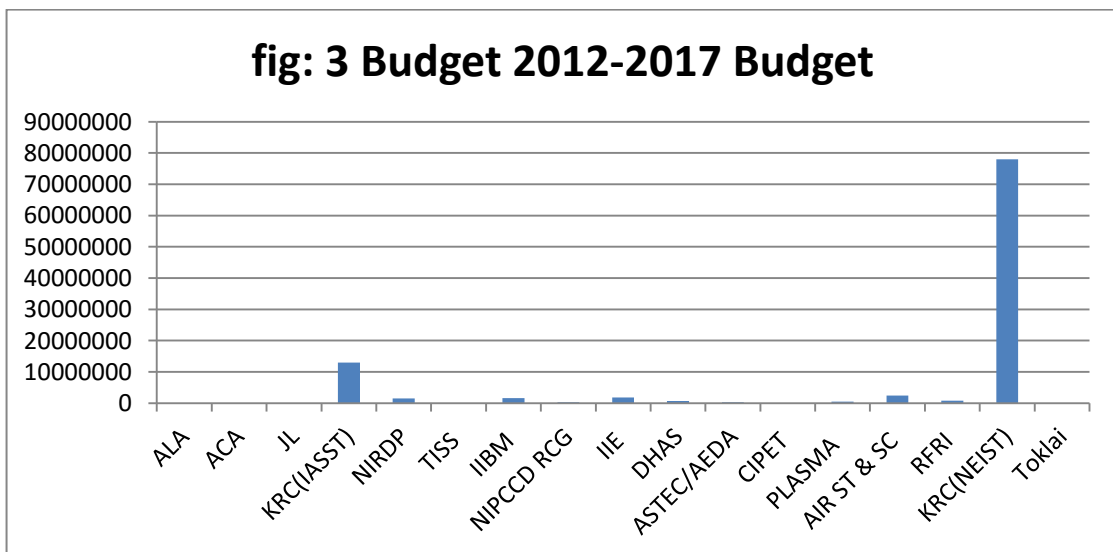
Table-9:   Annual budget of KRC, NEIST during 2012-2016 and proportion of expenditure in journal subscription.

Table-9: Annual Budget

Years	Total budget (Rs. in lakhs)	Amount spend for subscription of journals (Rs. in lakhs)
2012	78.00	72.05
2013	86.00	81.00
2014	95.00	89.50
2015	100.00	95.00
2016	110.00	102.50

6.9 Library Collection

In Special library more importance is given to its collection as it is the medium through which users communicate and explore information. The collection section generally consists of periodicals, books, reference documents, Theses/Dissertations, Manuscripts, Electronic Resources, Grey Literature and miscellaneous. From the table among the libraries surveyed can get a general idea about their collection.

From the Table- 10 and fig: 4 it is found that all the libraries are rendering periodical services. Though periodical service is rendering in all the libraries still subscription of journals are not sufficient. As periodicals are the important elements of library collection, especially in academic and special libraries. It is a highly primary media for recording, communicating information. So the subscription of periodicals should be well sound. The libraries which are taken for study does not have good collection of journals, except KRC IASST and KRC NEIST, both the libraries are having vast collection of journals. Most of the libraries subscribed foreign journals too but it's very less in number. TISS library has the highest collection of E-journals (approx. 10,000). NIPCCD, IIE and ASTEC library does not subscribe E-journals. And some of them do not subscribe foreign journals. It's shown from the survey that all the libraries have few or less collection print journals. Ananda Chandra Agarwala Library has some special collections such as- the library has a good collection on Dr.

Biswanarayan Sastri's writings, then the collection on Dr. H.K. Borpujari's writings. It is found from the Table: 10 and fig: 4 that each of the libraries has a good collection on books only rather than other documents. Among the libraries surveyed only DHAS library has Grey literature. Around 320 grey literatures are available till 2016. Most of the libraries don't mention its collection properly. They have not even mentioned about the total collection of library documents. Year wise they have mentioned only the increasing number of collections. From the survey it is found that KRC NEIST has the highest collection of documents. It has rich and outstanding collections on National and International journal, books, Indian and Foreign Patents, standards, reports, etc. The library as of 2008 has collection strength of 25,000 back volumes of journals, and 23,000 books, 6,000 Indian and foreign standards, 1.5 lacks of Indian patents, and 6,000 reports of various national and international organizations, a good quantum of e-sources such as CD-ROMs, DVDs, etc. The library subscribes to 79 foreign and 86 Indian journals.

In any type of library be it special or other, everything depends on the economic side and if a library is economically sound then the collection would increase.

Table-10: Collections

Table no: 10 Total collection of books from 2012-2017	
Library	**Books**
ALA	44194
ACA	38020
JL	3620
KRC(IASST)	34600
NIRDP	770
TISS	9704
IIBM	1273
NIPCCD RCG	12354
IIE	76243
DHAS	85303
ASTEC/AEDA	123
CIPET	969
PLASMA	1589
AIR ST & SC	1099

RFRI	852
KRC(NEIST)	764
Tocklai	7503

fig:4 Total collection of books from 2012-2017 Books
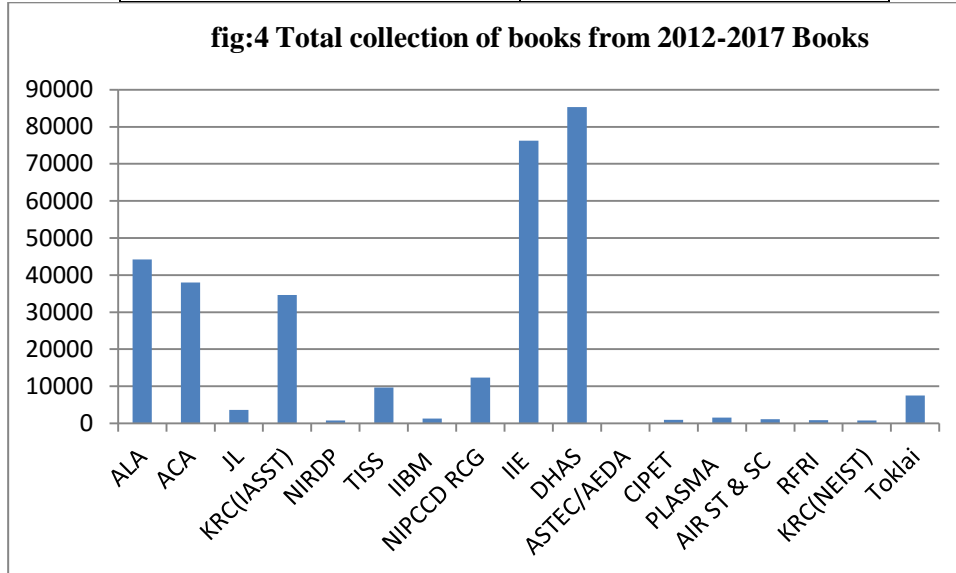
Table- 11: Periodicals

Total collection of Periodicals from 2012-2017	
Library	**Periodicals**
ALA	1500
ACA	500
JL	144
KRC(IASST)	380
NIRDP	51
TISS	
IIBM	256
NIPCCD RCG	175
IIE	426
DHAS	
ASTEC/AEDA	12
CIPET	65
PLASMA	85
AIR ST & SC	50
RFRI	169
KRC(NEIST)	496
Tocklai	

fig: 5 Total collection of Periodicals from 2012-2017 Periodicals
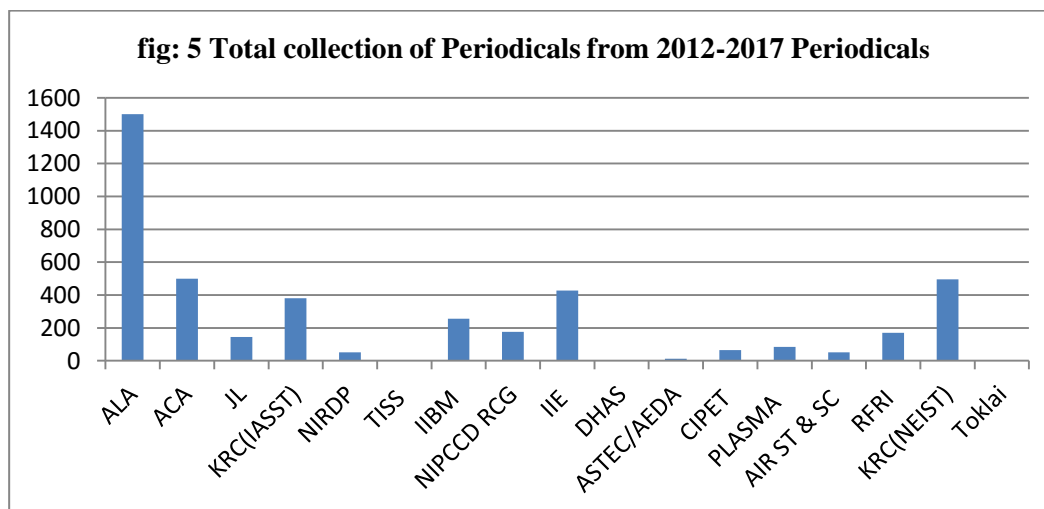
6.10   About Journals

It is found from the Table- 12that TISS has the highest10040 number of subscription of journals followed by IASST with 745 DHAS with 700 journals. ACA Library has 500 collections of journals of its own publication. TISS is providing access to 16 databases, NIRD&PR also providing access to E-brary & Proquest databases to its users.

Table- 12: Journals

Sl. No.	Name of the Libraries	Indian		1.1	Foreign	1.2 Total	Reason for acquiring journals in E-Format
		Print	E-Journals	Print	E-Journals		
1	ALA Library	-	-	-	-	-	i. Economical to acquire ii.Provides Networking facility. iii. Easy to maintain.
2	ACA Library	500(own)	-	-	-	500	NA
3	Judges' Library	24	3	4	-	-	i.Provides Networking facility.ii. Easy to maintain.
4	KRC (IASST)	45	-	-	700	745	i. Economical to acquire. ii.Provides Networking facility. iii. Easy to maintain. iv. Solves the problem of theft & mutilation.
5	NIRDP Library	36	-	4	-	40	i.Provides Networking facility. ii. Easy to maintain.
6	TISS Library	40	-	-	10,000	10040	i. Provides Networking facility. ii. Easy to maintain.
7	IIBM Library	56	-	3	-	59	i. Economical to acquire. ii.Provides Networking facility. iii. Easy to maintain. iv. Solves the problem of theft & mutilation.

8	NIPCCD RCG Library	17	-	-	-	17	i. Economical to acquire. ii.Provides Networking facility. iii. Easy to maintain. iv. Solves the problem of theft & mutilation.
9	IIE Library	70	-	9	79	79	i. Economical to acquire.ii.Provides Networking facility. iii. Easy to maintain. iv. Solves the problem of theft & mutilation
10	DHAS Library	700	-	-	-	700	NA
11	ASTEC/AEDA	12	-	-	-	12	NA (Not used till date)
12	CIPET Library	14	-	2	-	16	i. Solves the problem of theft & mutilation.
13	PLASMA Physics Library	17	8	12	7	44	I.Provides Networking facility. ii. Easy to maintain. iii. Solves the problem of theft & mutilation.
14	AIR ST & SC Library	10	-	-	-	10	NA
15	RFRI Library	38	-	-	47	85	i. Economical to acquire. ii.Provides Networking facility. iii. Easy to maintain. iv. Solves the problem of theft & mutilation.
16	KRC (NEIST)						i.Provides Networking facility
17	TTRC Library	45	45	-	-	90	NA

6.11   Technical Operations

Special library should be specialized in its own right but some of the special libraries of the study specialized to only its collection and services to some extent. Manual system cannot meet that much information needs of the readers so computerized system of information storage and retrieval is must.

It has been shown from the surveyed data that 80% libraries have computer facility for both the library personnel and users. The libraries are using different software and operating system for their regular housekeeping operations except ASTEC library. Most of the libraries have been using Windows as operating system. Only KRC IASST and RFRI library is using Linux.

From the Table- 13 and fig: 6-9 it is found that 90% of the libraries are using different classification scheme and cataloguing code. From the survey it is found that among libraries 38% libraries have open access system, 37% libraries have semi access

system and 25% have closed access system. It is found from the study that except PLASMA Physics library, CIPET library and KRC NEIST in all the libraries classification process is done through DDC and as regard to cataloguing it's seen that except ALA library, Ananda Chandra Agarwala Library and RFRI Library, all the other libraries' process of cataloguing is AACR II. While the processing of cataloguing in ALA Library is ALA, Ananda Chandra Agarwala Library is CCC and RFRI Library is MARC. KRC NEIST is using the cataloguing code of all three as, AACR I, AACR II & CCC. Judge's Library, NIRDP Library, Tocklai Tea Research Centre Library does not have any cataloguing code.

Table- 13: Technical Operations carried out by special libraries under study

TECHNICAL OPERATIONS							
SL NO.	Name of The Libraries	No. of Computers	Operating System	Software	Classification Scheme	Cataloguing Code	Access System
1	ALA Library	2	NA	Koha	DDC 22nd	ALA	Semi access
2	Ananda Chandra Agarwala Library	NA	NA	NA	DDC	CCC	Semi access
3	Judges' Library	7	Windows	Koha	DDC 23rd	NA	Closed access
4	Knowledge Resource Centre(IASST)	15	Linux	SOUL & D. SPACE	DDC 23rd	AACR II	Semi access
5	NIRDP Library	3	Windows	E-Granthalaya	DDC 19th	NA	Closed access
6	TISS Library	77	Windows	Koha	DDC 23rd	AACR II	Semi access
7	IIBM Library	4	Windows	CDS/ISIS	DDC 19th	AACR II	Open access
8	NIPCCD RCG Library	1	Windows	Books help plus	DDC 21st	AACR II	Semi access
9	IIE Library	3	UNIX & Windows	In-house software	DDC	AACR II	Open access
10	DHAS Library	5	Windows	SOUL 2.0	DDC 19th	AACR II	Open access
11	ASTEC/AEDA	NIL	NA	NA	DDC	AACR I	Open access
12	CIPET Digital Library	13	Windows	Others	UDC	AACR II	Open access
13	Institute of PLASMA Physics Library	2	Windows	E-Granthalaya	UDC 21st	AACR I	Close access
14	Directorate of AIR ST & SC Library	3	Windows	SOUL	DDC 21st	AACR II	
15	RFRI Library	3	LINUX	Koha	DDC 23rd	MARC	Open access
16	Knowledge Resource Centre(NEIST)	5	Windows	Koha	UDC 2015	AACR I, AACR II & CCC	Semi access

17	Tocklai Tea Research Centre Library (TTRC)	3	LINUX & Windows	NA	DDC	NA	Closed access

fig: 6 Availability of Computers

no 12%

yes 88%

fig:7 Access System

Semi Access 38%

Open Access 37%

Closed Access 25%

fig:8 Cataloguing Code

CCC 8%

ALA 8%

MARC 8%

AACR II 61%

AACR I 15%

fig:9 Classification Scheme

UDC 18%

DDC 82%
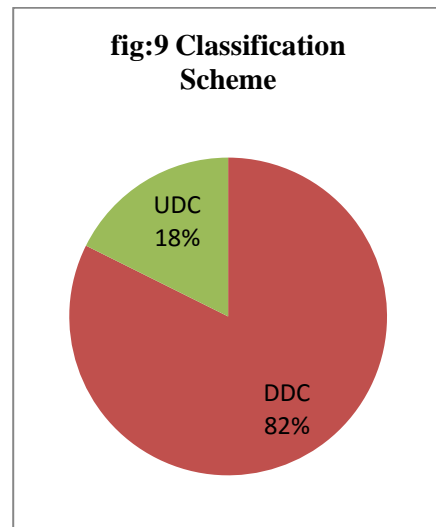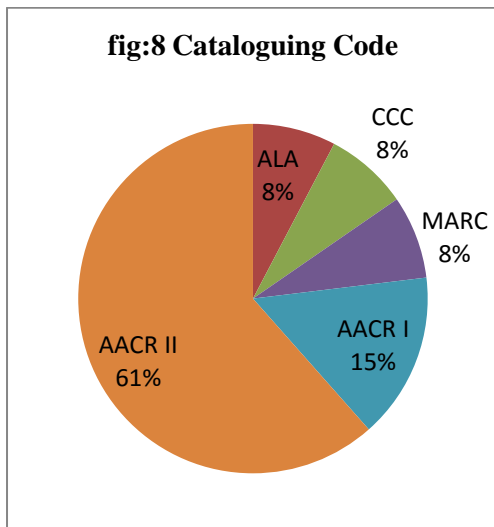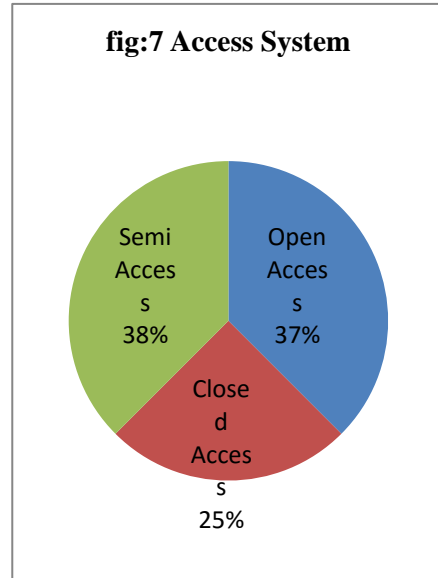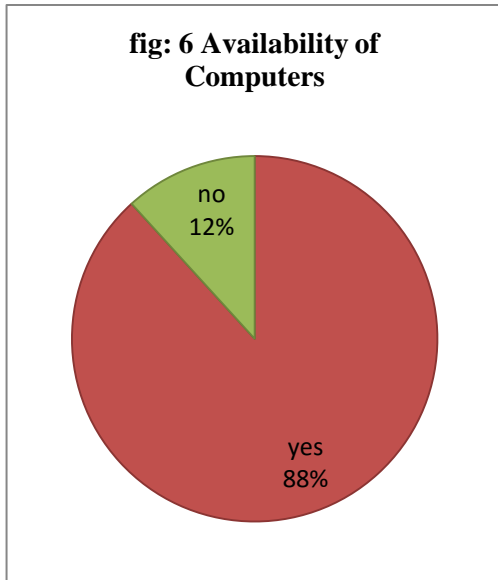
6.12   Library Acquisition System

Table- 14 shows about the library acquisition system. It is seen from Table-14 and fig: 10 shows that among the libraries 32% libraries uses printed catalogues as a tool for selecting documents, 26% uses Subject Bibliographies, 12% libraries by checking the holdings of other libraries, 21% libraries uses Internet sites/ online databases, and 9% libraries uses varieties of sources. It is seen from fig: 11 that 65% libraries uses approval method for acquisition of documents, 26% libraries use firm order method, 5% libraries use Ad-hoc Purchase method and 4% libraries use other sources. It is seen from fig: 12 that 80% libraries preferred Paper form for documents and 20% libraries preferred electronic form.

Table- 14: Acquisition System

SL N O	Name of the Libraries	Tool to select documents	Method to acquisition of documents	Type of Books Format
1.	ALA Library	i. Subject Bibliographies ii. Internet Sites/Online Databases	i. Approval ii. Firm Order	i. Paper form ii. Electronic form
2.	Ananda Chandra Agarwala Library	NA	NA	Paper form
3.	Judges' Library	i. Printed Catalogues ii. Subject Bibliographies iii. Internet Sites/Online Databases	Approval	Paper form
4.	Knowledge Resource Centre(IASST)	i. Printed Catalogues ii. Subject Bibliographies iii. Representation of Book Supplying	i. Approval ii. Firm Order	Paper form
5.	NIRDP Library	i. Printed Catalogues ii. Internet Sites/Online Databases iii. Display of Books	Approval	i. Paper form ii. Electronic form
6.	TISS Library	i. Printed Catalogues ii. Subject Bibliographies	Approval	Paper form

7.	IIBM Library	i. Printed Catalogues ii. Subject Bibliographies iii. Check the Holdings of other Libraries iv. Internet Sites/Online Databases v. Faculty's choice	Approval	i. Paper form ii. Electronic form
8.	NIPCCD RCG Library	i.Printed Catalogues ii. Subject Bibliographies iii. Internet Sites/Online Databases	i. Approval ii. Firm Order	i. Paper form ii. Electronic form
9.	IIE Library	i. Printed Catalogues ii. Subject Bibliographies	Approval	Paper form
10.	DHAS Library	i. Printed Catalogues ii. Subject Bibliographies iii. Check the Holdings of other Libraries iv. Internet Sites/Online Databases v. User's Requirement	i. Approval ii. Firm Order iii. Donation	Paper form
11.	ASTEC/AEDA	i. Printed Catalogues ii. Subject Bibliographies	i. Approval ii. Firm Order iii. Ad-hoc purchase	Paper form
12.	CIPET Digital Library	i. Printed Catalogues ii. Internet Sites/Online Databases	Approval	Paper form
13.	Institute of PLASMA Physics Library	i. Printed Catalogues ii. Subject Bibliographies iii. Check the Holdings of other Libraries iv. Internet Sites/Online Databases	Approval	Paper form
14.	Directorate of AIR ST & SC Library	Printed Catalogues	Approval	Paper form
15.	RFRI Library	i. Printed Catalogues ii. Subject Bibliographies iii. Check the Holdings of other Libraries iv. Internet Sites/Online Databases v. User's Requirement	i. Approval ii. Firm Order	Paper form
16.	Knowledge Resource Centre(NEIST)	i. Printed Catalogues ii. Subject Bibliographies iii. Check the Holdings of other Libraries iv. Internet Sites/Online Databases	Approval	Paper form
17.	Tocklai Tea Research Centre Library	NA	NA	NA

fig:10 Tools to select documents

vi. Guide to Indian Periodicals Literature 0%

v. Ulrich International Periodical Directory 0%

vii. Others 9%

i. Printed Catalogues 32%

iv. Internet Sites/Online Databases 21%

iii. Check the Holdings of other Libraries 12%

ii.Subject Bibliographies 26%

fig:11 Method to acquisition of documents

iii. Ad-hoc Purchase 5%

iv. Others 4%

ii. Firm order 26%

i. Approval 65%

fig:12 Type of Books format

6.13   Software using for library automation

Table- 15 and fig: 13shows that out of 17 surveyed libraries 5 libraries are using KOHA followed by 3 libraries are using SOUL 2.0, 2 libraries are using E-Granthalaya, 1 library is using CDS/ISIS and 1 library that is KRC IASST using both SOUL 2.0 & D-Space and the rest 3 libraries are using some non-standardized software for library automation.

Table- 15: Software uses in the Libraries

Different software used	No. of Libraries	Percentage (%)
SOUL 2.0	3	25%
KOHA	5	42%
CDS/ISIS	1	8%
LIBSYS	0	0%
E-GRANTHALAYA	2	17%
ALICE FOR WINDOWS	0	0%
D-SPACE	1	8%
OTHERS	3	25%

Fig: 13 Software used in the Libraries
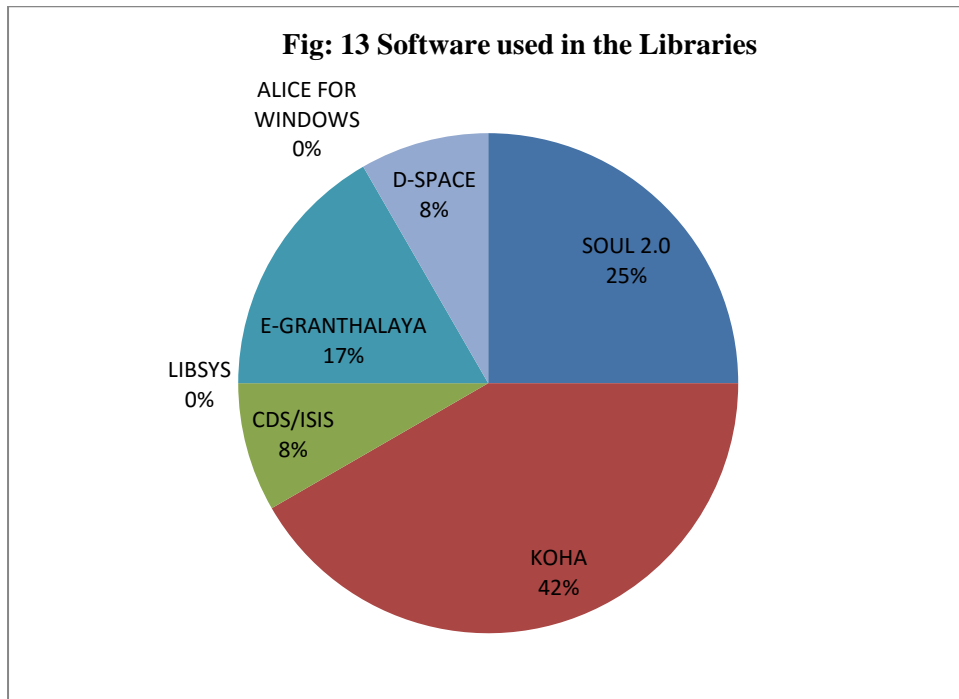
6.14 Modules of software in operation for automation

Table- 16 shows the different areas of automation done by the surveyed libraries. It is found from the study that out of the 17 libraries surveyed 3 libraries are automated fully. Some are partially automated followed by 13 libraries have done acquisition, 14 libraries have done cataloguing, 12 libraries have done circulation, 9 libraries have done OPAC, 8 libraries have done Serial Control modules and only8 libraries have done article indexing module. Among these 17 libraries only Ananda Chandra Agarwala library and ASTEC/AEDA library till now have not applied any ICT application. Nothing has been done automated in these two particular libraries.

