Research Article

Perception of Faculty Members towards the Usage of E-resources at Nitte Meenakshi Institute of Technology, Bengaluru: A Survey

Prathibha S N[1], Shilpa Rani N R[2]

[1]Research Scholar, DoS & R in Library & Information Science,KSOU, Mukthagangothri, Mysore.
[2]Associate. Professor, DoS & R in Library & Information Science, KSOU, Mukthagangothri, Mysore.
DOI: https://doi.org/10.24321/2395.2288.202301

I N F O

Corresponding Author:
Prathibha S N, Research Scholar, DoS & R in Library & Information Science,KSOU, Mukthagangothri, Mysore.
E-mail Id:
pratibha.goudar@gmail.com
Orcid Id:
https://orcid.org/0000-0002-8847-6227

A B S T R A C T

Electronic resources are need of the hour to enrich academic, research and developmental activities of an institution. In this connection present study is carried out to know the awareness of faculties in the use of e-resources at Nitte Meenakshi Institute of Technology in Bengaluru. The questionnaire was designed and circulated among faculty members of various departments to get their input on the e-resources that the central library subscribes to. NMIT faculty members were given a total of 150 questionnaires to fill out but 120 (80%) responses were received. MsExcel tool has used to analyze the collected data. The findings reveal that majority of respondents are aware of available e-resources in the library and they felt like, those resources are extremely useful to enrich their research & academic activities. Most of the faculties 82(68.33%) rate that the use of e-journal databases & e-books subscribed by the NMIT Library are accelerating the overall research output of the institution. The study also focuses on various problems encountered by the users while using e-resources. Faculty members of Nitte Meenakshi Institute of Technology 76(63.33%) are felt strongly as problems they are facing while using e-resources are very negligible hence they are very satisfied with the available e-resources of the library.

Keywords: Electronic Resources, Print Resources, Information and Communication Technology, Interactive Media, Remote Access, Knimbus

Introduction

Electronic information sources and services have become an integral part of an academic, research and development activities. Electronic services are becoming more readily accessible and increasingly supportive format for academics. Engineering students, on the other hand, are far more technologically savvy and are more used to using electronic tools. As a result, it has become important for engineering libraries to provide and subscribe access to e-resources to satisfy their user category. Now a day's online journals and databases are the much preferred medium for academics than print resources.1 as part of their digital resources, libraries have the option of subscribing to full-text databases. Many of the publishers are offering web-enabled interfaces and full-text journals. Wisdom is processed electronically and is available through electronic systems and networks in ICT-based resources.2

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

2

Why E-Resources

E-resources are considered to be the essential tool in teaching, learning, and training activities. Libraries today have access to e-resources as an effective means for retrieving knowledge.

- 24/7 access, no geographical boundaries, anywhere at any time access to e-information.
- It saves library space and user time.
- Information retrieval and transfer is effortless .
- Availability of e-information in terms of quantity is vast compare to the print version.
- It provides hyperlinks to related additional information sources.
- Provisions are available for preservation and archival of rare and valuable information.
- Huge amount of up-to-date information is available for R&D activities.
- Simultaneous access to multi-users.
- E-resources save the printing and binding time, hence users will get quick access to published information.
- Availability of Information through interactive media i.e. Image, Sound, Video, etc.

Scope of the Study

The purpose of this work is to evaluate whether faculty members at Nitte Meenakshi Institute of Technology in Bengaluru are aware of and use various e-resources.

Objectives

- To study the awareness, purpose, and frequency of access to e-resources by the faculty members .
- To assess the user preferred platform to access Electronics Resources remotely.
- To know the usefulness of e-journals and e-books databases.
- To examine the level of satisfaction in the use of the different category of Electronics Resources.
- To study the benefits of e-resources and problems faced by the faculty members while accessing e-resources.
- To know the impact of e-resources on the research output of the institution.

Review of Related Literature

A study conducted by Sivakami[3] to explore the access and use of e-resources available in the science & arts college faculty members in Erode district. The study reveals that the majority of the arts faculties are using e-Journals for their educational and research purpose and e-books for their subject-specific knowledge. Pitla[4] carried out a study to know about the use of E-Resources in Andhra Pradesh's Krishna District engineering college libraries the investigator used the survey approach in this research to obtain primary data for the current study. According to the findings, users are extremely pleased with IEEE, DELNET, and NPTEL Videos, but they are not using the CMIE Prowess facility. Finally, the results of this survey concluded that electronic services would be used to conduct information literacy programs. Veeramallu[5] conducted a study to know the user opinion and satisfaction in engineering college libraries about library information services. The study indicates that users are highly satisfied with books and information services facilitated by their library. Jotangia[6] focused his study on the usage of electronic resources by GTU-affiliated students, faculty members, and self-financing postgraduate engineering colleges. Findings of this research illustrate that the faculty and students seem to be very interested in using e-resources since e-resources use for their research activities, academic & teaching aim. Sawai[7] study observes the use of e-resources by the faculty of different college libraries in Marathwada. This survey was conducted to identify the awareness and usability of electronic resources. The results indicate that the maximum number of respondents visited the library daily to access e-resources. It was also noticed that most of the respondents had excellent knowledge of utilizing e-resources.[8,10]

Methodology

The present study conducted at the Nitte Meenakshi Institute of Technology, Bengaluru. To collected the data, a structured questionnaire was designed and circulated through Google form among the faculty members. Total 150 questionnaires were randomly distributed among faculties and 120 filled-in questionnaires were received in return.

Analysis and Interpretation

The data obtained through the questionnaire have been analyzed by using MS Excel to prepare necessary tables and graphs.