Table- 16: Modules of software in operation for automation

SL NO.	Name of the Libraries	Acquisition	Cataloguing	Circulation	OPAC	Serial Control	Article Indexing
1	ALA Library	Yes	No	No	No	No	No
2	Ananda Chandra Agarwala Library	No	No	No	No	No	No
3	Judges' Library	No	Yes	Yes	Yes	No	No
4	Knowledge Resource Centre(IASST)	Yes	Yes	Yes	Yes	Yes	Yes
5	NIRDP Library	Yes	Yes	Yes	Yes	Yes	Yes
6	TISS Library	Yes	Yes	Yes	Yes	Yes	No
7	IIBM Library	No	Yes	Yes	No	No	Yes
8	NIPCCD RCG Library	Yes	Yes	No	No	No	Yes
9	IIE Library	Yes	Yes	Yes	No	Yes	Yes
10	DHAS Library	Yes	Yes	No	No	No	No
11	ASTEC/AEDA	No	No	No	No	No	No
12	CIPET Digital Library	Yes	Yes	Yes	Yes	No	No
13	Institute of PLASMA Physics Library	Yes	Yes	Yes	No	No	Yes
14	Directorate of AIR ST & SC Library	Yes	Yes	Yes	Yes	Yes	Yes
15	RFRI Library	Yes	Yes	Yes	Yes	Yes	No
16	Knowledge Resource Centre(NEIST)	Yes	Yes	Yes	Yes	Yes	Yes
17	Tocklai Tea Research Centre Library	Yes	Yes	Yes	Yes	Yes	No

6.15 Digitized collections

Table- 17 shows about the status of digitized collections in the library. It is seen from fig: 14 that among the libraries 18% libraries have digitized Books collection, 29% libraries have digitized Thesis, 29% libraries have digitized Dissertation and Project reports and 35% libraries have digitized varieties collection of documents like Manuscript, Research Paper, etc. Digitization has not been done in all the libraries. Only Directorate of AIR ST & SC Library has been fully digitized. It's all the collections have been digitized. Assam Legislative Assembly has digitized its book collection only. KRC IASST, TISS library, RFRI library and KRC NEIST has digitized its all collection except books. DHAS library has digitized its Manuscript collections only.

Table- 17: Digitized collections

SL NO.	Name of the Libraries	Digitalized Collection				
		Books	Theses/Dissertations/Project Reports/others			
1.	ALA Library	√	×	×	×	×
2.	Ananda Chandra Agarwala Library	×	×	×	×	×
3.	Judges' Library	×	×	×	×	×
4.	Knowledge Resource Centre(IASST)	×	√	√	√	(Research papers)
5.	NIRDP Library	×	×	×	×	×
6.	TISS Library	×	√	√	√	√
7.	IIBM Library	×	×	×	×	×
8.	NIPCCD RCG Library	×	×	×	×	×
9.	IIE Library	×	×	×	×	×
10.	DHAS Library	×	×	×	×	(Manuscripts)
11.	ASTEC/AEDA	×	×	×	×	×
12.	CIPET Digital Library	√	×	×	×	×
13.	Institute of PLASMA Physics Library	×	×	×	×	×
14.	Directorate of AIR ST & SC Library	√	√	√	√	√
15.	RFRI Library	×	√	√	√	√
16.	Knowledge Resource Centre(NEIST)	×	√	√	√	√
17.	Tocklai Tea Research Centre Library	×	×	×	×	×

fig:14 Digitized collections

No. of the Libraries   percentage

	Books	Thesis	Dissertation	Project reports	Others
No. of the Libraries	3	5	5	5	6
percentage	18%	29%	29%	29%	35%
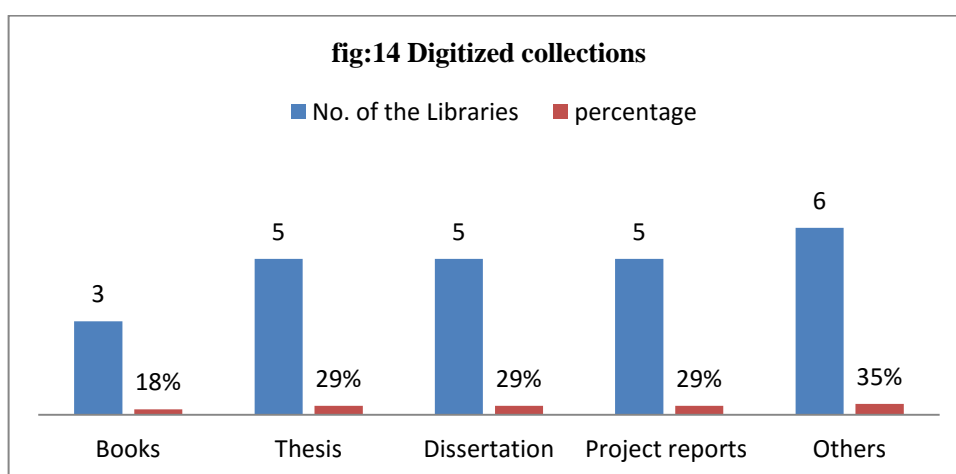
6.16 ICT infrastructures availability

Information and Communication Technology (ICT) has radically transformed most of the services provided by a library. The application of ICT in libraries has made remarkable changes in their daily operations and services. Information processing, storage, communication, dissemination of information, automation, etc. revolutionized the information communication technology. One of the most relevant outcomes of ICT is the introduction of the internet and development of World Wide Web, which has necessitated a major shift in the role of libraries. The application of ICT in the libraries becomes essential to provide the facilities to the user community.

ICT includes desktop, laptop, CD drivers, OPAC terminals, networking, CD network, computer server, etc. as well as the various services and applications associated with them. When such technologies are used for educational purpose, ICT becomes a subfield of educational technology. Table: 18 and fig: 15 show the current status and different ICT based facilities in the libraries selected. It is found from the study that most of the libraries are using the basic things only related to ICT like, Computer, laptop, server, CD drivers, scanner, printer, photocopy machine, telephone, generator, networking and special to library OPAC terminals. Ananda Chandra Agarwala library and ASTEC/AEDA library till now have not applied any ICT facility.

Table-18: ICT Infrastructures availability in libraries

No. of Libraries	Desktop	Laptop	CD driver	OPAC Terminal	Networking	CD network	Computer server	Photocopy machine	Scanner	Printer	Telephone	generator	Web camera	Microfilming	Wireless device
17	15	4	9	4	11	2	13	12	12	15	13	8	3	2	2
Percentage	88%	24%	53%	24%	65%	12%	76%	71%	71%	8%	76%	47%	18%	12%	12%

fig:15 ICT Infrastructures
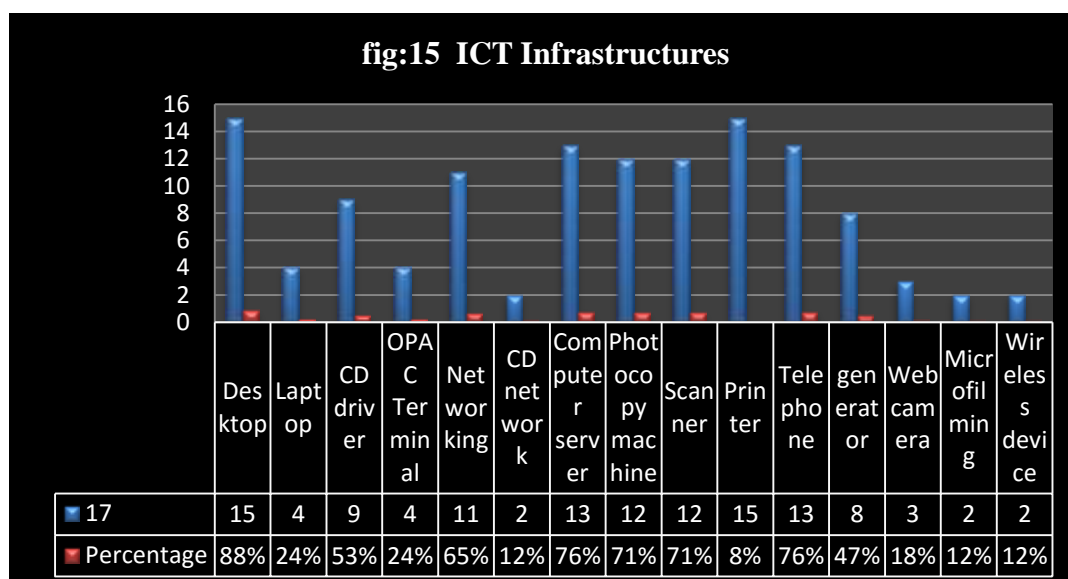
6.17   Purpose of using ICT

The functions of the software are to automatic the library systems which cover acquisition, cataloguing, circulation, serial management, stock, verification, etc. ICT is used in various library housekeeping operations as well as for different library activity and service Table- 19 and fig: 16shows about purposes of libraries of acquiring or using ICT application. It is found from the studies that among 17 libraries 10 libraries (14%) are using ICT mailing and document sharing purpose. 8 libraries (11%) are using ICT for subscription of electronic journals then 6 libraries (9%) are using ICT for availability of electronic books. Whereas 7 libraries (10%) are using ICT for collecting data through internet, for online databases, for developing career and also

only for presentation. Only 4 libraries (6%) are using ICT for manuscript. Then 9 libraries (13%) are using ICT just to update knowledge of both users and staffs and lastly 5 libraries (7%) are using ICT for searching Web-OPACS /OPACs.

Table- 19: Purpose of using ICT

Purposes	No. of the Libraries	Percentage (%)
1.E-mail & Document sharing	10	14%
2. Electronic Journals	8	11%
3. Electronic Books	6	9%
4. Collect data through Internet	7	10%
5. Online databases	7	10%
6. For Career Development	7	10%
7.Presentation	7	10%
8.Manuscript Proposal & papers	4	6%
9.Update Knowledge	9	13%
10. Search Webopacs/OPACS	5	7%

fig: 16 Purspose of using ICT
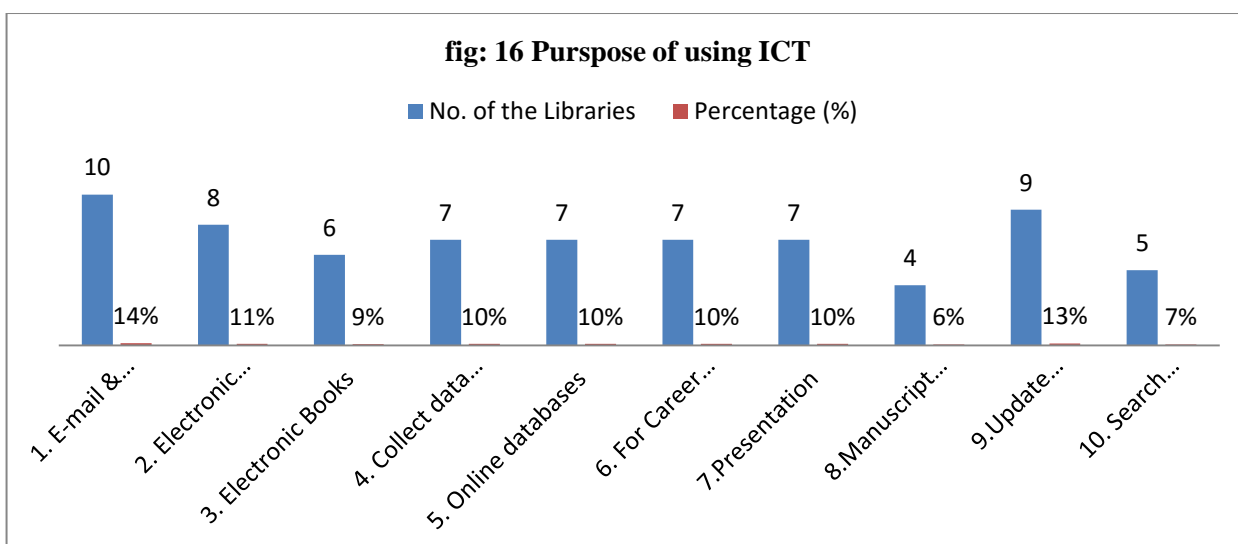
6.18 Primary ways to learn about ICT

Table- 20 shows about the ways to learn about ICT. It is seen from the Table- 20 and fig: 17 that 35% libraries acquired teaching/supervising skill to learn about ICT. 29% libraries acquired Library homepage method, 35% libraries acquired Training program for library staff, 12% libraries acquired Subject librarian skill, 29% libraries acquired orientation program and 35% libraries acquired various ways to learn about ICT. It is found from study that 53% libraries provide Internet service to ICT users among them 76%ICT users are research scholar.

Table- 20: Primary ways to learn about ICT

SL NO.	Name of the Libraries	Internet For RS	ICT Users	Teacher/ Supervisor	Library Homepage	Library training	Subject Librarian	Orient ation	Others
1	ALA Library	No	No	No	Yes	Yes	No	No	No
2	ACA Library	No	No	NA	NA	NA	NA	NA	NA
3	Judges' Library	NA	NA	NA	NA	NA	NA	NA	NA
4	KRC (IASST)	Yes	Student/ Research Scholars	No	No	Yes	No	No	Workshop / Meeting, etc.
5	NIRDP Library	No	Faculty	yes	No	No	No	Yes	Yes
6	TISS Library	Yes	Student/ Research Scholars & Faculty	No	Yes	Yes	No	Yes	No
7	IIBM Library	Yes	Student/ Research Scholars & Faculty	yes	Yes	No	No	Yes	Yes
8	NIPCCD RCG Library	No	Faculty	yes	Yes	No	Yes	Yes	Yes
9	IIE Library	Yes	Student/ Research Scholars & Faculty	NA	NA	NA	NA	NA	NA
10	DHAS Library	No	Student/ Research Scholars	yes	No	Yes	No	No	No
11	ASTEC/AEDA	No	No	NA	NA	NA	NA	NA	NA
12	CIPET Library	Yes	Student/ Research Scholars & Faculty	yes	No	Yes	No	Yes	No
13	PLASMA Physics Library	Yes	Student/ Researc	No	Yes	No	No	No	No

			h Scholars & Faculty						
14	AIR ST & SC Library	No	Faculty	No	No	No	No	No	No
15	RFRI Library	Yes	Student/ Researc h Scholars & Faculty	yes	No	yes	No	No	yes
16	KRC (NEIST)	Yes	Student/ Researc h Scholars & Faculty	No	No	No	Yes	No	No
17	TTRC Library	Yes	Student/ Researc h Scholars	No	No	No	No	No	Yes

fig: 17 Primary ways to learn about ICT
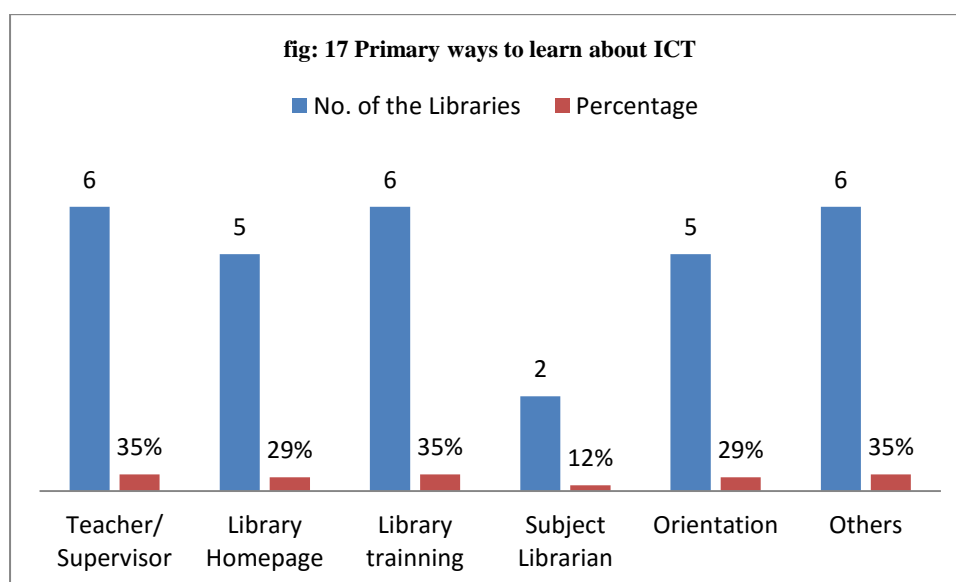
6.19   Benefits of using ICT

Information and Communication Technology (ICT) has transformed library services globally. Most current information are recorded in electronic format, ICT has also contributed immensely to the performance of librarians in the discharge of their duties such as cataloguing, reference services, circulation management, serials control, etc. From the Table- 21 and fig: 18 it is showing that how many libraries are benefitted in

these field mentioned below in the table by using of ICT. It is found from the study that 27% libraries get benefits in saving valuable time by using ICT. 26% libraries get helps in housekeeping operations. 25% libraries get helps in providing accurate results to user's query. And 22% libraries get helps in suggesting the proper subject approach to the research scholar.

Table- 21: Benefits

Benefits	No. of the libraries	Percentage (%)
1.Saving of valuable time	15	27%
2.Helps in Housekeeping operations	14	26%
3.Giving accurate results to user's query	14	25%
4.Helps the proper subject approach to the Research Scholar	12	22%

fig: 18 Benefits of using ICT
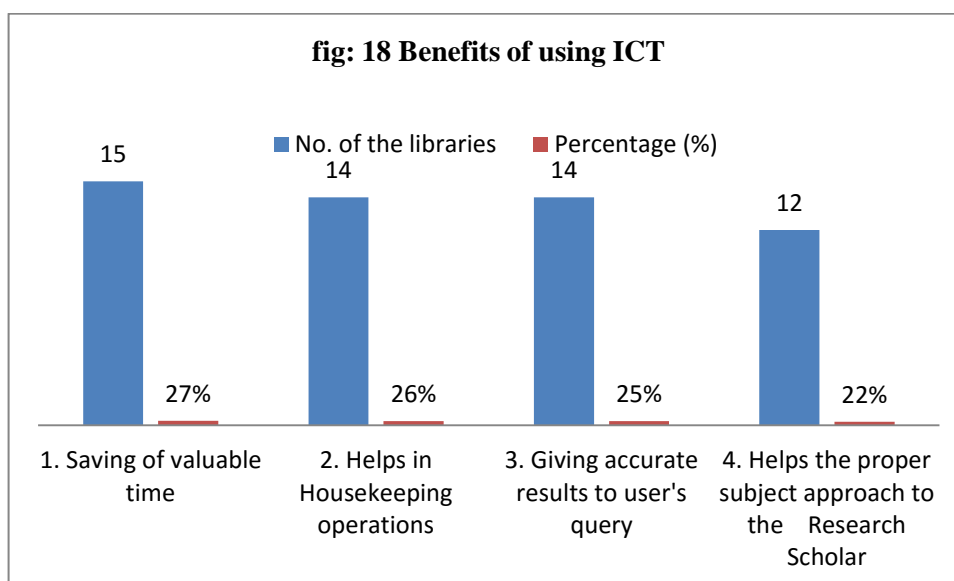
6.20   Barriers in using ICT

Sometime ICT cannot run properly in the libraries due to lack of several aspects which are essential to operate the ICT tools. Table No. 22 and fig: 19 shows that all surveyed libraries are facing several barriers in using ICT, like 7 libraries (14%) are facing barrier in getting insufficient fund for ICT infrastructures followed by 9 libraries (17%) are facing problem of lack of proper infrastructures, 5 libraries (10%) are facing problems in lack of support from their concern authority, 9 libraries (17%) are facing lack of skilled manpower, 8 libraries (16%) are facing barrier in inadequate staff training, 4 libraries (8%) are facing problem in long gap orientation among users, 3 libraries (6%) are facing problem from the absence mindset of the professionals and 6 libraries (12%) are getting barriers from the lack of ICT knowledge of their staffs.

Table- 22: Barriers

Aspects	No. of the Libraries	Percentage (%)
1. Insufficient of Funds	7	14%
2. Lack of infrastructure	9	17%
3. Lack of support from the concern authority	5	10%
4. Lack of skilled manpower	9	17%
5. Inadequate staff training	8	16%
6. Long gap oriented from time to time	4	8%
7.Absence of mind-set of the professional	3	6%
8.Lack of ICT Knowledge	6	12%

Fig: 19 Barriers in using ICT
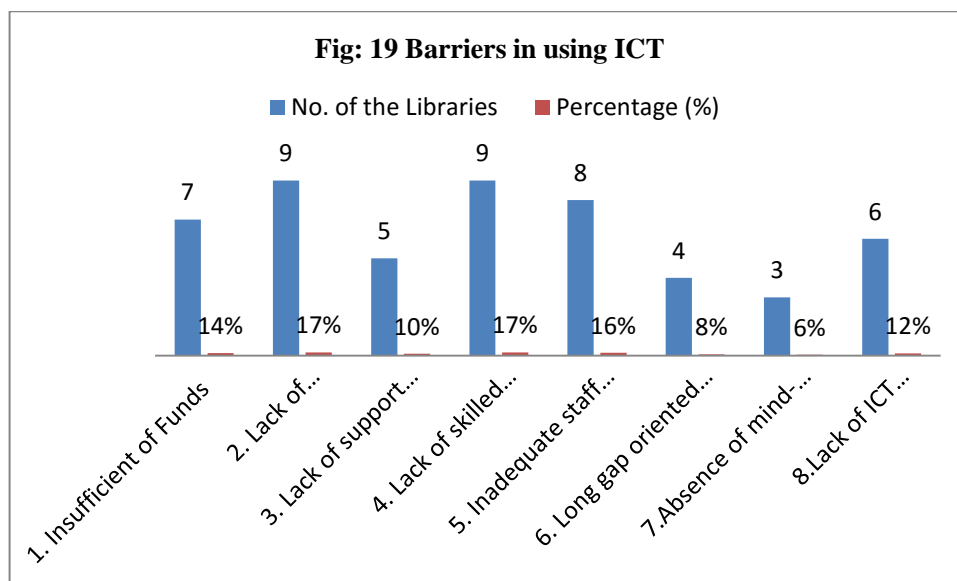
6.21 About Consortium

It is seen that due to the ever increasing cost of resources from the beginning of 21st century the concept of consortium have come into existence. In India there are various consortium being run successfully by different organizations. Some of them are furnish bellow-

- Council for Scientific and Industrial Research (CSIR) e-journal.
- FORSA (The Forum for Resource Sharing in Astronomy & Astrophysics)
- HELINET (Health Sciences Library & Information Network).
- UGC INFONET e-Journal consortium.
- UGC INDEST Consortium.
- IIM (The Indian Institute of Management).
- N-LIST (National Library & Information Service Infrastructure for Scholarly Content).
- E- Shodhshindu etc.

The Table- 23 and fig: 20 show the status of Consortium among the libraries selected. It is found from the study that43% libraries are participating in consortium. Among the libraries selected for study KRC (NEIST) has been participated in CSIR E-Journal Consortium, KRC (IASST) has been participated in NKRC and TISS library has been participated in Shodhganga. 28% libraries get available documents from consortium. 29% libraries share budget with consortium for getting access to e-documents.

Table- 23: Consortium

Category	No. of the Libraries	Percentage (%)
1.Participation in consortium	3	43%
2. Documents available from consortium	2	28%
3.Library share budget with consortium for getting access to e-documents….(Y/N)	2	29%

fig; 20 Status of consortium
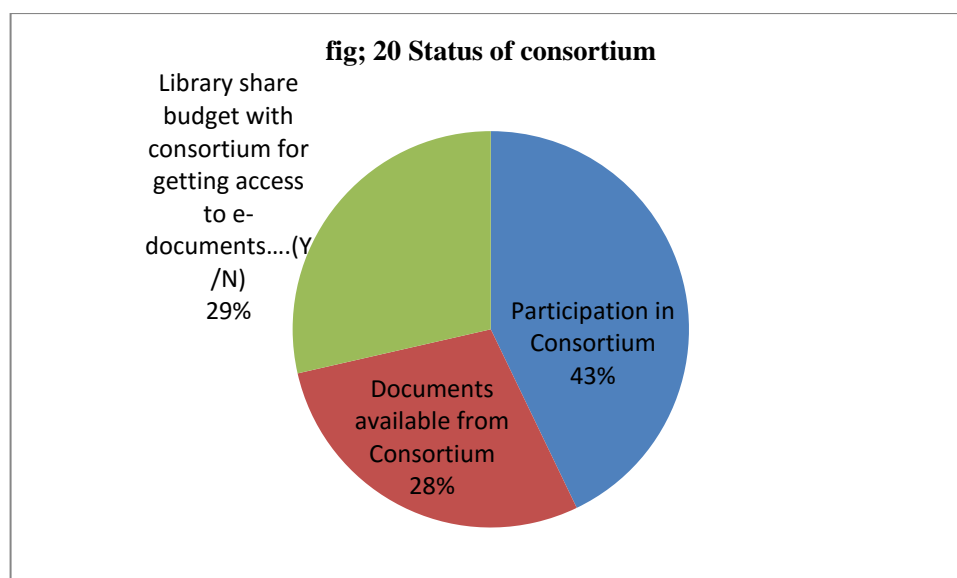
6.22   Problems confronting library

Table- 24 and fig: 21 show about the problems confronting by the libraries. It is seen from fig: 21 that 32% libraries are confronting the problem of inadequacy of fund, 45% libraries are confronting the problem of inadequacy of staff and 23% libraries confronting the problem of Space in the libraries.

Table- 24: Problems confronting library

SL NO.	Name of the Libraries	Problems Confronting Library		
		Inadequate funding	Inadequate staffing	Space problem
1	ALA Library	NA	NA	NA
2	Ananda Chandra Agarwala Library	NA	NA	NA
3	Judges' Library	×	√	√
4	Knowledge Resource Centre(IASST)	×	√	×
5	NIRDP Library	×	×	√
6	TISS Library	√	×	×
7	IIBM Library	×	√	×
8	NIPCCD RCG Library	√	√	×
9	IIE Library	NA	NA	NA
10	DHAS Library	√	√	√
11	ASTEC/AEDA	√	√	×
12	CIPET Digital Library	√	√	√
13	Institute of PLASMA Physics Library	×	√	×
14	Directorate of AIR ST & SC Library	NA	NA	NA
15	RFRI Library	√	√	√
16	Knowledge Resource Centre(NEIST)	NA	NA	NA
17	Tocklai Tea Research Centre Library	√	√	×

fig: 21 Problems confronting Library
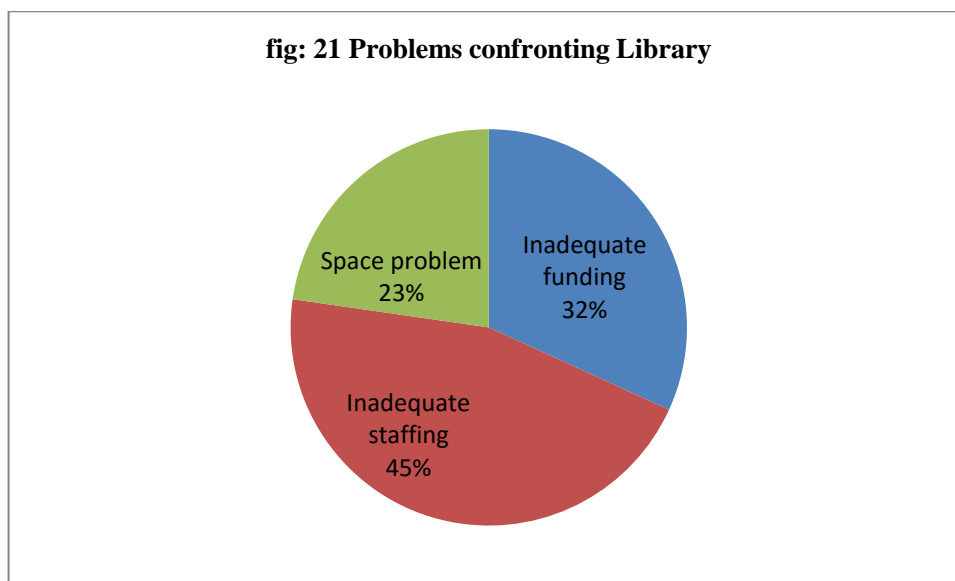
6.23   Status of Archive facility

Table-25and fig: 22shows about the status of Archiving of documents in the libraries selected. In fig: 7.22 it is shown that among the libraries only 2 (12%) have archive facility. And among the rest 15 (88%) libraries some of the library staff doesn't have any knowledge about archive because they are not professional and some libraries have not applied archive facility till now.

Table- 25: Archive facility

SL NO.	Name of the Libraries	Archive Facility
1	ALA Library	×
2	Ananda Chandra Agarwala Library	×
3	Judges' Library	×
4	Knowledge Resource Centre(IASST)	×
5	NIRDP Library	×
6	TISS Library	×
7	IIBM Library	√
8	NIPCCD RCG Library	NA
9	IIE Library	NA

10	DHAS Library	×
11	ASTEC/AEDA	×
12	CIPET Digital Library	NA
13	Institute of PLASMA Physics Library	×
14	Directorate of AIR ST & SC Library	NA
15	RFRI Library	×
16	Knowledge Resource Centre(NEIST)	√
17	Tocklai Tea Research Centre Library	×

fig: 22 Archive facilty
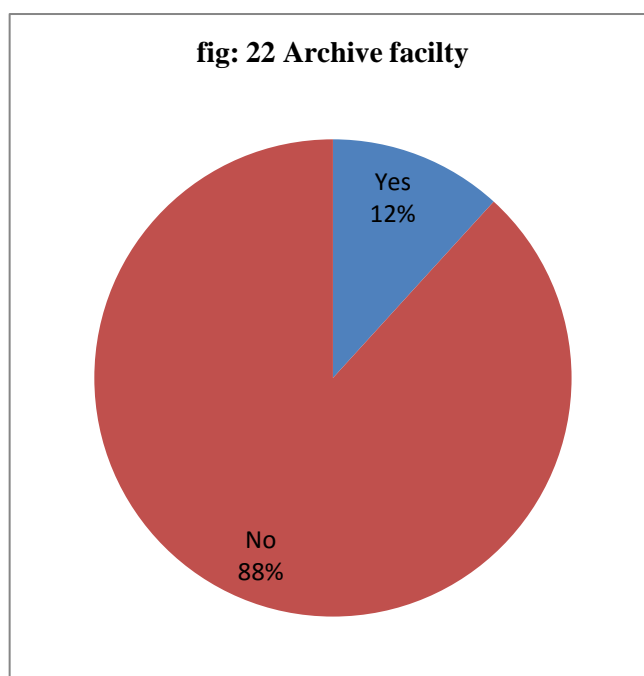
6.24   Participation in Institutional Repository System (IR)

Table- 26 shows about the participation in Institutional Repository (IR) System of the libraries selected. It is seen in the fig: 23 that only 3 (18%) libraries are participating in IR system. These are TISS library, NIPCCD RCG and RFRI library.

Table- 26: IR System

SL NO.	Name of the Libraries	Archive Facility
1	ALA Library	×
2	Ananda Chandra Agarwala Library	×
3	Judges' Library	×
4	Knowledge Resource Centre(IASST)	×
5	NIRDP Library	×
6	TISS Library	√
7	IIBM Library	NA
8	NIPCCD RCG Library	√
9	IIE Library	NA
10	DHAS Library	NA
11	ASTEC/AEDA	×
12	CIPET Digital Library	×
13	Institute of PLASMA Physics Library	×
14	Directorate of AIR ST & SC Library	NA
15	RFRI Library	√
16	Knowledge Resource Centre(NEIST)	NA
17	Tocklai Tea Research Centre Library	NA

fig: 23 IR System
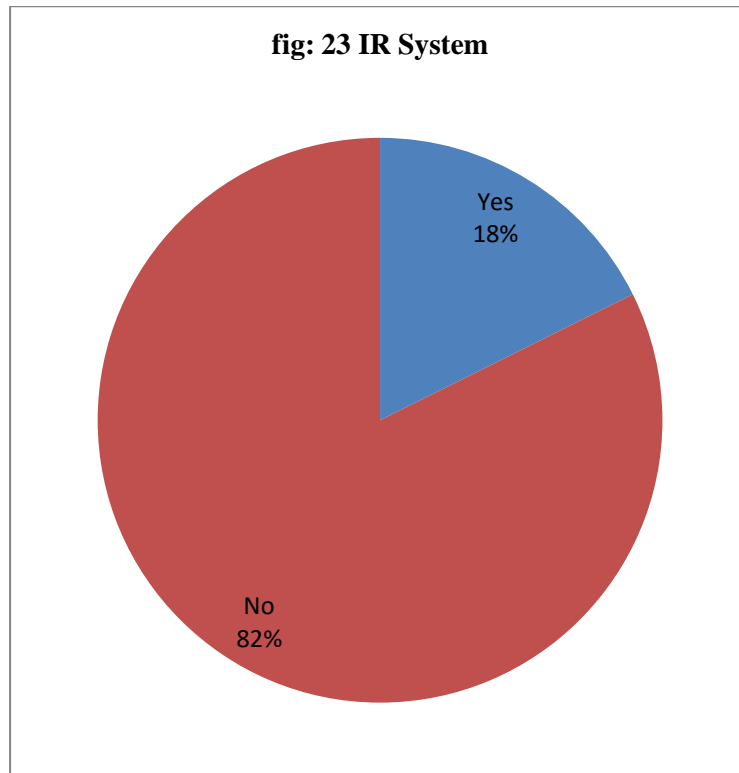
ANALYSIS OF USERS' DATA

6.25   Users' response

Table- 27and fig: 24 stated that in ALA library user response found as other category 40%, in ACA library respondent found as others 20% and student 10%, in Judges' library user response found as other category 40%, in KRC (IASST) library user found as others 20% and research scholars 50%, NIRDP library user response found as other category 40%, in TISS library user response found as student 30%, in IIBM library user response found as other category 50%, NIPCCD RCG library and IIE library user response found as other category 40%, DHAS library user found as others category 30% and research scholars 20%, ASTEC/AEDA library user found as others category 10% and research scientist 20%,CIPET Digital library user response found as student 50%, PLASMA Physics library user found as others category 10% and research scholars 30%, AIR ST & SC library user response found as other category 30%, RFRI library user found as research scholars 40%, KRC (NEIST) library user found as others category 20% and research scientist 40% and TTRC library user found as others category 10% and research scholars 10%. It is found that out of 170 (100%) questionnaire100 (58.82%) numbers not received and 70 (41.10%) received as respondent from all surveyed libraries. Among the respondents it is found that users as others category 23.50%, research scholars 8.80%, scientists 3.50% and students 5.30% from all.

Table- 27: Users' response

Table 27 Institute wise users response							
Libraries	Total Questionnaire Distributed	No Response	Others	Research Scholar	Scientist	Students	Total Response
ALA Library	10	6	4	0	0	0	4
	100%	60%	40.00%	0.00%	0.00%	0.00%	40.00%
ACA Library	10	7	2	0	0	1	3
	100%	70%	20.00%	0.00%	0.00%	10.00%	30.00%
Judges' Library	10	6	4	0	0	0	4
	100%	60%	40.00%	0.00%	0.00%	0.00%	40.00%
KRC (IASST)	10	3	2	5	0	0	7
	100%	30%	20.00%	50.00%	0.00%	0.00%	70.00%
NIRDP Library	10	6	4	0	0	0	4
	100%	60%	40.00%	0.00%	0.00%	0.00%	40.00%
TISS Library	10	7	0	0	0	3	3
	100%	70%	0.00%	0.00%	0.00%	30.00%	30.00%
IIBM Library	10	5	5	0	0	0	5
	100%	50%	50.00%	0.00%	0.00%	0.00%	50.00%
NIPCCD RCG Library	10	6	4	0	0	0	4
	100%	60%	40.00%	0.00%	0.00%	0.00%	40.00%
IIE Library	10	6	4	0	0	0	4
	100%	60%	40.00%	0.00%	0.00%	0.00%	40.00%
DHAS Library	10	5	3	2	0	0	5
	100%	50%	30.00%	20.00%	0.00%	0.00%	50.00%
ASTEC/AEDA	10	7	1	0	2	0	3
	100%	70%	10.00%	0.00%	20.00%	0.00%	30.00%
CIPET Digital Library	10	5	0	0	0	5	5
	100%	50%	0.00%	0.00%	0.00%	50.00%	50.00%
PLASMA Physics Library	10	6	1	3	0	0	4
	100%	60%	10.00%	30.00%	0.00%	0.00%	40.00%
AIR ST & SC	10	7	3	0	0	0	3

Library							
Library	100%	70%	30.00%	0.00%	0.00%	0.00%	30.00%
RFRI Library	10	6	0	4	0	0	4
	100%	60%	0.00%	40.00%	0.00%	0.00%	40.00%
KRC (NEIST)	10	4	2	0	4	0	6
	100%	40%	20.00%	0.00%	40.00%	0.00%	60.00%
TTRC Library	10	8	1	1	0	0	2
	100%	80%	10.00%	10.00%	0.00%	0.00%	20.00%
Total	170	100	40	15	6	9	70
	100%	58.82%	23.50%	8.80%	3.50%	5.30%	41.10%

Fig: 24 Users' response
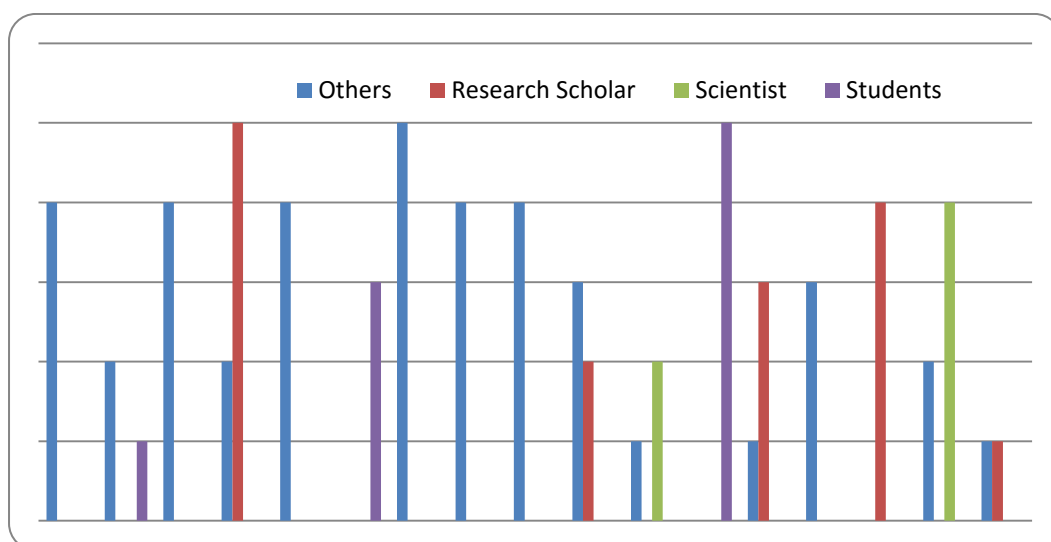
6.26 Users' gender

It is seen from Table- 28 and fig: 25 that in ALA library all respondent found as male, in ACA library 66.7% and 33.3% found as male and female respectively, in Judges' library the male and female ratio is 75%:25% , in KRC (IASST) library the male and female ratio is 28.6%:71.4%, in NIRDP library all respondent found as male, in TISS library the male and female ratio is 33.3%:66.7%, in IIBM library the male and female ratio is 80%:20%, in NIPCCD RCG library and IIE library the male and female ratio is

75%:25%, in DHAS library the male and female ratio is 80%:20%, in ASTEC/AEDA library the male and female ratio is 66.7%:33.3%, in CIPET Digital library the male and female ratio is 80%:20%, in PLASMA Physics library all respondent found as male, in AIR ST & SC library the male and female ratio is 66.7%:33.3%, in RFRI library the male and female ratio is 50%:50%, in KRC (NEIST) library the male and female ratio is 66.7%:33.3%, and in TTRC library the male and female ratio is 50%:50%.The respondent found 70% as male and 30% as female from all libraries.

Table- 28: Users' gender

Table 28 Institute wise user gender			
Libraries	Male	Female	Total
ALA Library	4	0	4
	100.0%	0.0%	100.0%
ACA Library	2	1	3
	66.7%	33.3%	100.0%
Judges' Library	3	1	4
	75.0%	25.0%	100.0%
KRC (IASST)	2	5	7
	28.6%	71.4%	100.0%
NIRDP Library	4	0	4
	100.0%	0.0%	100.0%
TISS Library	1	2	3
	33.3%	66.7%	100.0%
IIBM Library	4	1	5
	80.0%	20.0%	100.0%
NIPCCD RCG Library	3	1	4
	75.0%	25.0%	100.0%
IIE Library	3	1	4

	75.0%	25.0%	100.0%
DHAS Library	4	1	5
	80.0%	20.0%	100.0%
ASTEC/AEDA	2	1	3
	66.7%	33.3%	100.0%
CIPET Digital Library	4	1	5
	80.0%	20.0%	100.0%
PLASMA Physics Library	4	0	4
	100.0%	0.0%	100.0%
AIR ST & SC Library	2	1	3
	66.7%	33.3%	100.0%
RFRI Library	2	2	4
	50.0%	50.0%	100.0%
KRC (NEIST)	4	2	6
	66.7%	33.3%	100.0%
TTRC Library	1	1	2
	50.0%	50.0%	100.0%
Total	49	21	70
	70.0%	30.0%	100.0%

Fig: 25 Users' gender
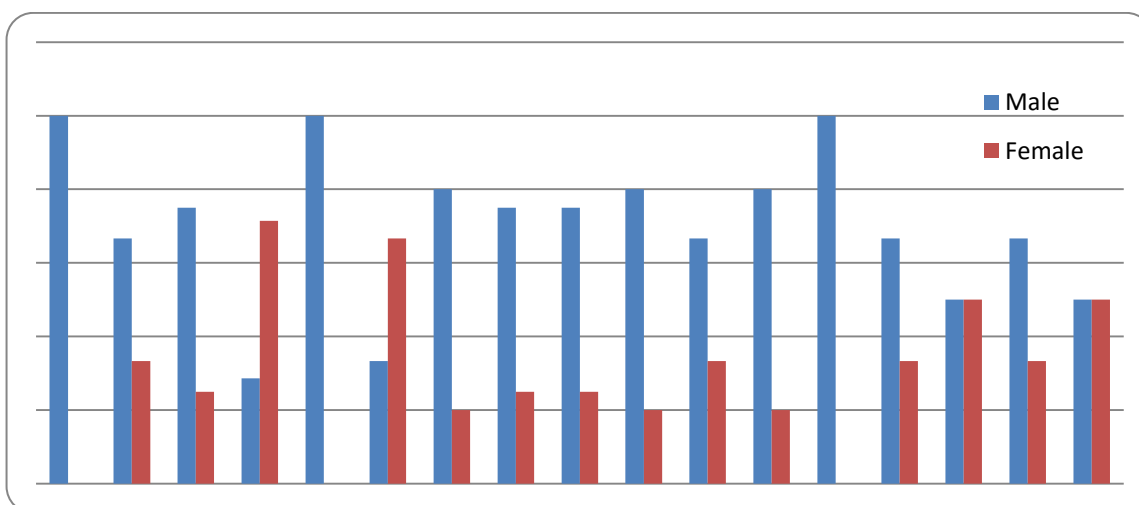
6.27   Gender wise user's response

Table- 29 and fig: 26 stated that in ALA library respondent found as male in other category, in ACA library all male from other and all female from student category, in Judges' library all male and female from other category, in KRC (IASST) library others and research scholars as 50% each as male and female user as others and research scholars is 20%:80%, in NIRDP library all males from other category, in TISS library all male and female respondents from student category, in IIBM library all male and female respondents from others category, in NIPCCD RCG library all male and female respondents from others category, in IIE library all male and female respondents from others category, in DHAS library male user respondent found as others and research scholars and female respondent as others only, in ASTEC/AEDA library male all user found as scientist and female user as others, in CIPET Digital library both the male and female users found as students, in PLASMA Physics library male respondent found from others and research scholars, in AIR ST & SC library all male and female respondents from others category, in RFRI library both the male and female users from research scholars, in KRC (NEIST) library male user from others and scientist and female users from scientist only and in TTRC library male users from others and female users from research scholars.

Total male users as others 65.3%, research scholar 16.3%, scientist 8.2%, student 10.2% and total female users as others 38.1%, research scholar 33.3%, scientist 9.5% and student 19% are found from all the selected libraries.

Table- 29: Gender wise user category

Table 29 Gender wise User Category						
Libraries	Gender	Others	Research Scholar	Scientist	Students	Total
ALA Library	Male	4	0	0	0	4
		100.0%	0.0%	0.0%	0.0%	100.0%
ACA Library	Male	2	0	0	0	2
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	0	0	0	1	1
		0.0%	0.0%	0.0%	100.0%	100.0%
Judges' Library	Male	3	0	0	0	3
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
KRC (IASST)	Male	1	1	0	0	2
		50.0%	50.0%	0.0%	0.0%	100.0%
	Female	1	4	0	0	5
		20.0%	80.0%	0.0%	0.0%	100.0%
NIRDP Library	Male	4	0	0	0	4
		100.0%	0.0%	0.0%	0.0%	100.0%
TISS Library	Male	0	0	0	1	1
		0.0%	0.0%	0.0%	100.0%	100.0%
	Female	0	0	0	2	2
		0.0%	0.0%	0.0%	100.0%	100.0%
IIBM Library	Male	4	0	0	0	4
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%

NIPCCD RCG Library	Male	3	0	0	0	3
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
IIE Library	Male	3	0	0	0	3
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
DHAS Library	Male	2	2	0	0	4
		50.0%	50.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
ASTEC/AEDA	Male	0	0	2	0	2
		0.0%	0.0%	100.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
CIPET Digital Library	Male	0	0	0	4	4
		0.0%	0.0%	0.0%	100.0%	100.0%
	Female	0	0	0	1	1
		0.0%	0.0%	0.0%	100.0%	100.0%
PLASMA Physics Library	Male	1	3	0	0	4
		25.0%	75.0%	0.0%	0.0%	100.0%
AIR ST & SC Library	Male	2	0	0	0	2
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
RFRI Library	Male	0	2	0	0	2
		0.0%	100.0%	0.0%	0.0%	100.0%
	Female	0	2	0	0	2
		0.0%	100.0%	0.0%	0.0%	100.0%
KRC (NEIST)	Male	2	0	2	0	4

		50.0%	0.0%	50.0%	0.0%	100.0%
	Female	0	0	2	0	2
		0.0%	0.0%	100.0%	0.0%	100.0%
TTRC Library	Male	1	0	0	0	1
		100.0%	0.0%	0.0%	0.0%	100.0%
	Female	0	1	0	0	1
		0.0%	100.0%	0.0%	0.0%	100.0%
Total	Male	32	8	4	5	49
		65.3%	16.3%	8.2%	10.2%	100.0%
	Female	8	7	2	4	21
		38.1%	33.3%	9.5%	19.0%	100.0%

Fig: 26 Gender wise users' response
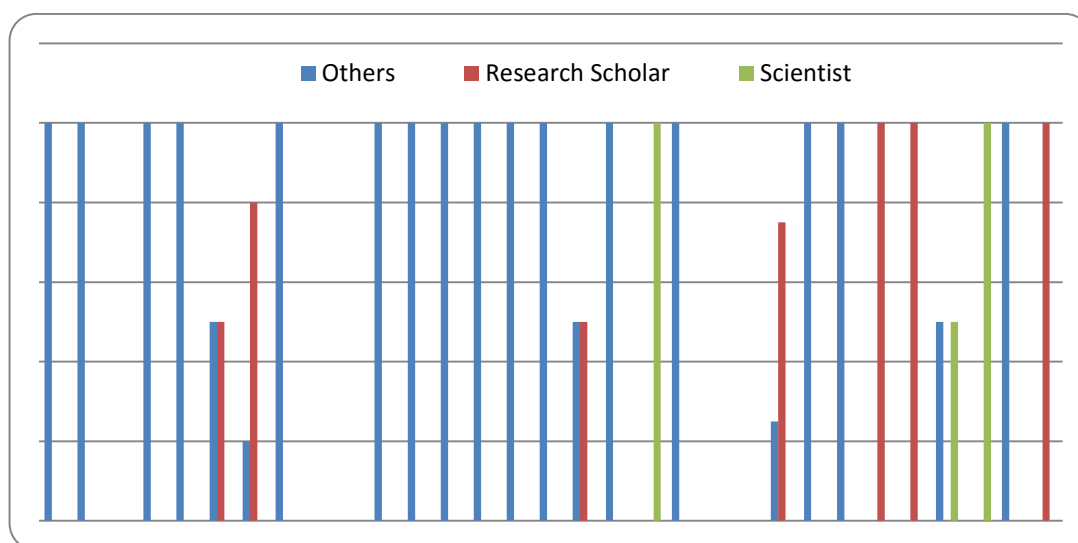
6.28   Library Use

Table- 30 stated that the entire respondent from all special libraries used the library. That is 100% of respondent uses the libraries.

Table- 30: Library Use

Table 30 Library use			
Libraries	Yes	No	Total
ALA Library	4	0	4
	100.0%	0.0%	100.0%
ACA Library	3	0	3
	100.0%	0.0%	100.0%
Judges' Library	4	0	4
	100.0%	0.0%	100.0%
KRC (IASST)	7	0	7
	100.0%	0.0%	100.0%
NIRDP Library	4	0	4
	100.0%	0.0%	100.0%
TISS Library	3	0	3
	100.0%	0.0%	100.0%
IIBM Library	5	0	5
	100.0%	0.0%	100.0%
NIPCCD RCG Library	4	0	4
	100.0%	0.0%	100.0%
IIE Library	4	0	4
	100.0%	0.0%	100.0%
DHAS Library	5	0	5
	100.0%	0.0%	100.0%
ASTEC/AEDA	3	0	3
	100.0%	0.0%	100.0%
CIPET Digital Library	5	0	5
	100.0%	0.0%	100.0%

PLASMA Physics Library	4	0	4
	100.0%	0.0%	100.0%
AIR ST & SC Library	3	0	3
	100.0%	0.0%	100.0%
RFRI Library	4	0	4
	100.0%	0.0%	100.0%
KRC (NEIST)	6	0	6
	100.0%	0.0%	100.0%
TTRC Library	2	0	2
	100.0%	0.0%	100.0%
Total	70	0	70
	100.0%	0.0%	100.0%

6.29   Purpose of visit to the libraries

Table- 31 (a) and fig: 27 stated that in ALA library users visit the library for the purpose of updating knowledge as first, to consult reference document as second and to borrow and return the document as third priority; in ACA library users visit the library for the purpose of to borrow and return the document as first priority, in Judges' library users visit the library for the purpose of updating knowledge as first priority, in KRC (IASST) library users visit the library for the purpose of to borrow and return the document and updating knowledge as first priority, in NIRDP library mainly user uses the library to borrow and return the document, in TISS library for updating knowledge, in IIBM library to borrow and return the document, in NIPCCD RCG library for updating knowledge as first priority, in IIE library to borrow and return the document, in DHAS library to borrow and return the document, in ASTEC/AEDA library to consult reference document, in CIPET Digital library to borrow and return the document, in PLASMA Physics library updating knowledge, in AIR ST & SC library to consult reference document, in RFRI library to consult reference document, in KRC (NEIST) library to borrow and return the document and in TTRC library to borrow and return the document as first priority to visit the library.

It is found from the study that in case of 'purpose of using the library'- to borrow and return the documents gets first priority, to consult reference documents gets second and updating knowledge gets third priority from the users' of all the libraries.

Table- 31 (b) stated that to borrow and return the document is highest in IIBM library, IIE library, KRC (NEIST) library followed by CIPET Digital library as second position. To consult reference document is found highest in ASTEC/AEDA library followed by RFRI library and TTRC library in second. Updating knowledge is found highest in TISS library followed by Judges' library, NIPCCD RCG library and PLASMA Physics library as second position.

Table- 31: Purpose of visit to the libraries

Table 31: Purpose of visit to the library						
Libraries	Priority	NA	Borrow	Consult	Updating	Total
ALA Library	P1	0	1	1	2	4
	P2	0	1	2	1	4
	P3	0	2	1	1	4
ACA Library	P1	0	2	0	1	3
	P2	0	0	3	0	3
	P3	0	1	0	2	3
Judges' Library	P1	0	0	2	2	4
	P2	0	1	1	2	4
	P3	1	2	1	0	4
KRC (IASST)	P1	0	2	1	4	7
	P2	0	5	1	1	7
	P3	0	0	5	2	7
NIRDP Library	P1	0	3	0	1	4
	P2	0	1	1	2	4
	P3	0	0	3	1	4
TISS Library	P1	0	0	1	2	3
	P2	0	0	2	1	3

	P3	0	3	0	0	3
IIBM Library	P1	0	5	0	0	5
	P2	0	0	5	0	5
	P3	0	0	0	5	5
NIPCCD RCG Library	P1	0	0	2	2	4
	P2	0	1	1	2	4
	P3	0	3	1	0	4
IIE Library	P1	0	4	0	0	4
	P2	0	0	1	3	4
	P3	0	0	3	1	4
DHAS Library	P1	0	3	1	1	5
	P2	0	0	4	1	5
	P3	0	2	0	3	5
ASTEC/AEDA	P1	0	1	2	0	3
	P2	0	0	1	2	3
	P3	0	2	0	1	3
CIPET Digital Library	P1	0	4	0	1	5
	P2	0	1	4	0	5
	P3	0	0	1	4	5
PLASMA Physics Library	P1	0	0	2	2	4
	P2	0	2	0	2	4
	P3	0	2	2	0	4
AIR ST & SC Library	P1	2	1	0	0	3
	P2	0	0	3	0	3
	P3	0	0	0	3	3
RFRI Library	P1	0	1	2	1	4
	P2	0	1	2	1	4
	P3	0	2	0	2	4
KRC (NEIST)	P1	0	6	0	0	6
	P2	0	0	6	0	6
	P3	0	0	0	6	6

TTRC Library	P1	0	1	1	0	2
	P2	0	1	1	0	2
	P3	0	0	0	2	2
Total	P1	2	34	15	19	70
	P2	0	14	38	18	70
	P3	1	19	17	33	70

Table weighted mean score and rank

Table- 31 (a): Purpose of visit to the libraries (Weighted Mean Score and Rank)

Table 31 (a): Purpose of visit to the library (Weighted Mean Score and Rank)				
Libraries	WMSR	Borrow	Consult	Updating
ALA Library	WMS	1.75	2	2.25
	Rank	3	2	1
ACA Library	WMS	2.333	2	1.667
	Rank	1	2	3
Judges' Library	WMS	1	2.25	2.5
	Rank	3	2	1
KRC (IASST)	WMS	2.286	1.429	2.286
	Rank	1	3	1
NIRDP Library	WMS	2.75	1.25	2
	Rank	1	3	2
TISS Library	WMS	1	2.333	2.667
	Rank	3	2	1
IIBM Library	WMS	3	2	1
	Rank	1	2	3
NIPCCD RCG	WMS	1.25	2.25	2.5

Library				
Library	Rank	3	2	1
IIE Library	WMS	3	1.25	1.75
	Rank	1	3	2
DHAS Library	WMS	2.2	2.2	1.6
	Rank	1	1	3
ASTEC/AEDA	WMS	1.667	2.667	1.667
	Rank	2	1	2
CIPET Digital Library	WMS	2.8	1.8	1.4
	Rank	1	2	3
PLASMA Physics Library	WMS	1.5	2	2.5
	Rank	3	2	1
AIR ST & SC Library	WMS	1	2	1
	Rank	2	1	2
RFRI Library	WMS	1.75	2.5	1.75
	Rank	2	1	2
KRC (NEIST)	WMS	3	2	1
	Rank	1	2	3
TTRC Library	WMS	2.5	2.5	1
	Rank	1	1	3
Total	WMS	2.129	1.971	1.8
	Rank	1	2	3

Fig: 27 Purpose of visit to the libraries
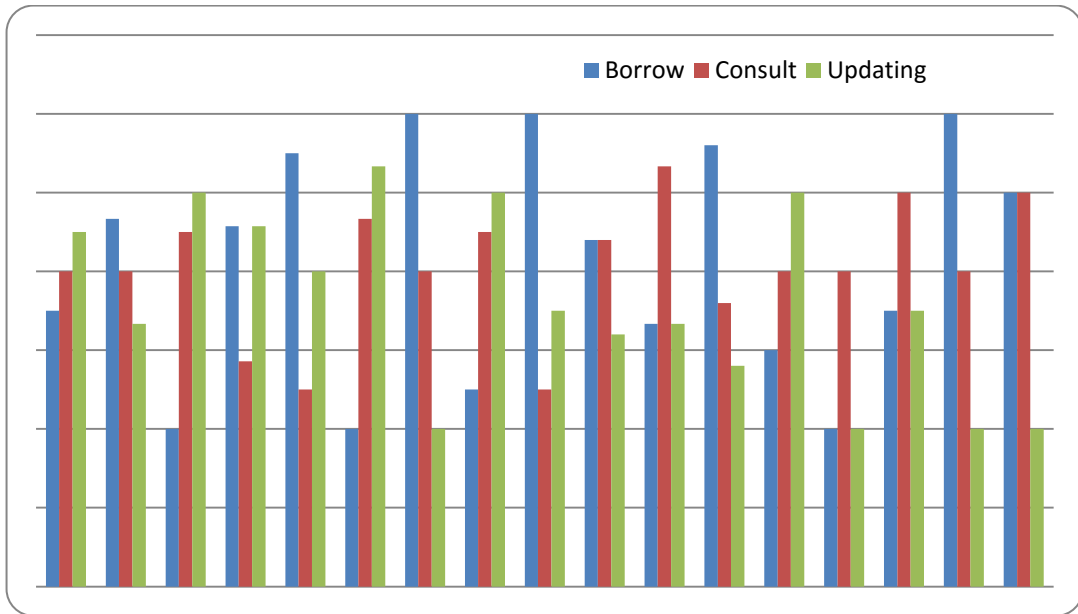
Table- 31 (b): Purpose of visit to libraries

Table 31 (b) Purpose of visit to the library (Weighted Mean Score and Rank)																		
Pur pos e	W MS R	A L A	A C A	Jud ges '	K R C	NI RD P	TI S S	II B M	NIP CC D	II E	D H AS	AS TE C	C I P E T	PLA SMA	A I R S T	R F RI	K R C	TT R C
Bor row	W MS	1. 7 5	2. 33 3	1	2. 28 6	2.7 5	1	3	1.25	3	2.2	1.6 67	2. 8	1.5	1	1. 75	3	2.5
	Ra nk	1 0	7	15	8	5	15	1	14	1	9	12	4	13	1 5	10	1	6
Con sult	W MS	2	2	2.2 5	1. 42 9	1.2 5	2. 33 3	2	2.25	1 . 2 5	2.2	2.6 67	1. 8	2	2	2. 5	2	2.5

	Rank	8	8	5	15	16	4	8	5	16	7	1	14	8	8	2	8	2
Updating	WMS	2.25	1.667	2.5	2.286	2	2.667	1	2.5	1.75	1.6	1.667	1.4	2.5		1	1.75	1	1
	Rank	6	10	2	5	7	1	14	2	8	12	10	13	2		14	8	14	14

6.30   Satisfaction with infrastructure facilities

Table- 32 and fig: 28 shows that in ALA library, Judges' library, KRC (IASST) library, NIRDP library, IIBM library, NIPCCD RCG library, IIE library, CIPET Digital library, PLASMA Physics library, AIR ST & SC library, RFRI library, KRC (NEIST) library and TTRC library users satisfaction with infrastructure facilities as Yes in 100%. Whether in ACA library and TISS library 66.7% users answered as Yes and 33.3% users answered as not satisfy with infrastructure facilities. DHAS library users answered as Yes in 60% and No in 40% and in ASTEC/AEDA library100% users not satisfied with infrastructure facilities.

So, it is found from the study that 90% users are satisfied and 10% users are not satisfied with the infrastructure facilities in all the selected libraries.

Table- 32: Satisfaction with infrastructure facilities

Table 32 Satisfaction with Infrastructure facilities			
Libraries	Yes	No	Total
ALA Library	4	0	4
	100.0%	0.0%	100.0%
ACA Library	2	1	3
	66.7%	33.3%	100.0%
Judges' Library	4	0	4
	100.0%	0.0%	100.0%
KRC (IASST)	7	0	7
	100.0%	0.0%	100.0%
NIRDP Library	4	0	4
	100.0%	0.0%	100.0%
TISS Library	2	1	3
	66.7%	33.3%	100.0%
IIBM Library	5	0	5
	100.0%	0.0%	100.0%
NIPCCD RCG Library	4	0	4
	100.0%	0.0%	100.0%
IIE Library	4	0	4
	100.0%	0.0%	100.0%
DHAS Library	3	2	5
	60.0%	40.0%	100.0%
ASTEC/AEDA	0	3	3
	0.0%	100.0%	100.0%
CIPET Digital	5	0	5

Library	100.0%	0.0%	100.0%
PLASMA Physics Library	4	0	4
	100.0%	0.0%	100.0%
AIR ST & SC Library	3	0	3
	100.0%	0.0%	100.0%
RFRI Library	4	0	4
	100.0%	0.0%	100.0%
KRC (NEIST)	6	0	6
	100.0%	0.0%	100.0%
TTRC Library	2	0	2
	100.0%	0.0%	100.0%
Total	63	7	70
	90.0%	10.0%	100.0%

Fig: 28 Satisfaction with infrastructure facilities
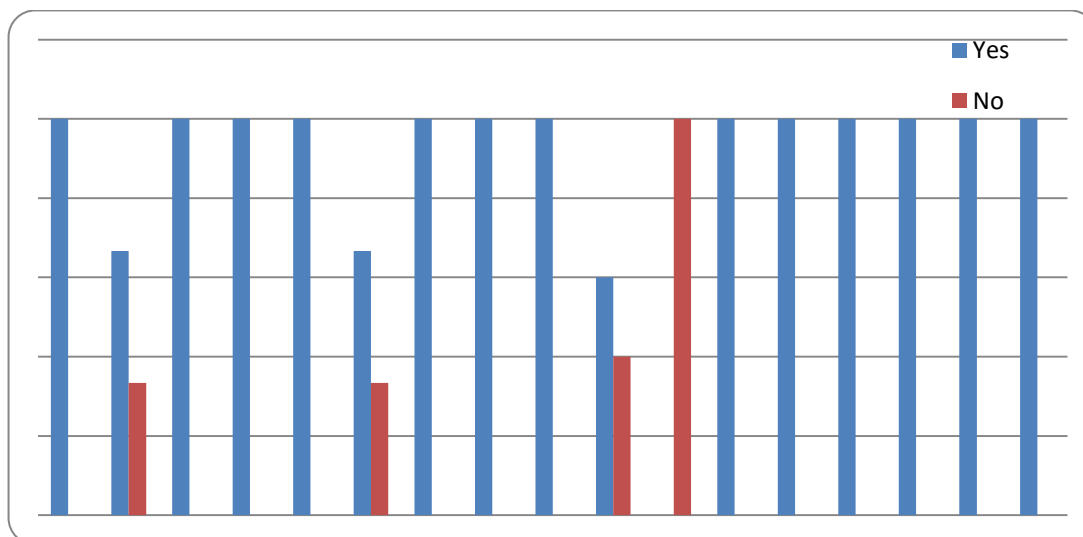
6.31   Provision of Reading Room

Table- 33 and fig: 29 stated that in ALA library, ACA library, Judges' library, KRC (IASST) library, NIRDP library, TISS library, IIBM library, NIPCCD RCG library, IIE library, DHAS library, CIPET Digital library, PLASMA Physics library, AIR ST & SC library, RFRI library, KRC (NEIST) library and TTRC library 100% users answered that the libraries are providing separate reading room facility. The entire ASTEC/AEDA library user answered that they are not having any kind of separate reading room facility.

Table-33: Provision of separate reading room

Table 33 Provision of separate reading room			
Libraries	Yes	No	Total
ALA Library	4	0	4
	100.0%	0.0%	100.0%
ACA Library	3	0	3
	100.0%	0.0%	100.0%
Judges' Library	4	0	4
	100.0%	0.0%	100.0%
KRC (IASST)	7	0	7
	100.0%	0.0%	100.0%
NIRDP Library	4	0	4
	100.0%	0.0%	100.0%
TISS Library	3	0	3
	100.0%	0.0%	100.0%

IIBM Library	5	0	5
	100.0%	0.0%	100.0%
NIPCCD RCG Library	4	0	4
	100.0%	0.0%	100.0%
IIE Library	4	0	4
	100.0%	0.0%	100.0%
DHAS Library	5	0	5
	100.0%	0.0%	100.0%
ASTEC/AEDA	0	3	3
	0.0%	100.0%	100.0%
CIPET Digital Library	5	0	5
	100.0%	0.0%	100.0%
PLASMA Physics Library	4	0	4
	100.0%	0.0%	100.0%
AIR ST & SC Library	3	0	3
	100.0%	0.0%	100.0%
RFRI Library	4	0	4
	100.0%	0.0%	100.0%
KRC (NEIST)	6	0	6
	100.0%	0.0%	100.0%
TTRC Library	2	0	2
	100.0%	0.0%	100.0%

Total	67	3	70
	95.7%	4.3%	100.0%

Fig: 29 Provision of Reading Room
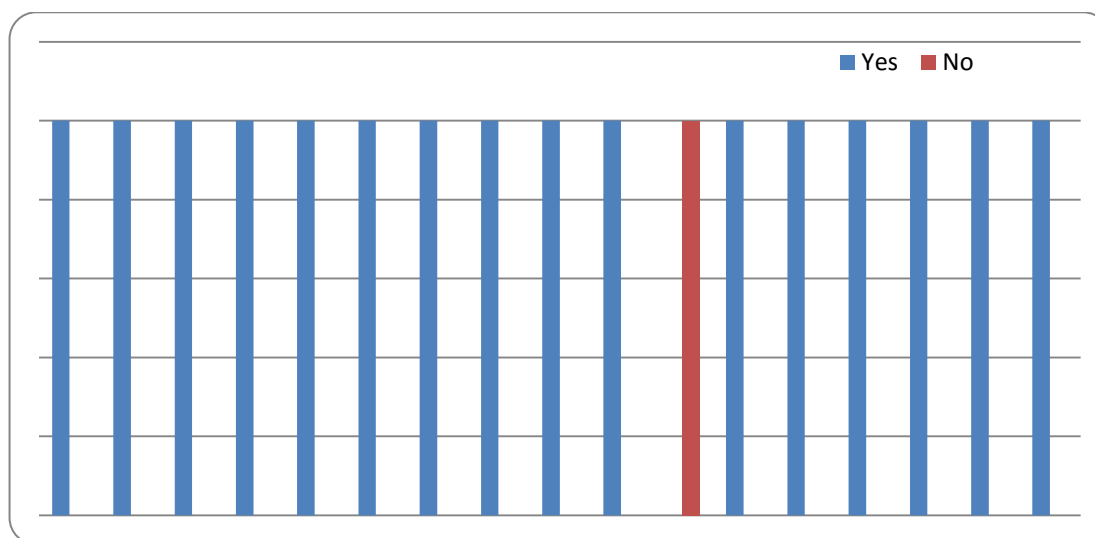
6.32   Satisfaction with reading room facilities

Table- 34 (a) and fig: 30 stated satisfaction with regarding room facilities that in ALA library and CIPET Digital library user voted highest for adequacy of lights. In ACA library, NIPCCD RCG library, PLASMA Physics library, KRC (NEIST) library and TTRC library user voted highest for adequacy of lights and overall serenity of atmosphere. In Judges' library, KRC (IASST) library, NIRDP library, TISS library, AIR ST & SC library and RFRI library user voted highest for overall serenity of atmosphere. IIBM library user voted equally to all the facilities. In IIE library user voted highest for adequacy of lights and with present library hours. In DHAS library and ASTEC/AEDA library user voted highest for availability of books on the spot for reading.

It is found from the study that user's satisfaction to reading room facilities is highest with the adequacy of lights and overall serenity of atmosphere as first position

followed by present library hours as second and availability of books on the spot for reading as third position in all the libraries.

Table- 34 (b) and fig: 30 stated that user's satisfaction to reading room facilities as adequacy of lights is highest in IIE library, CIPET Digital library, PLASMA Physics library, KRC (NEIST) library and TTRC library. Regarding overall serenity of atmosphere is highest in Judges' library, NIRDP library, TISS library, PLASMA Physics library, AIR ST & SC library, RFRI library, KRC (NEIST) library and TTRC library. Regarding present library hours is highest in IIE library. In case of availability of books for on the spot reading is highest in ASTEC/AEDA library. Regarding cubicle desk facility is highest in IIBM library.

Table- 34: Satisfaction with reading room facilities

Table 34 Satisfaction with reading room facilities								
Libraries	Priority	NA	Adequacy of light	Overall atmosphere	Library hours	Spot reading	Cubicle desk	Total
ALA Library	P1	0	3	1	0	0	0	4
	P2	0	0	2	2	0	0	4
	P3	0	1	0	2	1	0	4
ACA Library	P1	0	2	0	1	0	0	3
	P2	0	0	2	0	1	0	3
	P3	0	0	0	1	1	1	3
Judges' Library	P1	0	2	2	0	0	0	4
	P2	0	1	2	1	0	0	4
	P3	0	0	0	1	3	0	4
KRC (IASST)	P1	0	4	1	1	1	0	7
	P2	0	0	4	1	0	2	7
	P3	0	2	0	3	0	2	7
NIRDP	P1	0	2	2	0	0	0	4

Library								
Library	P2	0	1	2	1	0	0	4
	P3	0	0	0	1	3	0	4
TISS Library	P1	0	1	2	0	0	0	3
	P2	0	1	1	0	0	1	3
	P3	0	1	0	2	0	0	3
IIBM Library	P1	0	1	1	1	1	1	5
	P2	0	1	1	1	1	1	5
	P3	0	1	1	1	1	1	5
NIPCCD RCG Library	P1	1	3	0	0	0	0	4
	P2	1	0	3	0	0	0	4
	P3	1	0	0	1	2	0	4
IIE Library	P1	0	4	0	0	0	0	4
	P2	0	0	0	4	0	0	4
	P3	0	0	0	0	4	0	4
DHAS Library	P1	0	1	1	2	1	0	5
	P2	0	0	2	0	2	1	5
	P3	0	1	0	2	1	1	5
ASTEC/AEDA	P1	0	0	0	1	2	0	3
	P2	1	0	0	0	1	1	3
	P3	1	1	0	0	0	1	3
CIPET Digital Library	P1	0	5	0	0	0	0	5
	P2	0	0	3	1	1	0	5
	P3	1	0	0	0	4	0	5
PLASMA Physics Library	P1	0	4	0	0	0	0	4
	P2	0	0	4	0	0	0	4
	P3	0	0	0	4	0	0	4
AIR ST & SC Library	P1	0	2	1	0	0	0	3
	P2	0	0	2	1	0	0	3

	P3	0	0	0	2	1	0	3
RFRI Library	P1	0	3	1	0	0	0	4
	P2	1	0	3	0	0	0	4
	P3	2	0	0	1	1	0	4
KRC (NEIST)	P1	0	6	0	0	0	0	6
	P2	0	0	6	0	0	0	6
	P3	0	0	0	6	0	0	6
TTRC Library	P1	0	2	0	0	0	0	2
	P2	0	0	2	0	0	0	2
	P3	0	0	0	2	0	0	2
Total	P1	1	45	12	6	5	1	70
	P2	3	4	39	12	6	6	70
	P3	5	7	1	29	22	6	70

Table Weighted Mean Score and Rank

Table- 34(a): Satisfaction with reading room facilities

Table 34 (a) Satisfaction with reading room facilities (Weighted Mean Score and Rank)						
Libraries	WMSR	Adequacy of light	Overall atmosphere	Library hours	Spot reading	Cubicle desk
ALA Library	WMS	2.5	2.25	2	0.25	0
	Rank	1	2	3	4	5
ACA Library	WMS	2	2	1.333	1.333	0.333
	Rank	1	1	3	3	5
Judges' Library	WMS	2.25	3	1	0.75	0
	Rank	2	1	3	4	5
KRC (IASST)	WMS	2	2.143	1.286	0.429	1.143
	Rank	2	1	3	5	4
NIRDP Library	WMS	2.25	3	1	0.75	0
	Rank	2	1	3	4	5
TISS Library	WMS	2.333	3	0.667	0	1
	Rank	2	1	4	5	3
IIBM Library	WMS	1.4	1.4	1.4	1.4	1.4
	Rank	1	1	1	1	1
NIPCCD RCG Library	WMS	2.25	2.25	0.25	0.5	0
	Rank	1	1	4	3	5
IIE Library	WMS	3	0	3	1	0
	Rank	1	4	1	3	4
DHAS Library	WMS	0.8	1.8	1.6	2	0.8

	Rank	4	2	3	1	4
ASTEC/AEDA	WMS	0.333	0	1	3	1.333
	Rank	4	5	3	1	2
CIPET Digital Library	WMS	3	1.8	0.6	1.4	0
	Rank	1	2	4	3	5
PLASMA Physics Library	WMS	3	3	1	0	0
	Rank	1	1	3	4	4
AIR ST & SC Library	WMS	2	3	1.667	0.333	0
	Rank	2	1	3	4	5
RFRI Library	WMS	2.25	3	0.25	0.25	0
	Rank	2	1	3	3	5
KRC (NEIST)	WMS	3	3	1	0	0
	Rank	1	1	3	4	4
TTRC Library	WMS	3	3	1	0	0
	Rank	1	1	3	4	4
Total	WMS	2.2	2.2	1.186	0.786	0.386
	Rank	1	1	3	4	5

Fig: 30 Satisfaction with reading room facilities
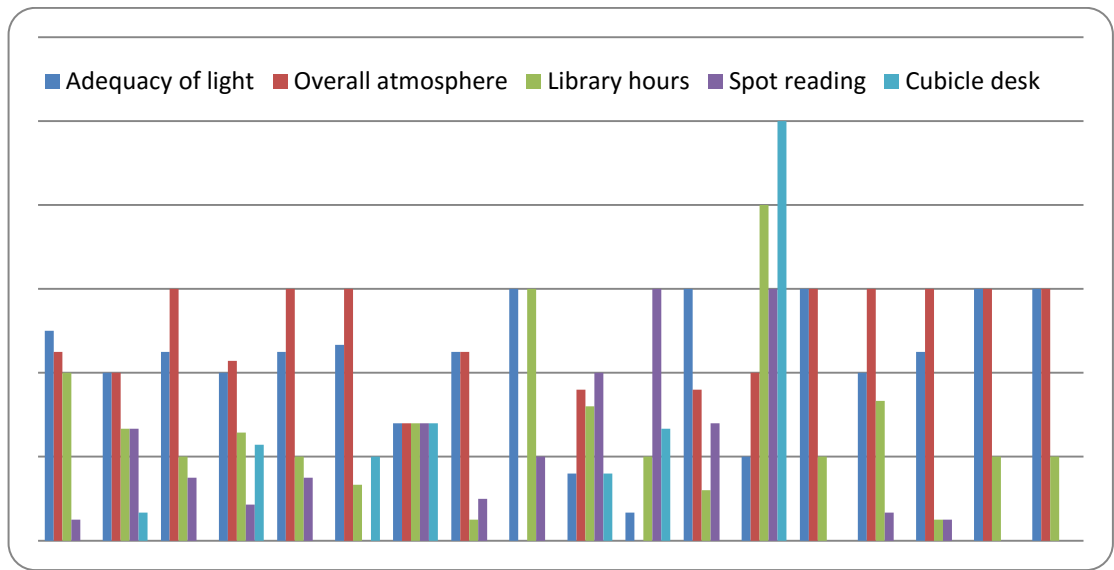
Table- 34 (b): Satisfaction with reading room facilities

Table 33 (b) Satisfaction with reading room facilities (Weighted Mean Score and Rank)

Satisfaction	WMSR	ALA Library	ACA Library	Judges' Library	KRC (IASST)	NIRDP Library	TISS Library	HBM Library	NIP CCD RCG Library	IIE Library	DH AS Library	ASTEC/AEDA	CIPET Digital Library	PLASMA Physics Library	AIR ST & SC Library	RFRI Library	KRC (NEIST)	TTRC Library
Adequacy of light	WMS	2.5	2	2.3	2	2.3	2.3	1.4	2	3	0.8	0.3	3	3	2	2	3	3
	Rank	6	12	8	12	8	7	15	8	1	16	17	1	1	12	8	1	1
Overall atmosphere	WMS	2.3	2	3	2	3	3	1.4	2	0	1.8	0	1.8	3	3	3	3	3
	Rank	9	12	1	11	1	1	15	9	16	13	16	13	1	1	1	1	1
Library hours	WMS	2	1.33	1	1	1	0.7	1.4	0	3	1.6	1	0.6	1	1.7	0	1	1
	Rank	2	6	8	7	8	14	5	16	1	4	8	15	8	3	16	8	8
Spot reading	WMS	0.3	1.33	0.8	0	0.8	0	1.4	1	0	2	3	1.4	0	0.3	0	0	0
	Rank	12	5	7	10	7	14	3	9	6	2	1	3	14	11	12	14	14
Cubicle desk	WMS	0	0.33	0	1	0	1	1.4	0	0	0.8	13	0	0	0	0	0	0
	Rank	7	6	7	3	7	4	1	7	7	5	2	7	7	7	7	7	7

6.33 Satisfaction with number of reader's card

Table- 35 and fig: 31 stated that in ALA library and NIRDP library user's satisfaction with number of reader's card as Yes in 50% and No in 25%, ACA library user answered as 33.3% Yes and 33.3% No. Judges' library and TTRC library all the users are not satisfied, KRC (IASST) library 57.1% satisfied, TISS library 66.7% satisfied, IIBM library, ASTEC/AEDA library, PLASMA Physics library, AIR ST & SC library and KRC (NEIST) library all the users satisfied, NIPCCD RCG library 75% satisfied, IIE library 75% not satisfied, DHAS library 40% satisfied 20% not satisfied, CIPET Digital library 60% users are satisfied and RFRI library 50% users are satisfied.

It is found from the study that 60% users are satisfied and 18.6% users are not satisfied with the number of reader's card facility in the libraries.

Table- 35: Satisfaction with the number of reader's card

Table 35 Satisfaction with the number of reader's card				
Libraries	NA	Yes	No	Total
ALA Library	1	2	1	4
	25.0%	50.0%	25.0%	100.0%
ACA Library	1	1	1	3
	33.3%	33.3%	33.3%	100.0%
Judges' Library	0	0	4	4
	0.0%	0.0%	100.0%	100.0%
KRC (IASST)	3	4	0	7
	42.9%	57.1%	0.0%	100.0%
NIRDP Library	1	2	1	4
	25.0%	50.0%	25.0%	100.0%
TISS Library	1	2	0	3
	33.3%	66.7%	0.0%	100.0%
IIBM Library	0	5	0	5

	0.0%	100.0%	0.0%	100.0%
NIPCCD RCG Library	1	3	0	4
	25.0%	75.0%	0.0%	100.0%
IIE Library	1	0	3	4
	25.0%	0.0%	75.0%	100.0%
DHAS Library	2	2	1	5
	40.0%	40.0%	20.0%	100.0%
ASTEC/AEDA	0	3	0	3
	0.0%	100.0%	0.0%	100.0%
CIPET Digital Library	2	3	0	5
	40.0%	60.0%	0.0%	100.0%
PLASMA Physics Library	0	4	0	4
	0.0%	100.0%	0.0%	100.0%
AIR ST & SC Library	0	3	0	3
	0.0%	100.0%	0.0%	100.0%
RFRI Library	2	2	0	4
	50.0%	50.0%	0.0%	100.0%
KRC (NEIST)	0	6	0	6
	0.0%	100.0%	0.0%	100.0%
TTRC Library	0	0	2	2
	0.0%	0.0%	100.0%	100.0%
Total	15	42	13	70
	21.4%	60.0%	18.6%	100.0%

Fig: 31 Satisfaction with number of reader's card
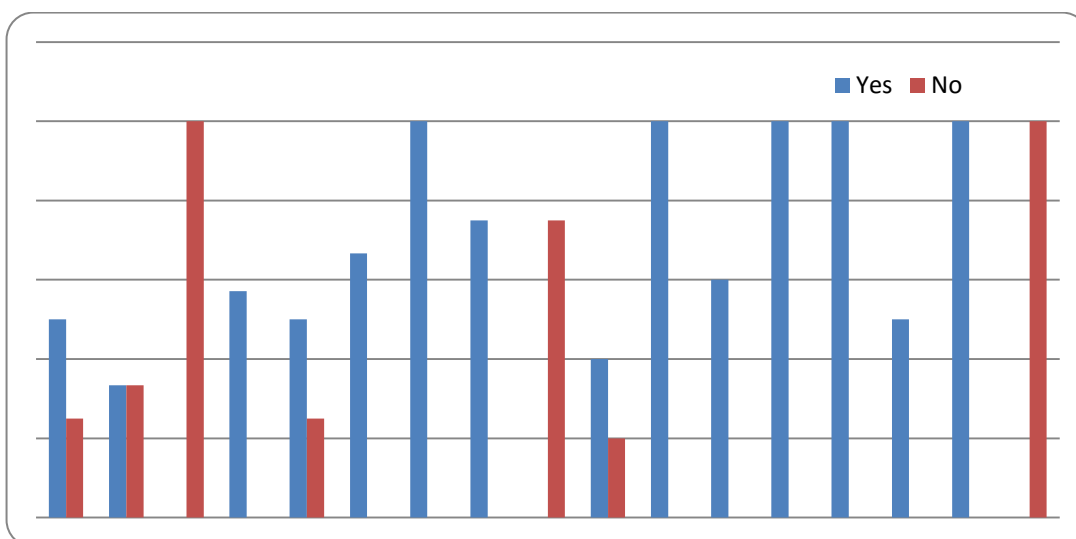
6.34   Access to library materials

Table- 36 and fig: 32 stated that in ALA library 50% users uses card catalogue, in KRC (IASST) library14.3% users uses card catalogue and 28.6% user uses both, NIRDP library 25% user uses OPAC, TISS library 33.3% user uses card catalogue and 33.3% user uses both. In IIBM library, PLASMA Physics library, AIR ST & SC library and KRC (NEIST) library all the user uses card catalogue. In DHAS library 40% user uses card catalogue, ASTEC/AEDA library 66.7% uses card catalogue and 33.3% uses OPAC, CIPET Digital library60% user uses card catalogue. RFRI library 50% uses card catalogue and 25% uses OPAC to access the library materials.

It is found from the study that 47.1% user uses the card catalogue, 4.3% user uses OPAC, 4.3% user uses both card catalogue and OPAC and 8.6% users do not use any accessible techniques to access the library materials in all the libraries.

Table- 36: Access to library materials

Table 36 Access to library materials						
Libraries	NA	Card catalog	OPAC	Both	Do not use any	Total
ALA Library	2	2	0	0	0	4
	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
ACA Library	3	0	0	0	0	3
	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Judges' Library	4	0	0	0	0	4
	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
KRC (IASST)	3	1	0	2	1	7
	42.9%	14.3%	0.0%	28.6%	14.3%	100.0%
NIRDP Library	3	0	1	0	0	4
	75.0%	0.0%	25.0%	0.0%	0.0%	100.0%
TISS Library	1	1	0	1	0	3
	33.3%	33.3%	0.0%	33.3%	0.0%	100.0%
IIBM Library	0	5	0	0	0	5
	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
NIPCCD RCG Library	2	2	0	0	0	4
	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%

IIE Library	1	0	0	0	3	4
	25.0%	0.0%	0.0%	0.0%	75.0%	100.0%
DHAS Library	3	2	0	0	0	5
	60.0%	40.0%	0.0%	0.0%	0.0%	100.0%
ASTEC/AEDA	0	2	1	0	0	3
	0.0%	66.7%	33.3%	0.0%	0.0%	100.0%
CIPET Digital Library	2	3	0	0	0	5
	40.0%	60.0%	0.0%	0.0%	0.0%	100.0%
PLASMA Physics Library	0	4	0	0	0	4
	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
AIR ST & SC Library	0	3	0	0	0	3
	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
RFRI Library	1	2	1	0	0	4
	25.0%	50.0%	25.0%	0.0%	0.0%	100.0%
KRC (NEIST)	0	6	0	0	0	6
	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
TTRC Library	0	0	0	0	2	2
	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	25	33	3	3	6	70
	35.7%	47.1%	4.3%	4.3%	8.6%	100.0%

Fig: 32 Access to library materials
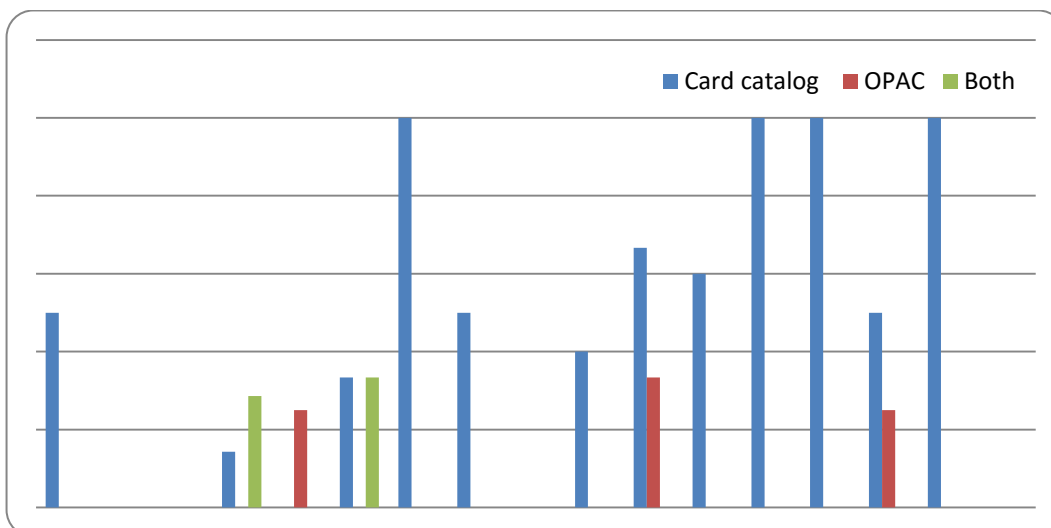
6.35 Library material format users preferred most

Table- 37 and fig: 33 stated that in ALA library users preferred to use paper form is 50% and both paper and electronic form is 50%, ACA library user preferred to use paper form is 33.3% and both paper and electronic form is 66.7%, Judges' library 75% user uses the paper format, KRC (IASST) library user uses paper form is 42.9%, electronic is 14.3%, and 42.9% uses both. NIRDP library user use paper form is 75% and electronic is 25%. In TISS library, DHAS library, CIPET Digital library, RFRI library and TTRC library all the user preferred to use paper format. In IIBM library 20% user uses paper format and 80% user uses both. In NIPCCD RCG library 50% user use paper and 25% user use electronic format. In IIE library 50% user uses paper and 50% user uses both the format. In ASTEC/AEDA library user voted equqlly 33.3% to each paper and electronic format. In PLASMA physics library 75% user uses paper format and 25% user uses both format. In KRC (NEIST) library user voted equqlly 33.3% to each paper and electronic format.

It is found from the study that 60% user prefered to use paper format by aquiring first priority followed by both paper and electronic format in 25.7% by aquiring second priority and electronic format in 11.4% by aquiring third priority in all the libraries.

Table-37: Format of library collection prefer to use most

Libraries	NA	Paper form	Electronic form	Paper and Electronic both	Total
Table 37 Format of library collection prefer to use most					
ALA Library	0	2	0	2	4
	0.0%	50.0%	0.0%	50.0%	100.0%
ACA Library	0	1	0	2	3
	0.0%	33.3%	0.0%	66.7%	100.0%
Judges' Library	1	3	0	0	4
	25.0%	75.0%	0.0%	0.0%	100.0%
KRC (IASST)	0	3	1	3	7
	0.0%	42.9%	14.3%	42.9%	100.0%
NIRDP Library	0	3	1	0	4
	0.0%	75.0%	25.0%	0.0%	100.0%
TISS Library	0	3	0	0	3
	0.0%	100.0%	0.0%	0.0%	100.0%
IIBM Library	0	1	0	4	5
	0.0%	20.0%	0.0%	80.0%	100.0%
NIPCCD RCG Library	1	2	1	0	4
	25.0%	50.0%	25.0%	0.0%	100.0%
IIE Library	0	2	0	2	4
	0.0%	50.0%	0.0%	50.0%	100.0%
DHAS Library	0	5	0	0	5
	0.0%	100.0%	0.0%	0.0%	100.0%
ASTEC/AEDA	0	1	1	1	3

	0.0%	33.3%	33.3%	33.3%	100.0%
CIPET Digital Library	0	5	0	0	5
	0.0%	100.0%	0.0%	0.0%	100.0%
PLASMA Physics Library	0	3	0	1	4
	0.0%	75.0%	0.0%	25.0%	100.0%
AIR ST & SC Library	0	0	2	1	3
	0.0%	0.0%	66.7%	33.3%	100.0%
RFRI Library	0	4	0	0	4
	0.0%	100.0%	0.0%	0.0%	100.0%
KRC (NEIST)	0	2	2	2	6
	0.0%	33.3%	33.3%	33.3%	100.0%
TTRC Library	0	2	0	0	2
	0.0%	100.0%	0.0%	0.0%	100.0%
Total	2	42	8	18	70
	2.9%	60.0%	11.4%	25.7%	100.0%

Fig: 33 Format of library collection prefer to use most
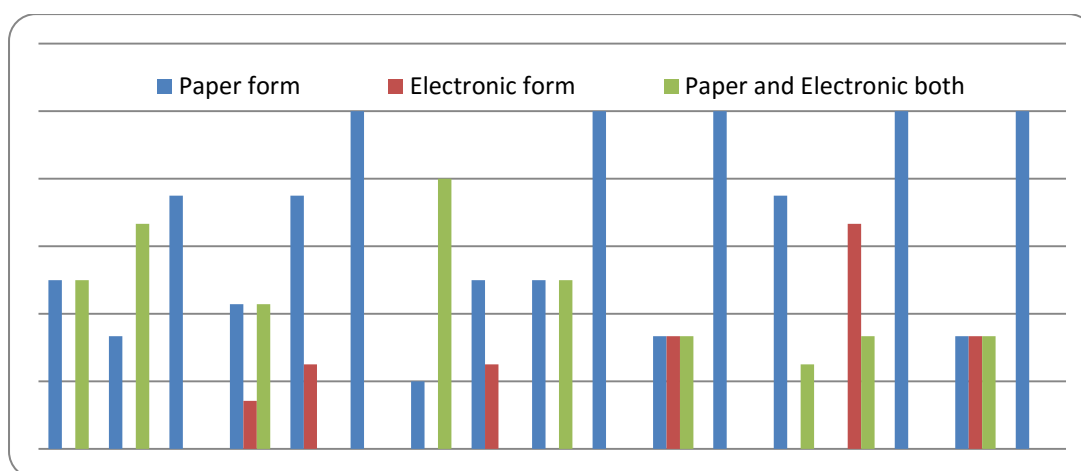
6.36   Users take part in building up library collection

Table- 38 and fig: 34 stated that in ALA library and TISS library users do not take part in building up the library collection. NIRDP library, ASTEC/AEDA library and PLASMA Physics library all the users take part in building up library collection. ACA library the ratio of Yes and No is 33.3%:66.7%, in Judges' library and TTRC library the ratio of Yes and No is 50%:50%, in KRC (IASST) library the ratio of Yes and No is 14.3%:85.7%, in IIBM library and DHAS library the ratio of Yes and No is 60%:40%, in NIPCCD RCG library, RFRI library and IIE library the ratio of Yes and No is 25%:75%, in CIPET Digital library the ratio of Yes and No is 40%:60%, in KRC (NEIST) library the ratio of Yes and No is 66.7%:33.3%.

It is found from the study that 44.3% users from all the libraries take part in building up the library collections and 51.4% users do not take part.

Table- 38: Users' taking part in building library collection

Table 38 User taking part in building library collection			
Libraries	NA	Yes	No	Total
ALA Library	0	0	4	4
	0.0%	0.0%	100.0%	100.0%
ACA Library	0	1	2	3
	0.0%	33.3%	66.7%	100.0%
Judges' Library	0	2	2	4
	0.0%	50.0%	50.0%	100.0%
KRC (IASST)	0	1	6	7
	0.0%	14.3%	85.7%	100.0%
NIRDP Library	0	4	0	4

	0.0%	100.0%	0.0%	100.0%
TISS Library	0	0	3	3
	0.0%	0.0%	100.0%	100.0%
IIBM Library	0	3	2	5
	0.0%	60.0%	40.0%	100.0%
NIPCCD RCG Library	0	1	3	4
	0.0%	25.0%	75.0%	100.0%
IIE Library	0	1	3	4
	0.0%	25.0%	75.0%	100.0%
DHAS Library	0	3	2	5
	0.0%	60.0%	40.0%	100.0%
ASTEC/AEDA	0	3	0	3
	0.0%	100.0%	0.0%	100.0%
CIPET Digital Library	0	2	3	5
	0.0%	40.0%	60.0%	100.0%
PLASMA Physics Library	0	4	0	4
	0.0%	100.0%	0.0%	100.0%
AIR ST & SC Library	3	0	0	3
	100.0%	0.0%	0.0%	100.0%
RFRI Library	0	1	3	4
	0.0%	25.0%	75.0%	100.0%
KRC (NEIST)	0	4	2	6

	0.0%	66.7%	33.3%	100.0%
TTRC Library	0	1	1	2
	0.0%	50.0%	50.0%	100.0%
Total	3	31	36	70
	4.3%	44.3%	51.4%	100.0%

Fig: 34 Users' taking part in building up library collection
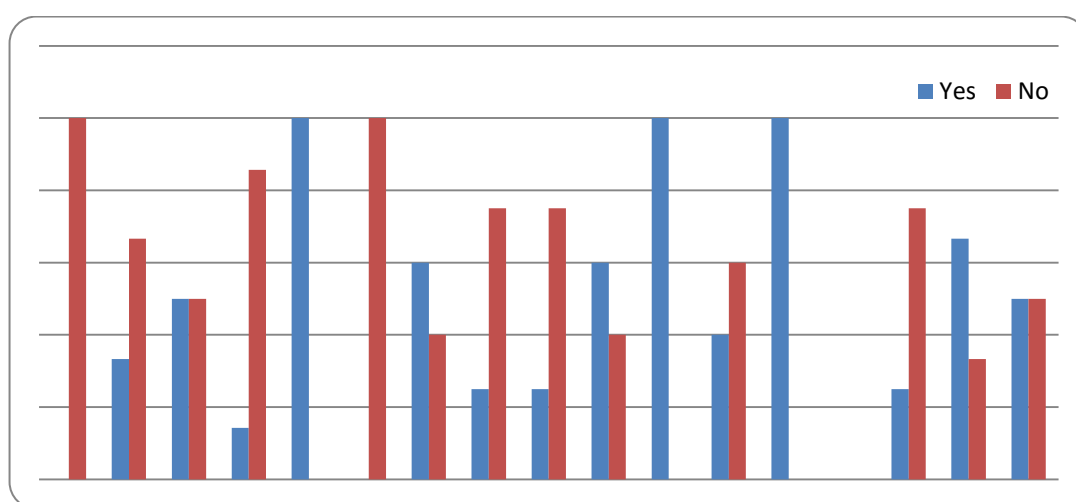
6.37   Users' satisfaction to library collection

Table- 39and fig: 35 stated that in ALA library and ACA library highest user satisfaction voted for current journals, thesis and dissertations. In Judges' library user satisfaction is highest with reference books, in KRC (IASST) library user satisfaction is highest with thesis and dissertations, in NIRDP library user satisfaction is highest with abstracting /indexing databases, in TISS library highest user satisfaction voted for printed books, e-books, e-journals, back volume journals, conference proceedings, govt. publications, research monographs, thesis and dissertations, non-book materials and abstracting /indexing databases. In IIBM library highest user satisfaction voted for printed books and research reports, in NIPCCD RCG library highest user satisfaction

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voted for current journals, in IIE library highest user satisfaction voted for back volume journals, in DHAS library highest user satisfaction voted for research reports and thesis and dissertations, in ASTEC/AEDA library highest user satisfaction voted for e-books and back volume journals, in CIPET Digital library highest user satisfaction voted for e-books, e-journals, thesis and dissertations and abstracting /indexing databases, in PLASMA Physics library highest user satisfaction goes to e-journals and abstracting /indexing databases, in AIR ST & SC library highest user satisfaction goes to research reports and conference proceedings, in RFRI library highest user satisfaction goes to e-books and patent and standards, in KRC (NEIST) library highest user satisfaction goes to printed books and e-books, in TTRC library highest user satisfaction voted for e-books, current journals, back volume journals, and conference proceedings.

It is found from the study that highest user satisfaction goes to thesis and dissertations by acquiring 3.11%followed by e-books as second by acquiring 3.07% and current journals as third by acquiring 3.06% in all the libraries.

Table: 39- Users' satisfaction to library collections

Table 39 User Satisfaction to Library Collections

Collections	Satisfaction	ALA	ACA	J (Judges)	KRC(IASST)	NIRDP	TISS	IIBM	NIPCCID	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC	Total
P-BK	v	0	0	1	1	1	0	5	3	1	0	0	1	1	0	1	4	0	19
	g	3	2	1	3	1	1	0	0	2	3	1	2	1	0	3	2	1	26
	s	1	1	2	3	2	1	0	1	1	2	2	2	2	3	0	0	1	24
	p	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
E-BK	v	0	0	2	1	2	0	3	3	2	1	1	1	1	0	2	4	1	24
	g	3	2	1	5	0	1	2	0	1	2	1	3	2	0	2	2	1	28
	s	1	1	1	1	2	1	0	1	1	2	1	1	1	3	0	0	0	17
	p	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
R-BK	v	2	1	3	2	2	0	3	3	1	0	0	1	1	0	0	3	1	23
	g	1	1	1	1	0	0	0	0	1	2	1	1	1	1	4	1	0	16
	s	1	1	0	4	2	2	2	1	2	3	2	3	2	2	0	2	1	30
	p	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
C-JOU	v	2	1	1	2	1	0	3	0	2	1	1	2	0	1	1	3	1	22
	g	2	2	2	4	1	0	2	0	3	2	2	2	3	0	3	3	1	31
	s	0	0	1	0	0	2	0	0	0	0	0	0	1	2	0	0	0	16
	p	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
E-JOU	v	1	1	2	2	2	0	2	3	2	1	0	2	2	1	1	3	0	25

Group	Code																		
	88	23	0	3	3	0	1	1	1	3	1	0	3	1	1	2	0	1	2
	s	21	2	0	0	2	1	2	2	1	1	1	0	1	1	3	2	1	1
	p	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	v	23	1	2	1	1	1	1	1	0	2	2	4	0	1	2	2	0	2
BVJ	88	17	1	2	0	0	1	1	1	2	2	0	0	1	1	1	0	1	1
	s	29	0	1	2	2	2	3	1	3	0	2	1	1	2	4	2	2	1
	p	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	v	25	1	1	2	2	1	1	0	2	0	1	5	0	2	2	2	0	1
RSREP	88	17	0	3	0	0	0	1	1	2	2	0	0	0	0	3	1	1	2
	s	27	1	2	1	2	2	1	2	1	2	3	0	2	2	2	1	2	1
	p	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	v	17	1	1	2	1	0	1	0	0	1	2	3	0	1	0	1	0	1
CNFP	88	21	1	1	0	0	0	1	1	2	2	0	0	1	1	3	2	1	2
	s	31	0	1	1	3	3	2	2	3	1	2	2	1	2	4	1	2	1
	p	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	v	15	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0
GVT PBL	88	20	1	2	0	0	1	1	1	2	2	2	3	1	0	1	1	1	2
	s	34	0	3	2	1	2	2	2	3	2	0	2	1	3	3	3	2	1
	p	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	v	20	1	2	1	0	1	0	1	1	0	3	4	0	1	1	0	0	1
RSMON	88	25	0	4	3	1	2	2	0	3	2	0	1	1	1	3	1	1	1

23	2	24	31	14	1	13	26	30	1	15	26	28	1	17	25	27	1
1	0	0	2	0	0	0	0	2	0	0	1	1	0	0	0	2	0
0	0	3	2	1	0	2	3	1	0	3	2	1	0	2	1	3	0
0	0	1	3	0	0	2	2	0	0	1	2	1	0	1	2	1	0
2	0	1	1	1	0	0	1	2	0	0	2	1	0	0	0	3	0
2	0	1	1	2	0	1	1	2	0	1	1	2	0	1	3	0	0
3	0	1	3	1	0	1	2	2	0	1	2	2	0	1	3	1	0
1	1	0	1	2	0	0	1	2	0	0	0	3	0	0	2	1	0
1	0	1	4	0	0	0	3	2	0	0	3	2	0	1	2	2	0
1	0	2	1	1	0	1	2	1	0	1	1	2	0	1	1	2	0
1	0	2	1	1	0	1	1	2	0	2	0	2	0	2	0	2	0
0	0	3	2	0	0	3	1	1	0	3	1	1	0	3	0	2	0
1	1	0	1	1	1	0	0	2	1	0	1	1	1	0	1	1	1
2	0	2	1	1	0	1	1	2	0	1	2	1	0	3	0	1	0
3	0	3	3	1	0	0	4	3	0	1	3	3	0	1	5	1	0
1	0	1	1	2	0	1	1	2	0	1	1	2	0	1	3	0	0
2	0	1	2	0	0	0	2	1	0	0	2	1	0	0	1	2	0
2	0	2	2	0	0	0	1	3	0	0	2	2	0	0	1	3	0
s	p	v	g	s	p	v	g	s	p	v	g	s	p	v	g	s	p
			THESIS				PAT				Non BK				Abs/Ind		

Table- 39 (a): Users' satisfaction to library collections

Table 39 (a) User Satisfaction to Library Collections (Weighted Mean Score and Rank)														
Libraries	WMSR	P-BK	E-BK	RBK	C-JOU	E-JOU	BVJ	RSREP	CNFP	GVT PBL	RSMON	THESIS	PAT	NonBK	Abs/Ind
ALA	WMS	2.75	2.75	3.3	3.5	3	3.3	3	3	3.3	2.8	3.5	2.3	2.5	2.25
	Rank	9	9	3	1	6	3	6	6	3	9	1	13	12	13
ACA	WMS	2.67	2.67	3	3.3	3	2.3	2.3	2.3	2.3	2.3	3.3	2.7	2.7	2.33
	Rank	5	5	3	1	3	9	9	9	9	9	1	5	5	9
Judges	WMS	2.75	3.25	3.8	3	3	3	3.3	3	2.3	3.3	2.8	2.8	2.8	3.25
	Rank	10	2	1	6	6	6	2	6	14	2	10	10	10	2
KRC(IASST)	WMS	2.71	3	2.7	3.1	2.9	2.7	3	2.4	2.7	2.7	3.3	2.6	2.7	3
	Rank	7	3	7	2	6	7	3	14	7	7	1	13	7	3
NIRDP	WMS	2.75	3	3	2.8	3.3	2.8	3	2.8	2.5	2.8	3.3	2.8	3	3.5
	Rank	8	4	4	8	2	8	4	8	14	8	2	8	4	1
TISS	WMS	2	2	1.7	1.7	2	2	1.7	2	2	2	2	1.7	2	2
	Rank	1	1	11	11	1	1	11	1	1	1	1	11	1	1
IIBM	WMS	4	3.6	3.2	3.6	3.4	3.6	4	3.2	3.2	3.8	3.6	3.4	3.4	3.2
	Rank	1	4	11	4	8	4	1	11	11	3	4	8	8	11
NIPCCD	WMS	3.5	3.5	3.5	4	3.5	3	2.5	3	3	3.5	3.3	2.8	3	3

	Rank	2	2	2	1	2	8	14	8	8	2	7	13	8	8
IIE	WMS	3	3.25	2.8	2.8	3.3	3.5	2.5	3	2.5	3	3.3	3	2.8	2.75
	Rank	5	2	9	9	2	1	13	5	13	5	2	5	9	9
DHAS	WMS	2.6	2.8	2.4	2.8	3	2.4	3.2	2.4	2.4	3	3.2	2.6	2.6	2.8
	Rank	8	5	11	5	3	11	1	11	11	3	1	8	8	5
ASTEC	WMS	2.33	3	2.3	2.3	2.3	3	2.3	2.3	2.3	2.3	2.3	2.3	2	2.67
	Rank	4	1	4	4	4	1	4	4	4	4	4	4	14	3
CIPET	WMS	2.8	3	2.6	2.8	3	2.6	2.6	2.6	2.8	2.4	3	2.8	2.8	3
	Rank	5	1	10	5	1	10	10	10	5	14	1	5	5	1
PLASMA	WMS	2.75	3	2.8	2.8	3.3	2.8	3	2.5	3	2.8	2.8	2.8	2.8	3.25
	Rank	6	3	6	6	1	6	3	14	3	6	6	6	6	1
AIR ST	WMS	2	2	2.3	2.7	2.7	2.7	3.3	3.3	2.3	2.3	3	2.3	2.7	2
	Rank	12	12	8	4	4	4	1	1	8	8	3	8	4	12
RFRI	WMS	3.25	3.5	3	3.3	3.3	3	3.3	2.8	3	3.3	3.3	3.5	3	3
	Rank	3	1	9	3	3	9	3	14	9	3	3	1	9	9
KRC (NEIST)	WMS	3.667	3.667	3.2	3.5	3.5	3	3.2	3.2	2.8	3.3	3.3	3.2	3.3	2.83
	Rank	1	1	8	3	3	12	8	8	13	5	5	8	5	13
TTRC	WMS	2.5	3.5	3	3.5	2	3.5	3	3.5	3	3	3	2	2.5	2
	Rank	10	1	5	1	12	1	5	1	5	5	5	12	10	12

Total	WMS	2.9	3.07	2.9	3.1	3	2.9	2.9	2.8	2.7	2.9	3.1	2.7	2.8	2.83
	Rank	6	2	9	3	4	8	5	12	14	6	1	13	11	10

Fig: 35 Users' satisfaction to library collections
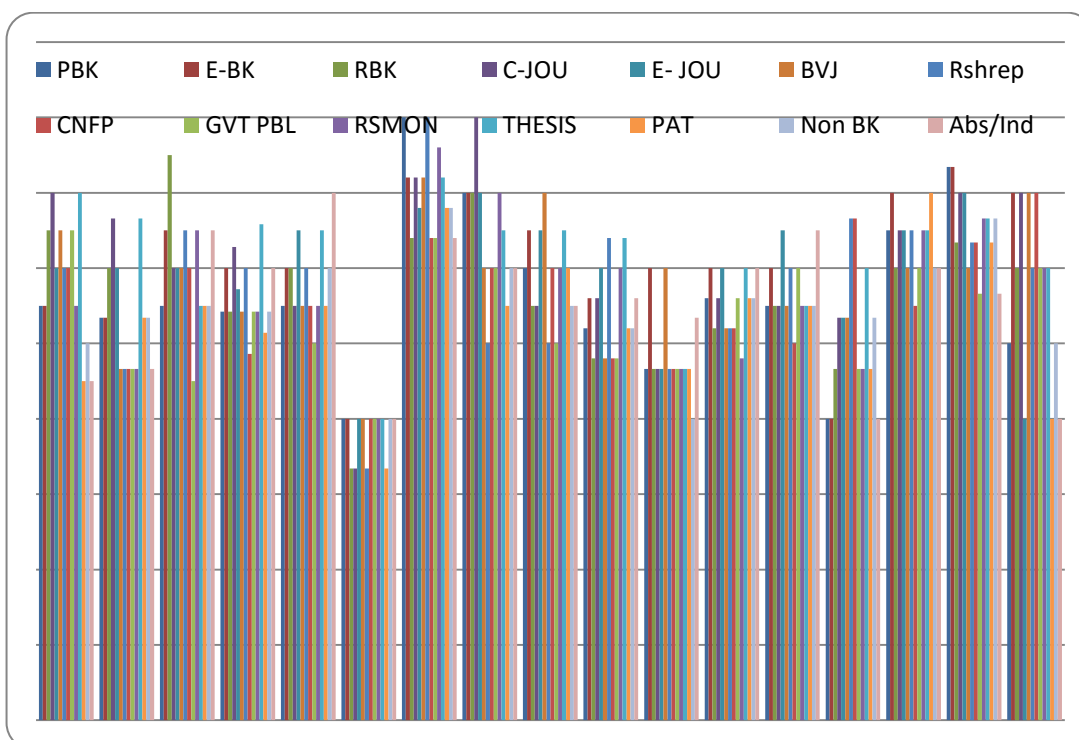
Table- 39 (b) and fig: 35 stated that users' satisfaction with printed books is highest in IIBM library followed by KRC (NEIST) library as second, satisfaction to e-books is highest in KRC (NEIST) library followed by IIBM library as second, user satisfaction with reference books is highest in Judges' library followed by NIPCCD RCG library as second, user satisfaction with current journals is highest in NIPCCD RCG library followed by IIBM library as second, satisfaction to e-journals is highest in NIPCCD RCG library and KRC (NEIST) library followed by IIBM library as second, satisfaction to back volume journals is highest in IIBM library followed by IIE library

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and TTRC library as second, user satisfaction to research reports is highest in IIBM library followed by AIR ST & SC library as second, satisfaction to conference proceedings is highest in TTRC library followed by AIR ST & SC library as second, satisfaction to govt. publications is highest in ALA library followed by IIBM library as second, satisfaction to research monographs is highest in IIBM library followed by NIPCCD RCG library as second, user satisfaction to thesis and dissertations is highest in IIBM library followed by ALA library as second, satisfaction to patent and standards is highest in RFRI library followed by IIBM library as second, satisfaction to non-book materials is highest in IIBM library followed by KRC (NEIST) library as second and user satisfaction to abstracting /indexing databases is highest in NIRDP library followed by Judges' library and PLASMA Physics library as second.

It is found from the study that satisfaction level to overall collection voted highest for IIBM library with 49.2% followed by KRC (NEIST) library with 45.67% as second; NIPCCD RCG library with 45.0% as third and RFRI library with 44.25% as fourth position among all the libraries.

N.B: P-BK-Printed books, E-BK-E-books, RBK-Reference books, C-JOU- Current journals, E-JOU- E-journals, BVJ- Back volume journals, RSREP-Research reports, CNFP-Conference proceedings, GVT PBL- Govt. publications, RSMON- Research monographs, THESIS- Thesis and Dissertations, PAT- Patent and Standards, Non BK-Non book materials, Abs/Ind- Abstracting /Indexing databases.

Table- 39 (b): Users' satisfaction to library collections

Table 39 (b) User Satisfaction to Library Collections (Weighted Mean Score and Rank)																		
Collections	WMSR	ALA	ACA	Judges	KRC(IASST)	NIRDP	TISS	IIBM	NIPCCD	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC
P-BK	WMS	2.8	2.7	3	2.7	2.8	2	4	3.5	3	2.6	2	2.8	3	2	3	4	3

	Rank	7	12	7	11	7	16	1	3	5	13	15	6	7	16	4	2	14
E-BK	WMS	2.8	2.7	3	3	3	2	4	3.5	3	2.8	3	3	3	2	4	4	4
	Rank	14	15	6	8	8	16	2	3	6	13	8	8	8	16	3	1	3
RBK	WMS	3.3	3	4	2.7	3	1.7	3	3.5	3	2.4	2	2.6	3	2	3	3	3
	Rank	3	6	1	12	6	17	4	2	10	14	15	13	10	15	6	5	6
C-JOU	WMS	3.5	3.3	3	3.1	2.8	1.7	4	4	3	2.8	2	2.8	3	3	3	4	4
	Rank	3	6	9	8	12	17	2	1	12	10	16	10	12	15	7	3	3
E-JOU	WMS	3	3	3	2.9	3.3	2	3	3.5	3	3	2	3	3	3	3	4	2
	Rank	8	8	8	13	4	16	3	1	4	8	15	8	4	14	4	1	16
BVJ	WMS	3.3	2.3	3	2.7	2.8	2	4	3	4	2.4	3	2.6	3	3	3	3	4
	Rank	4	16	5	12	10	17	1	5	2	15	5	14	10	13	5	5	2
RSREP	WMS	3	2.3	3	3	3	1.7	4	2.5	3	3.2	2	2.6	3	3	3	3	3
	Rank	7	15	3	7	7	17	1	13	13	5	15	12	7	2	3	6	7
CNFP	WMS	3	2.3	3	2.4	2.8	2	3	3	3	2.4	2	2.6	3	3	3	3	4
	Rank	5	15	5	13	9	17	3	5	5	14	15	11	12	2	9	4	1
GVT	WM	3.	2.	2	2.7	2.5	2	3	3	3	2.	2	2.	3	2	3	3	3

PBL	S	3	3							4		8					
	Rank	1	13	16	9	10	17	2	3	10	12	13	8	3	13	3	7	3
RS MON	WMS	2.8	2.3	3	2.7	2.8	2	4	3.5	3	3	2	2.4	3	2	3	3	3
	Rank	9	14	4	12	9	17	1	2	6	6	14	13	9	14	4	3	6
THE SIS	WMS	3.5	3.3	3	3.3	3.3	2	4	3.3	3	3.2	2	3	3	3	3	3	3
	Rank	2	3	14	5	6	17	1	6	6	10	16	11	14	11	6	3	11
PAT	WMS	2.3	2.7	3	2.6	2.8	1.7	3	2.8	3	2.6	2	2.8	3	2	4	3	2
	Rank	15	10	6	12	6	17	2	6	4	11	13	5	6	13	1	3	16
Non BK	WMS	2.5	2.7	3	2.7	3	2	3	3	3	2.6	2	2.8	3	3	3	3	3
	Rank	14	11	7	10	3	16	1	3	7	13	16	6	7	11	3	2	14
Abs/ Ind	WMS	2.3	2.3	3	3	3.5	2	3	3	3	2.8	3	3	3	2	3	3	2
	Rank	14	13	2	5	1	15	4	5	11	10	12	5	2	15	5	9	15
Tota l	WMS	41	37	42	40	41	27	49	45	41	38	34	39	40	36	44	46	40
	Rank	7	14	5	11	7	17	1	3	6	13	16	12	9	15	4	2	9

6.38   Area where the collections need to be improved

Table- 40 (a) and fig: 36 stated that in ALA library user wish to improve the collection in the form of e-journals as first priority and e-books as second priority, in ACA library user voted highest for e- books as first priority, in Judges' library user voted highest for printed books as first and printed journals as second priority, in KRC (IASST) library user voted highest for printed books and thesis and dissertations as first priority, in NIRDP library user voted highest for thesis and dissertations as first priority and e-books as second, in TISS library user wish to improve the e-books as first priority, in IIBM library user wish to be improve the e-books as first priority and e-journals as second, in NIPCCD RCG library user voted highest for e-books, in IIE library user voted highest for e-books as first priority and printed journals as second, in DHAS library user voted highest for e-books as first priority and thesis and dissertations as second, ASTEC/AEDA library user voted highest for thesis and dissertations as first priority and e-books and e-journals as second priority, in CIPET Digital library user voted highest for e-books as first priority, in PLASMA Physics library user wish to be improve the e-books as first priority and e-databases as second priority, in AIR ST & SC library user voted highest for e-books as first priority and e-journals as second, in RFRI library user voted highest for abstracting /indexing databases and e-databases as first priority, in KRC (NEIST) library user wish to be improve the e-books and e-thesis and dissertations as first priority and in TTRC library user voted highest for thesis and dissertations and e-journals and e-thesis and dissertations as second which need to be improve the collection.

It is found from the study that user voted highest for e-book acquiring 1.571 followed by e-journals as second acquiring 0.943 and thesis and dissertations as third acquiring 0.643 as the collection need to be improved in all the libraries.

Table- 40 (b) and fig: 36 stated that collection need to be improved as printed books is highest in Judges' library as first and KRC (IASST) library as second position. E-book is needed to be improve is highest in IIBM library, IIE library and AIR ST & SC library. Printed journals is needed to be improve is highest in IIE library followed by

Judges' library and NIPCCD RCG library as second and third position respectively. E-journals is needed to be improve is highest in ALA library in first and IIBM library and AIR ST & SC library in second position. Thesis and dissertations need to be improved is highest in TTRC library as first ASTEC/AEDA library as second and NIRDP library as third position. E-thesis and dissertations need to be improved is highest in KRC (NEIST) library. Abstracting /indexing databases need to be improved is highest in RFRI library. E-databases also need to be improved is highest in RFRI library.

Table- 40: Area where the collections need to be improved

Table 40 Area where the collection need to be improved										
Libraries	Priority	NA	P-BK	E-BK	PJOU	E-JOU	THES	E-THES	Abs/Ind	E-DAT	Total
ALA	P1	0	1	2	0	1	0	0	0	0	4
	P2	0	0	0	1	3	0	0	0	0	4
	P3	0	1	0	0	0	2	0	0	1	4
ACA	P1	0	0	2	0	0	1	0	0	0	3
	P2	0	0	0	1	2	0	0	0	0	3
	P3	0	2	0	0	0	1	0	0	0	3
Judges	P1	0	2	0	1	1	0	0	0	0	4
	P2	2	0	1	1	0	0	0	0	0	4
	P3	3	0	0	0	0	0	0	0	1	4
KRC(IASST)	P1	0	2	1	0	0	2	0	1	1	7
	P2	1	0	0	1	1	1	1	1	1	7
	P3	2	2	1	0	0	0	2	0	0	7
NIRDP	P1	0	1	1	0	0	2	0	0	0	4
	P2	1	0	1	1	0	0	1	0	0	4
	P3	1	1	0	1	0	0	0	1	0	4
TISS	P1	0	0	2	0	0	0	0	0	1	3

	P2	0	0	0	1	1	0	1	0	0	3
	P3	0	0	0	0	1	1	1	0	0	3
IIBM	P1	0	0	5	0	0	0	0	0	0	5
	P2	0	0	0	0	5	0	0	0	0	5
	P3	0	0	0	0	0	0	5	0	0	5
NIPCCD	P1	1	0	2	0	1	0	0	0	0	4
	P2	1	0	1	2	0	0	0	0	0	4
	P3	2	0	0	0	1	1	0	0	0	4
IIE	P1	0	0	4	0	0	0	0	0	0	4
	P2	0	0	0	4	0	0	0	0	0	4
	P3	0	0	0	0	4	0	0	0	0	4
DHAS	P1	0	1	2	0	0	1	0	1	0	5
	P2	0	0	2	0	1	0	0	1	1	5
	P3	0	0	0	2	0	3	0	0	0	5
ASTEC	P1	0	0	1	0	0	1	0	0	1	3
	P2	0	0	0	0	2	0	0	1	0	3
	P3	0	0	1	0	0	2	0	0	0	3
CIPET	P1	0	1	1	0	1	0	0	1	1	5
	P2	0	1	1	0	1	1	0	0	1	5
	P3	0	0	1	2	0	0	2	0	0	5
PLASMA	P1	0	1	2	0	0	0	0	0	1	4
	P2	1	0	0	1	0	0	1	1	0	4
	P3	1	0	0	1	0	1	0	0	1	4
AIR ST	P1	0	0	3	0	0	0	0	0	0	3
	P2	0	0	0	0	3	0	0	0	0	3
	P3	0	0	0	0	0	0	3	0	0	3
RFRI	P1	1	0	0	0	0	1	0	1	1	4
	P2	1	0	0	0	0	0	1	1	1	4

	P3	2	1	0	0	1	0	0	0	0	4
KRC (NEIST)	P1	0	0	3	0	0	0	1	1	1	6
	P2	0	0	0	0	3	0	2	1	0	6
	P3	0	0	1	0	1	0	3	0	1	6
TTRC	P1	0	0	0	0	0	2	0	0	0	2
	P2	0	0	0	0	1	0	1	0	0	2
	P3	0	1	1	0	0	0	0	0	0	2
Total	P1	2	9	31	1	4	10	1	5	7	70
	P2	7	1	6	13	23	2	8	6	4	70
	P3	11	8	5	6	8	11	16	1	4	70

Table- 40(a): Area where the collections need to be improved

Table 40 (a) Area where the collection need to be improved (Weighted Mean Score and Rank)									
Libraries	WMSR	P-BK	E-BK	PJOU	E-JOU	THES	E-THES	Abs/Ind	E-DAT
ALA	WMS	1	1.5	0.5	2.25	0.5	0	0	0.25
	Rank	3	2	4	1	4	7	7	6
ACA	WMS	0.667	2	0.667	1.333	1.333	0	0	0
	Rank	4	1	4	2	2	6	6	6
Judges	WMS	1.5	0.5	1.25	0.75	0	0	0	0.25
	Rank	1	4	2	3	6	6	6	5
KRC(IASST)	WMS	1.143	0.571	0.286	0.286	1.143	0.571	0.714	0.714
	Rank	1	5	7	7	1	5	3	3

NIRDP	WMS	1	1.25	0.75	0	1.5	0.5	0.25	0
	Rank	3	2	4	7	1	5	6	7
TISS	WMS	0	2	0.667	1	0.333	1	0	1
	Rank	7	1	5	2	6	2	7	2
IIBM	WMS	0	3	0	2	0	1	0	0
	Rank	4	1	4	2	4	3	4	4
NIPCCD	WMS	0	2	1	1	0.25	0	0	0
	Rank	5	1	2	2	4	5	5	5
IIE	WMS	0	3	2	1	0	0	0	0
	Rank	4	1	2	3	4	4	4	4
DHAS	WMS	0.6	2	0.4	0.4	1.2	0	1	0.4
	Rank	4	1	5	5	2	8	3	5
ASTEC	WMS	0	1.333	0	1.333	1.667	0	0.667	1
	Rank	6	2	6	2	1	6	5	4
CIPET	WMS	1	1.2	0.4	1	0.4	0.4	0.6	1
	Rank	2	1	6	2	6	6	5	2
PLASMA	WMS	0.75	1.5	0.75	0	0.25	0.5	0.5	1
	Rank	3	1	3	8	7	5	5	2
AIR ST	WMS	0	3	0	2	0	1	0	0
	Rank	4	1	4	2	4	3	4	4

RFRI	WMS	0.25	0	0	0.25	0.75	0.5	1.25	1.25
	Rank	5	7	7	5	3	4	1	1
KRC (NEIST)	WMS	0	1.667	0	1.167	0	1.667	0.833	0.667
	Rank	6	1	6	3	6	1	4	5
TTRC	WMS	0.5	0.5	0	1	3	1	0	0
	Rank	4	4	6	2	1	2	6	6
Total	WMS	0.529	1.571	0.5	0.943	0.643	0.5	0.4	0.471
	Rank	4	1	5	2	3	5	8	7

Fig: 36 Area where the collections need to be improved

Table- 40 (b): Area where the collections need to be improved

Table 40 (b) Area where the collection need to be improved (Weighted Mean Score and Rank)																	
Collection	WMSR	ALA	ACA	Judges	KRC(IASST)	NIRDP	TISS	IIBM	NIPCCD	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC
P-BK	WMS	1	0.7	1.5	1.1	1	0	0	0	0	0.6	0	1	1	0	0.25	0	0.5
	Rank	3	7	1	2	3	11	11	11	11	8	11	3	6	11	10	11	9
E-BK	WMS	1.5	2	0.5	0.6	1.3	2	3	2	3	2	1.3	1.2	2	3	0	1.67	0.5
	Rank	9	4	15	14	12	4	1	4	1	4	11	13	9	1	17	8	15
PJOU	WMS	0.5	0.7	1.3	0.3	0.8	0.7	0	1	2	0.4	0	0.4	1	0	0	0	0
	Rank	8	6	2	11	4	6	12	3	1	9	12	9	4	12	12	12	12
E-JOU	WMS	2.3	1.3	0.8	0.3	0	1	2	1	1	0.4	1.3	1	0	2	0.25	1.17	1
	Rank	1	4	12	14	16	7	2	7	7	13	4	7	16	2	15	6	7
THES	WMS	0.5	1.3	0	1.1	1.5	0.3	0	0.3	0	1.2	1.7	0.4	0	0	0.75	0	3
	Rank	8	4	13	6	3	10	13	11	13	5	2	9	11	13	7	13	1
E-THES	WMS	0	0	0	0.6	0.5	1	1	0	0	0	0	0.4	1	1	0.5	1.67	1
	Rank	11	11	11	6	7	2	2	11	11	11	11	10	7	2	7	1	2
Abs/Ind	WMS	0	0	0	0.7	0.3	0	0	0	0	1	0.7	0.6	1	0	1.25	0.83	0
	Rank	9	9	9	4	8	9	9	9	9	2	5	6	7	9	1	3	9

	W MS	0.3	0	0.3	0.7	0	1	0	0	0	0.4	1	1	1	0	1.25	0.67	0
E-DAT	Rank	9	11	9	6	11	2	11	11	11	8	2	2	2	11	1	7	11

N.B: NA- Not applicable, P-BK-Printed books, E-BK-E-books, PJOU- Printed journals, E-JOU- E-journals, THES- Thesis and Dissertations, E-THES- E-Thesis and Dissertations, Abs/Ind- Abstracting /Indexing databases, E-DAT- E-databases.

6.39 Users' awareness about the services

Table- 41 (a) fig: 37 stated that in ALA library user aware about lending service as first, reference service as second and online service as third priority. In ACA library and KRC (IASST) library user aware about lending service as first, reference service as second. In Judges' library user aware about reference service as first, lending service as second. In NIRDP library maximum number of users aware about lending service and reference service. In TISS library highest number of users is aware about lending service and translation services. In IIBM library no user voted for any services. In NIPCCD RCG library highest number of users is aware about lending service as first, reference service as second and bibliographic services as third. In IIE library highest number of users is aware about lending service and reference service. In DHAS library maximum number of users is aware about reference service as first lending service and online services as second. In ASTEC/AEDA library highest number of users is aware about lending service as first, reference service as second and bibliographic services as third. In CIPET Digital library and AIR ST & SC library users aware about lending service as first reference service as second and online services as third choice. In PLASMA Physics library maximum numbers of user are aware about lending service and reference service. RFRI library users are aware about lending service and reference service most. In KRC (NEIST) library most of the users are aware about reference service as first lending service as second and bibliographic

services as third. In TTRC library most of the users are aware about lending service and online services.

So, it is found from the study that the highest number of users are aware about lending/circulation service which is 1.886 followed by reference service in 1.6 as second and bibliographic services in 0.443 as third choice in all the libraries.

Table- 41: Awareness about library services

Table 41 Awareness about library services												
Libraries	Priority	Not Applicable	Lending/circulation	Reference	Bibliographic	CAS	SDI	Reprographic	Translation	Online	Indexing/abstracting	Total
ALA	P1	0	4	0	0	0	0	0	0	0	0	4
	P2	0	0	4	0	0	0	0	0	0	0	4
	P3	0	0	0	0	0	0	0	0	4	0	4
ACA	P1	0	3	0	0	0	0	0	0	0	0	3
	P2	0	0	3	0	0	0	0	0	0	0	3
	P3	0	0	0	1	0	0	0	1	1	0	3
Judges	P1	0	2	1	0	0	0	0	0	1	0	4
	P2	1	0	2	0	1	0	0	0	0	0	4
	P3	1	0	0	0	0	1	0	1	1	0	4
KRC(IASST)	P1	2	4	1	0	0	0	0	0	0	0	7
	P2	2	0	4	1	0	0	0	0	0	0	7
	P3	2	0	0	3	0	0	0	0	2	0	7
NIRDP	P1	0	3	1	0	0	0	0	0	0	0	4
	P2	0	0	3	1	0	0	0	0	0	0	4
	P3	0	0	0	1	0	0	1	1	1	0	4
TISS	P1	1	1	0	0	0	0	0	1	0	0	3
	P2	2	0	0	0	0	0	0	0	1	0	3
	P3	3	0	0	0	0	0	0	0	0	0	3
IIBM	P1	5	0	0	0	0	0	0	0	0	0	5
	P2	5	0	0	0	0	0	0	0	0	0	5
	P3	5	0	0	0	0	0	0	0	0	0	5

NIPCCD	P1	2	2	0	0	0	0	0	0	0	0	4
	P2	2	0	2	0	0	0	0	0	0	0	4
	P3	2	0	0	2	0	0	0	0	0	0	4
IIE	P1	0	3	1	0	0	0	0	0	0	0	4
	P2	0	0	3	0	0	0	0	1	0	0	4
	P3	0	0	0	0	0	0	3	0	1	0	4
DHAS	P1	2	1	2	0	0	0	0	0	0	0	5
	P2	2	0	1	0	0	0	0	1	1	0	5
	P3	2	0	0	1	0	0	0	0	1	1	5
ASTEC	P1	0	3	0	0	0	0	0	0	0	0	3
	P2	0	0	3	0	0	0	0	0	0	0	3
	P3	0	0	0	2	0	0	0	0	0	1	3
CIPET	P1	0	5	0	0	0	0	0	0	0	0	5
	P2	0	0	3	0	0	0	0	0	2	0	5
	P3	2	0	0	1	2	0	0	0	0	0	5
PLASMA	P1	0	3	1	0	0	0	0	0	0	0	4
	P2	0	0	3	1	0	0	0	0	0	0	4
	P3	0	0	0	2	1	0	0	0	1	0	4
AIR ST	P1	0	3	0	0	0	0	0	0	0	0	3
	P2	0	0	3	0	0	0	0	0	0	0	3
	P3	0	0	0	0	0	0	0	0	3	0	3
RFRI	P1	0	3	1	0	0	0	0	0	0	0	4
	P2	0	0	3	1	0	0	0	0	0	0	4
	P3	1	0	0	2	0	0	0	0	1	0	4
KRC (NEIST)	P1	1	3	2	0	0	0	0	0	0	0	6
	P2	1	0	3	2	0	0	0	0	0	0	6
	P3	2	0	0	3	0	0	0	0	1	0	6
TTRC	P1	0	1	0	0	0	0	0	0	1	0	2
	P2	0	0	1	0	0	0	0	0	0	1	2
	P3	1	0	0	1	0	0	0	0	0	0	2
Total	P1	13	44	10	0	0	0	0	1	2	0	70

	P2	15	0	41	6	1	0	0	2	4	1	70
	P3	21	0	0	19	3	1	4	3	17	2	70

Table WMSR

Table- 41 (a): Awareness about library services

Table 41 (a) Awareness about library services (Weighted Mean Score and Rank)										
Libraries	WMSR	Lending/ci rculation	Reference	Bibliogra phic	CAS	SDI	Repro graphi c	Transl ation	Online	Indexi ng/abs tractin g
ALA	WMS	3	2	0	0	0	0	0	1	0
	Rank	1	2	4	4	4	4	4	3	4
ACA	WMS	3	2	0.333	0	0	0	0.333	0.333	0
	Rank	1	2	3	6	6	6	3	3	6
Judges	WMS	1.5	1.75	0	0.5	0.25	0	0.25	1	0
	Rank	2	1	7	4	5	7	5	3	7
KRC(IAS ST)	WMS	1.714	1.571	0.714	0	0	0	0	0.286	0
	Rank	1	2	3	5	5	5	5	4	5
NIRDP	WMS	2.25	2.25	0.75	0	0	0.25	0.25	0.25	0
	Rank	1	1	3	7	7	4	4	4	7
TISS	WMS	1	0	0	0	0	0	1	0.667	0
	Rank	1	4	4	4	4	4	1	3	4
IIBM	WMS	0	0	0	0	0	0	0	0	0
	Rank	1	1	1	1	1	1	1	1	1
NIPCCD	WMS	1.5	1	0.5	0	0	0	0	0	0
	Rank	1	2	3	4	4	4	4	4	4
IIE	WMS	2.25	2.25	0	0	0	0.75	0.5	0.25	0
	Rank	1	1	6	6	6	3	4	5	6

DHAS	WMS	0.6	1.6	0.2	0	0	0	0.4	0.6	0.2
	Rank	2	1	5	7	7	7	4	2	5
ASTEC	WMS	3	2	0.667	0	0	0	0	0	0.333
	Rank	1	2	3	5	5	5	5	5	4
CIPET	WMS	3	1.2	0.2	0.4	0	0	0	0.8	0
	Rank	1	2	5	4	6	6	6	3	6
PLASMA	WMS	2.25	2.25	1	0.25	0	0	0	0.25	0
	Rank	1	1	3	4	6	6	6	4	6
AIR ST	WMS	3	2	0	0	0	0	0	1	0
	Rank	1	2	4	4	4	4	4	3	4
RFRI	WMS	2.25	2.25	1	0	0	0	0	0.25	0
	Rank	1	1	3	5	5	5	5	4	5
KRC (NEIST)	WMS	1.5	2	1.167	0	0	0	0	0.167	0
	Rank	2	1	3	5	5	5	5	4	5
TTRC	WMS	1.5	1	0.5	0	0	0	0	1.5	1
	Rank	1	3	5	6	6	6	6	1	3
Total	WMS	1.886	1.6	0.443	0.071	0.014	0.057	0.143	0.443	0.057
	Rank	1	2	3	6	9	7	5	3	7

Fig: 37 Awareness about library services
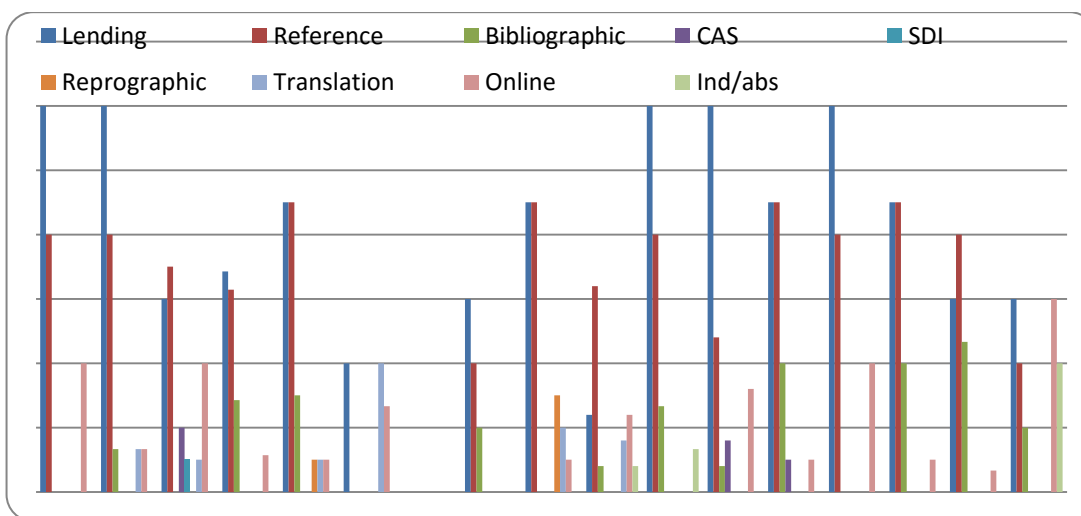
Table- 41 (b) and fig: 37 stated that users aware about lending service/circulation are highest in ALA library, ACA library, ASTEC/AEDA library, CIPET Digital library and AIR ST & SC library. Most of the users are aware about reference services are highest in NIRDP library, IIE library, PLASMA Physics library and RFRI library. Users aware about bibliographic services are highest in KRC (NEIST) library as first followed by PLASMA Physics library and RFRI library as second position. Most of the users aware about CAS are highest in Judges' library followed by CIPET Digital library as second and PLASMA Physics library as third position. Users aware about SDI services are highest in Judges' library. Users aware about reprographic services are highest in IIE library as first and NIRDP library as second position. Users aware about translation services are highest in TISS library as first followed by IIE library as second and DHAS library as third position. Users aware about online services are highest in TTRC library. Most of the users aware about indexing/abstracting services are highest in TTRC library as first and ASTEC/AEDA library as second and DHAS library as third position.

Table- 41 (b): Awareness about library services

Table 41 (b) Awareness about library services (Weighted Mean Score and Rank)

Services	WMSR	ALA	ACA	Judges	KRC(IASST)	NRDP	TISS	IIBM	NPCCD	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC
Lending/circulation	WMS	3	3	1.5	1.7	2	1	0	1.5	2.3	0.6	3	3	2.3	3	2.3	1.5	1.5
	Rank	1	1	11	10	6	15	17	11	6	16	1	1	6	1	6	11	11
Reference	WMS	2	2	1.75	1.6	2	0	0	1	2.3	1.6	2	1.2	2.3	2	2.3	2	1
	Rank	5	5	10	12	1	16	16	14	1	11	5	13	1	5	1	5	14
Bibliographic	WMS	0	0.33	0	0.7	1	0	0	0.5	0	0.2	0.7	0.2	1	0	1	1.2	0.5
	Rank	12	9	12	5	4	12	12	7	12	10	6	10	2	12	2	1	7
CAS	WMS	0	0	0.5	0	0	0	0	0	0	0	0	0.4	0.3	0	0	0	0
	Rank	4	4	1	4	4	4	4	4	4	4	4	2	3	4	4	4	4
SDI	WMS	0	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rank	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Reprographic	WMS	0	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0
	Rank	3	3	3	3	2	3	3	3	1	3	3	3	3	3	3	3	3
Translation	WMS	0	0.33	0.25	0	0	1	0	0	0.5	0.4	0	0	0	0	0	0	0
	Rank	7	4	5	7	5	1	7	7	2	3	7	7	7	7	7	7	7
Online	WMS	1	0.33	1	0.3	0	0.7	0	0	0.3	0.6	0	0.8	0.3	1	0.3	0.2	1.5
	Rank	2	8	2	9	10	6	15	15	10	7	15	5	10	2	10	14	1
Indexing abstracting	WMS	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0
	Rank	4	4	4	4	4	4	4	4	4	3	2	4	4	4	4	4	1

6.40   Types of periodical used

Table- 42 and fig: 38 stated that in ALA library, ACA library, NIRDP library, IIE library, AIR ST & SC library and TTRC library all the users uses periodicals in the form of current issues. In Judges' library 50% user uses current issues and 25% user uses back volume. In KRC (IASST) library 57.1% user uses current issues and 14.3% user uses both the current and back volume. In TISS library 66.7% user uses current issues. In IIBM library 60% user uses current issues and 40%user uses back volume. In NIPCCD RCG library 50% user uses current issues and 25%user uses back volume. In DHAS library 60% user uses current issues and 40% user uses both the current and back volume. In ASTEC/AEDA library 33.3% user uses current issues and 33.3% user uses both the current and back volume. In CIPET Digital library 40% user uses current issues and 20% user uses both the current and back volume. In PLASMA Physics library 75% user uses current issues and 25%user uses back volume. In RFRI library 25% user uses current issues 25%user uses back volume and 25% uses both. In KRC (NEIST) library 16.7% user uses current issues and 83.3%user uses back volume.

It is found from the study that 62.9% user uses current issues of periodicals as first priority followed by 15.7% user uses back volume of periodicals as second and 8.6% user uses both the current and back volume periodicals as third priority in all the libraries.

Table- 42: Types of periodical used

Table 42 Types of periodical used					
Libraries	NA	Current Issue	Back Volume	Current and Back volume both	Total
ALA Library	0	4	0	0	4
	0.0%	100.0%	0.0%	0.0%	100.0%
ACA Library	0	3	0	0	3
	0.0%	100.0%	0.0%	0.0%	100.0%
Judges' Library	1	2	1	0	4
	25.0%	50.0%	25.0%	0.0%	100.0%
KRC (IASST)	2	4	0	1	7
	28.6%	57.1%	0.0%	14.3%	100.0%
NIRDP Library	0	4	0	0	4
	0.0%	100.0%	0.0%	0.0%	100.0%
TISS Library	1	2	0	0	3
	33.3%	66.7%	0.0%	0.0%	100.0%
IIBM Library	0	3	2	0	5
	0.0%	60.0%	40.0%	0.0%	100.0%
NIPCCD RCG Library	1	2	1	0	4
	25.0%	50.0%	25.0%	0.0%	100.0%
IIE Library	0	4	0	0	4
	0.0%	100.0%	0.0%	0.0%	100.0%

DHAS Library	0	3	0	2	5
	0.0%	60.0%	0.0%	40.0%	100.0%
ASTEC/AEDA	1	1	0	1	3
	33.3%	33.3%	0.0%	33.3%	100.0%
CIPET Digital Library	2	2	0	1	5
	40.0%	40.0%	0.0%	20.0%	100.0%
PLASMA Physics Library	0	3	1	0	4
	0.0%	75.0%	25.0%	0.0%	100.0%
AIR ST & SC Library	0	3	0	0	3
	0.0%	100.0%	0.0%	0.0%	100.0%
RFRI Library	1	1	1	1	4
	25.0%	25.0%	25.0%	25.0%	100.0%
KRC (NEIST)	0	1	5	0	6
	0.0%	16.7%	83.3%	0.0%	100.0%
TTRC Library	0	2	0	0	2
	0.0%	100.0%	0.0%	0.0%	100.0%
Total	9	44	11	6	70
	12.9%	62.9%	15.7%	8.6%	100.0%

Fig: 38 Types of periodical used

6.41 Library provided reference help

Table- 43 and fig: 39 stated that library provided the reference help regarding to search the document where 100% user voted as Yes in ALA library, ACA library, Judges' library, NIRDP library, IIBM library, IIE library, DHAS library, ASTEC/AEDA library, CIPET Digital library, PLASMA Physics library, AIR ST & SC library, RFRI library, KRC (NEIST) library and TTRC library. In KRC (IASST) library 71.4% user answered Yes, in TISS library 33.3% user answered Yes, in NIPCCD RCG library 50% user answered Yes to reference help provided by the library as to search the document. No user answered as 'No' to this query.

It is found from the study that 91.4% user voted Y es to reference help provided by the library as to search the document. It is evident that reference help provided by library regarding to use bibliographical sources is highest in NIRDP library, IIE library, DHAS library, AIR ST & SC library, RFRI library and KRC (NEIST) library and TTRC library as100% from the users. In ALA library 75%, ACA library 66.7%, Judges' library 50%, KRC (IASST) library 71.4%, TISS library 33.3%, IIBM library 80%, NIPCCD RCG library 50%, ASTEC/AEDA library 33.3%, CIPET Digital library 60%, PLASMA Physics library 25% answered to the query reference help provided by library regarding to use bibliographical sources. No user answered as

'No' to this query. It is found from the study that 74.3% user voted Yes to reference help provided by the library as to use bibliographical sources.

It is stated that help provided by library regarding to search specific information is highest in IIE library, DHAS library, AIR ST & SC library, RFRI library, KRC (NEIST) library and TTRC library where the entire user voted as Yes. In ALA library, Judges' library and PLASMA Physics library user voted 75%, ACA library 66%, KRC (IASST) library 71.4%, NIRDP library 50%, TISS library 33%, IIBM library 80%, NIPCCD RCG library 25%, ASTEC/AEDA library 33.3% and CIPET Digital library 60% user voted Yes to the query 'help provided by library regarding to search specific information'. No user answered as 'No' to this query.

It is found from the study that 74.3% user voted Yes to reference help provided by the library as to search specific information.

Table- 43: Library provided the reference help

Table 43 Library provided the reference help									
Libraries	Search the document			Bibliographical sources			Specific information		
	NA	Yes	Total	NA	Yes	Total	NA	Yes	Total
ALA Library	0	4	4	1	3	4	1	3	4
	0.0%	100.0%	100.0%	25.0%	75.0%	100.0%	25.0%	75.0%	100.0%
ACA Library	0	3	3	1	2	3	1	2	3
	0.0%	100.0%	100.0%	33.3%	66.7%	100.0%	33.3%	66.7%	100.0%
Judges' Library	0	4	4	2	2	4	1	3	4
	0.0%	100.0%	100.0%	50.0%	50.0%	100.0%	25.0%	75.0%	100.0%
KRC (IASST)	2	5	7	2	5	7	2	5	7
	28.6%	71.4%	100.0%	28.6%	71.4%	100.0%	28.6%	71.4%	100.0%
NIRDP Library	0	4	4	0	4	4	2	2	4
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	50.0%	50.0%	100.0%
TISS Library	2	1	3	2	1	3	2	1	3
	66.7%	33.3%	100.0%	66.7%	33.3%	100.0%	66.7%	33.3%	100.0%
IIBM Library	0	5	5	1	4	5	1	4	5

	0.0%	100.0%	100.0%	20.0%	80.0%	100.0%	20.0%	80.0%	100.0%
NIPCCD RCG Library	2	2	4	2	2	4	3	1	4
	50.0%	50.0%	100.0%	50.0%	50.0%	100.0%	75.0%	25.0%	100.0%
IIE Library	0	4	4	0	4	4	0	4	4
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
DHAS Library	0	5	5	0	5	5	0	5	5
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
ASTEC/AEDA	0	3	3	2	1	3	2	1	3
	0.0%	100.0%	100.0%	66.7%	33.3%	100.0%	66.7%	33.3%	100.0%
CIPET Digital Library	0	5	5	2	3	5	2	3	5
	0.0%	100.0%	100.0%	40.0%	60.0%	100.0%	40.0%	60.0%	100.0%
PLASMA Physics Library	0	4	4	3	1	4	1	3	4
	0.0%	100.0%	100.0%	75.0%	25.0%	100.0%	25.0%	75.0%	100.0%
AIR ST & SC Library	0	3	3	0	3	3	0	3	3
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
RFRI Library	0	4	4	0	4	4	0	4	4
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
KRC (NEIST)	0	6	6	0	6	6	0	6	6
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
TTRC Library	0	2	2	0	2	2	0	2	2
	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
Total	6	64	70	18	52	70	18	52	70
	8.6%	91.4%	100.0%	25.7%	74.3%	100.0%	25.7%	74.3%	100.0%

Fig: 39 Library provided the reference help
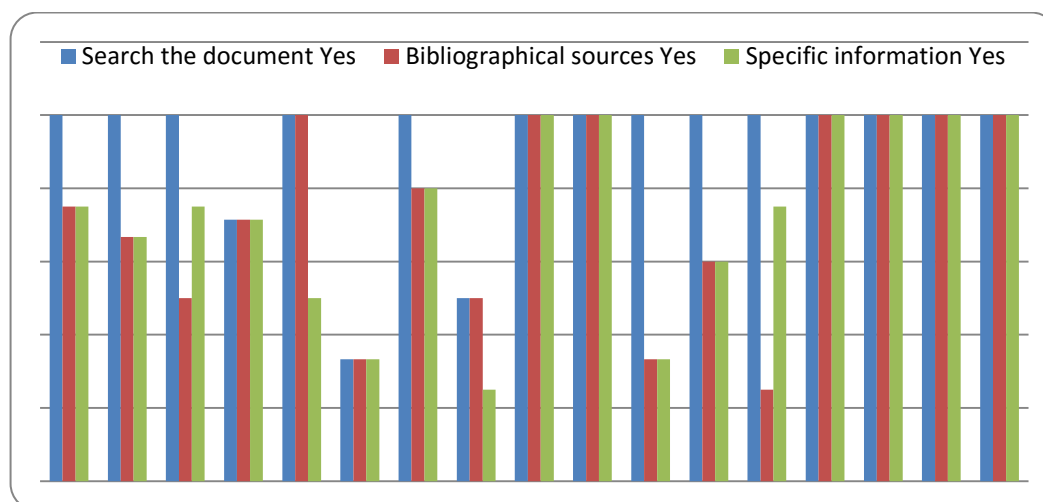
6.42 Services the user used most

Table- 44 (a) and fig: 40 stated that in ALA library Xeroxing service used most by the user as first and internet as second priority. In ACA library Xeroxing service used most by the user. In Judges' library and TISS library internet service used most by the user as first and online databases as second priority. KRC (IASST) library, NIRDP library, IIBM library, IIE library, CIPET Digital library, AIR ST & SC library and KRC (NEIST) library Xeroxing service as first and internet service as second priority. In NIPCCD RCG library, ASTEC/AEDA library, RFRI library and KRC (NEIST) library bibliographical services as first and Xeroxing as second. DHAS library xeroxing service as first and bibliographical service as second. In PLASMA Physics library Xeroxing service is as first and CAS as second priority of use. In TTRC library bibliographical services, Xeroxing and internet service as first priority of use.

It is found from the study that most used servise is Xeroxing which scored 2.186 in first position followed by internet service in second by scoring 1.314 and bibliographical services in third position by scoring 0.514 in all the libraries.

Table- 44: Services the user used most

Table 44 Services the user used most									
Libraries	Priority	NA	Bibliographical	Xeroxing	CAS	Internet	Online database	CD/DVD	Total
ALA Library	P1	0	0	4	0	0	0	0	4
	P2	1	0	0	0	3	0	0	4
	P3	4	0	0	0	0	0	0	4
ACA Library	P1	0	0	3	0	0	0	0	3
	P2	3	0	0	0	0	0	0	3
	P3	3	0	0	0	0	0	0	3
Judges Library	P1	0	0	1	0	3	0	0	4
	P2	1	0	0	0	1	2	0	4
	P3	4	0	0	0	0	0	0	4
KRC(IASST) Library	P1	0	2	5	0	0	0	0	7
	P2	0	0	2	1	4	0	0	7
	P3	1	0	0	0	2	4	0	7
NIRDP Library	P1	0	1	3	0	0	0	0	4
	P2	0	0	1	0	3	0	0	4
	P3	1	0	0	0	1	1	1	4
TISS Library	P1	1	0	0	0	2	0	0	3
	P2	2	0	0	0	0	1	0	3
	P3	3	0	0	0	0	0	0	3
IIBM Library	P1	0	0	5	0	0	0	0	5
	P2	3	0	0	0	2	0	0	5
	P3	5	0	0	0	0	0	0	5
NIPCCD Library	P1	3	1	0	0	0	0	0	4
	P2	3	0	1	0	0	0	0	4

	P3	3	0	0	0	1	0	0	4
IIE Library	P1	0	0	4	0	0	0	0	4
	P2	0	0	0	0	2	0	2	4
	P3	4	0	0	0	0	0	0	4
DHAS Library	P1	0	2	2	0	0	1	0	5
	P2	0	0	1	0	2	1	1	5
	P3	2	0	1	0	1	0	1	5
ASTEC Library	P1	0	2	1	0	0	0	0	3
	P2	1	0	1	0	1	0	0	3
	P3	1	0	0	0	1	1	0	3
CIPET Digital Library	P1	0	0	4	0	1	0	0	5
	P2	1	0	0	2	2	0	0	5
	P3	3	0	0	0	2	0	0	5
PLASMA Library	P1	0	0	4	0	0	0	0	4
	P2	2	0	0	2	0	0	0	4
	P3	2	0	0	0	2	0	0	4
AIR ST Library	P1	0	0	3	0	0	0	0	3
	P2	0	0	0	0	3	0	0	3
	P3	3	0	0	0	0	0	0	3
RFRI Library	P1	0	3	1	0	0	0	0	4
	P2	1	0	1	0	1	1	0	4
	P3	2	0	0	0	1	1	0	4
KRC (NEIST)Library	P1	0	0	5	0	1	0	0	6
	P2	0	0	0	0	5	1	0	6
	P3	1	0	0	0	0	5	0	6
TTRC Library	P1	0	1	1	0	0	0	0	2
	P2	0	0	0	0	1	1	0	2
	P3	1	0	0	0	0	1	0	2

Total	P1	4	12	46	0	7	1	0	70
	P2	18	0	7	5	30	7	3	70
	P3	43	0	1	0	11	13	2	70

Table WMSR

Table- 44 (a): Services the user used most

Table 44 (a) Service the user used most (Weighted Mean Score and Rank)							
Libraries	WMSR	Bibliographical	Xeroxing	CAS	Internet	Online database	CD/DVD
ALA Library	WMS	0	3	0	1.5	0	0
	Rank	3	1	3	2	3	3
ACA Library	WMS	0	3	0	0	0	0
	Rank	2	1	2	2	2	2
Judges' Library	WMS	0	0.75	0	2.75	1	0
	Rank	4	3	4	1	2	4
KRC (IASST)	WMS	0.857	2.714	0.286	1.429	0.571	0
	Rank	3	1	5	2	4	6
NIRDP Library	WMS	0.75	2.75	0	1.75	0.25	0.25
	Rank	3	1	6	2	4	4
TISS Library	WMS	0	0	0	2	0.667	0
	Rank	3	3	3	1	2	3
IIBM Library	WMS	0	3	0	0.8	0	0
	Rank	3	1	3	2	3	3
NIPCCD RCG Library	WMS	0.75	0.5	0	0.25	0	0
	Rank	1	2	4	3	4	4
IIE Library	WMS	0	3	0	1	0	1
	Rank	4	1	4	2	4	2
DHAS Library	WMS	1.2	1.8	0	1	1	0.6
	Rank	2	1	6	3	3	5
ASTEC/AEDA	WMS	2	1.667	0	1	0.333	0

	Rank	1	2	5	3	4	5
CIPET Digital Library	WMS	0	2.4	0.8	1.8	0	0
	Rank	4	1	3	2	4	4
PLASMA Physics Library	WMS	0	3	1	0.5	0	0
	Rank	4	1	2	3	4	4
AIR ST & SC Library	WMS	0	3	0	2	0	0
	Rank	3	1	3	2	3	3
RFRI Library	WMS	2.25	1.25	0	0.75	0.75	0
	Rank	1	2	5	3	3	5
KRC (NEIST)	WMS	0	2.5	0	2.167	1.167	0
	Rank	4	1	4	2	3	4
TTRC Library	WMS	1.5	1.5	0	1	1.5	0
	Rank	1	1	5	4	1	5
Total	WMS	0.514	2.186	0.143	1.314	0.429	0.114
	Rank	3	1	5	2	4	6

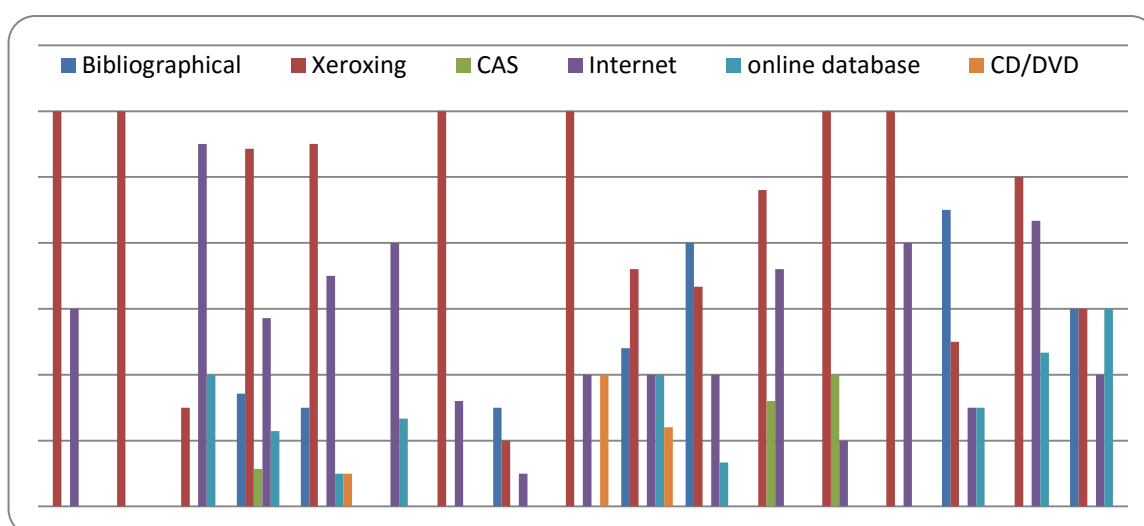**Fig: 40 Services the user used most**

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Table- 44 (b) and fig: 41 stated that most used service as bibliographical service is highest in RFRI library as first followed by ASTEC/AEDA library as second and TTRC library as third position. The most used service as Xeroxing service is highest in ALA library, ACA library, IIBM library, IIE library, PLASMA Physics library and AIR ST & SC library. Most used service as CAS is highest in PLASMA Physics library as first position and CIPET Digital library as second. Most used service as internet is highest in Judges' library as first and KRC (NEIST) library as second position. Most used service as online databases is highest in TTRC library as first and KRC (NEIST) library as second position. The CD/DVD ROM as most used service found highest in IIE library as first followed by DHAS library as second and NIRDP library as third position among the libraries.

Table: 44 (b) - Services the user used most

Table 44 (b) Service the user used most (Weighted Mean Score and Rank)																		
Libraries	WMMSR	ALA	ACA	Judges	KRC (IASST)	NIRDP	TISS	IIBM	NIPCCD	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC
Bibliographical	WMS	0	0	0	0.9	0.8	0	0	1	0	1.2	2	0	0	0	2.3	0	1.5
	Rank	8	8	8	5	6	8	8	6	8	4	2	8	8	8	1	8	3
Xeroxing	WMS	3	3	1	2.7	2.8	0	3	1	3	1.8	1.7	2.4	3	3	1.3	3	1.5
	Rank	1	1	15	8	7	17	1	16	1	11	12	10	1	1	14	9	13
CAS	WMS	0	0	0	0.3	0	0	0	0	0	0	0	0.8	1	0	0	0	0
	Rank	4	4	4	3	4	4	4	4	4	4	4	2	1	4	4	4	4
Intern	WM	1.	0	3	1.4	1.8	2	0.	0	1	1	1	1.	1	2	0.	2	1

et	S	5						8				8			8			
	Rank	7	17	1	8	6	3	13	16	9	9	9	5	15	3	14	2	9
Online database	WMS	0	0	1	0.6	0.3	1	0	0	0	1	0.3	0	0	0	0.8	1	1.5
	Rank	10	10	3	7	9	6	10	10	10	3	8	10	10	10	5	2	1
CD/DVD	WMS	0	0	0	0	0.3	0	0	0	1	0.6	0	0	0	0	0	0	0
	Rank	4	4	4	4	3	4	4	4	1	2	4	4	4	4	4	4	4

6.43   Overall assessment about the library

Table- 45 (a) and fig: 41 stated that in user voted for overall assesment about the library is highest as infrastructure facility and library collection in ALA library, ASTEC/AEDA library, PLASMA Physics library and TTRC library. In KRC (IASST) library and NIRDP library user voted for infrastructure facility as first and library collection as second category. In ACA library and IIE library user voted highest for library collection as first and organization of collection as second category. In Judges' library and TISS library the library collection as first and helping behavior of library staff as second. In IIBM library, NIPCCD RCG library, DHAS library, CIPET Digital library, AIR ST & SC library, RFRI library and KRC (NEIST) library user voted regarding overall assesment about the library is highest as infrastructure facility as first and library collection as second category of choice.

It is found from the study that user voted regarding overall assesment about the library is highest as library collection which scored 2.429 as first followed by infrastructure facility scored 1.757 as second and organization of collection scored 0.957 as third choice in all the selected special libraries of Assam.

Table- 45: Overall assessments about the library

Table 45 Overall assessment about the library							
Libraries	Priority	NA	Infrastructure	Library collection	Organization of collection	Helping behavior of staff	Total
ALA Library	P1	0	2	2	0	0	4
	P2	0	2	2	0	0	4
	P3	0	0	0	2	2	4
ACA Library	P1	0	0	3	0	0	3
	P2	0	0	0	3	0	3
	P3	0	0	0	0	3	3
Judges Library	P1	0	0	3	0	1	4
	P2	0	0	1	2	1	4
	P3	0	0	0	2	2	4
KRC(IASST) Library	P1	0	5	2	0	0	7
	P2	0	1	5	1	0	7
	P3	0	1	0	4	2	7
NIRDP Library	P1	0	4	0	0	0	4
	P2	0	0	4	0	0	4
	P3	0	0	0	4	0	4
TISS Library	P1	0	1	1	0	1	3
	P2	0	0	2	1	0	3
	P3	0	1	0	1	1	3
IIBM Library	P1	0	2	1	0	2	5
	P2	0	0	4	1	0	5
	P3	0	2	0	2	1	5
NIPCCD Library	P1	0	1	3	0	0	4
	P2	0	2	1	1	0	4

	P3	0	1	0	1	2	4
IIE Library	P1	0	0	4	0	0	4
	P2	0	0	0	4	0	4
	P3	0	4	0	0	0	4
DHAS Library	P1	0	2	3	0	0	5
	P2	0	1	2	2	0	5
	P3	0	0	0	2	3	5
ASTEC Library	P1	3	0	0	0	0	3
	P2	3	0	0	0	0	3
	P3	3	0	0	0	0	3
CIPET Digital Library	P1	0	2	3	0	0	5
	P2	0	1	2	0	2	5
	P3	0	0	0	4	1	5
PLASMA Library	P1	0	2	2	0	0	4
	P2	0	2	2	0	0	4
	P3	0	0	0	2	2	4
AIR ST Library	P1	0	1	2	0	0	3
	P2	0	1	1	0	1	3
	P3	0	1	0	2	0	3
RFRI Library	P1	0	2	2	0	0	4
	P2	0	0	2	2	0	4
	P3	0	2	0	1	1	4
KRC (NEIST) Library	P1	0	2	4	0	0	6
	P2	0	4	2	0	0	6
	P3	0	0	0	5	1	6
TTRC Library	P1	0	1	1	0	0	2
	P2	0	1	1	0	0	2
	P3	0	0	0	1	1	2

Total	P1	3	27	36	0	4	70
	P2	3	15	31	17	4	70
	P3	3	12	0	33	22	70

Table WMSR:

Table- 45 (a): Overall assessments about the library

Table 45 (a) Overall assessment about the library (Weighted Mean Score and Rank)					
Libraries	WMSR	Infrastructure	Library collection	Organization of collection	Helping behavior of staff
ALA Library	WMS	2.5	2.5	0.5	0.5
	Rank	1	1	3	3
ACA Library	WMS	0	3	2	1
	Rank	4	1	2	3
Judges' Library	WMS	0	2.75	1.5	1.75
	Rank	4	1	3	2
KRC (IASST)	WMS	2.571	2.286	0.857	0.286
	Rank	1	2	3	4
NIRDP Library	WMS	3	2	1	0
	Rank	1	2	3	4
TISS Library	WMS	1.333	2.333	1	1.333
	Rank	2	1	4	2
IIBM Library	WMS	1.6	2.2	0.8	1.4
	Rank	2	1	4	3
NIPCCD RCG Library	WMS	2	2.75	0.75	0.5
	Rank	2	1	3	4

|					
IIE Library	WMS	1	3	2	0
	Rank	3	1	2	4
DHAS Library	WMS	1.6	2.6	1.2	0.6
	Rank	2	1	3	4
ASTEC/AEDA	WMS	0	0	0	0
	Rank	1	1	1	1
CIPET Digital Library	WMS	1.6	2.6	0.8	1
	Rank	2	1	4	3
PLASMA Physics Library	WMS	2.5	2.5	0.5	0.5
	Rank	1	1	3	3
AIR ST & SC Library	WMS	2	2.667	0.667	0.667
	Rank	2	1	3	3
RFRI Library	WMS	2	2.5	1.25	0.25
	Rank	2	1	3	4
KRC (NEIST)	WMS	2.333	2.667	0.833	0.167
	Rank	2	1	3	4
TTRC Library	WMS	2.5	2.5	0.5	0.5
	Rank	1	1	3	3
Total	WMS	1.757	2.429	0.957	0.6
	Rank	2	1	3	4

Fig: 41 Overall assessments about the library
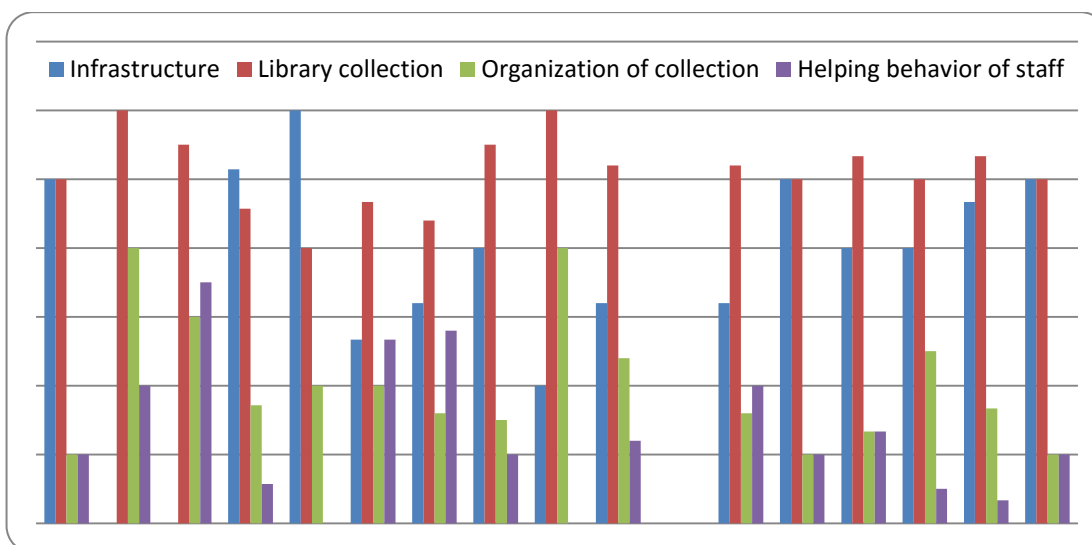
Table- 45 (b) and fig: 41 stated regarding overall assesment about the library that user voted for infrastructure facility is highest in NIRDP library as first position followed by KRC (IASST) library as second and ALA library, PLASMA Physics library and TTRC library as third position. In regard of overall assesment about the library user voted for library collection is highest in ACA library and IIE library as first position and Judges' library and NIPCCD RCG library as second position. Regarding overall assesment about the library that user voted for organization of collection is highest in ACA library and IIE library as first and Judges' library as second position. Overall assesment about the library that user voted for helping behavior of library staff is highest in Judges' library as first followed by IIBM library as second and TISS library as third in position.

Table- 45 (b): Overall assessments about the library

Table 45 (b) Overall assessment about the library (Weighted Mean Score and Rank)																		
Services	WMSR	ALA	ACA	Judges	KRC(IASST)	NIRDP	TISS	IIBM	NIPCCD	IIE	DHAS	ASTEC	CIPET	PLASMA	AIRST	RFRI	KRC (NEIST)	TTRC
Infrastructure	WMS	2.5	0	0	2.6	3	1.3	1.6	2	1	1.6	0	1.6	2.5	2	2	2.33	2.5
	Rank	3	15	15	2	1	13	10	7	14	10	15	10	3	7	7	6	3
Library collection	WMS	2.5	3	3	2.3	2	2.3	2.2	2.8	3	2.6	0	2.6	2.5	3	2.5	2.67	2.5
	Rank	9	1	3	14	16	13	15	3	1	7	17	7	9	5	9	5	9
Organization of collection	WMS	0.5	2	2	0.9	1	1	0.8	0.8	2	1.2	0	0.8	0.5	1	1.3	0.83	0.5
	Rank	14	1	3	8	6	6	10	12	1	5	17	10	14	13	4	9	14
Helping behavior of staff	WMS	0.5	1	2	0.3	0	1.3	1.4	0.5	0	0.6	0	1	0.5	1	0.3	0.17	0.5
	Rank	8	4	1	12	15	3	2	8	15	7	15	4	8	6	13	14	8

6.44   User's opinion about total collection and services

After omitting the repeated numbers the opinion of user's about total collection and services to special libraries of Assam are as follows-

Need to be update in the form of collection and services both. It is needed to update the library collection with recent edition of books and need to subscribe more print and online journals and number of journal title should be increase. Library should purchase the e-books as some books are not available in print form or the cost is too high to purchase. Need to update the library to cope up with time. Library should display the new arrival of materials in it. Library infrastructure should be improved. Overall collection and services are satisfactory.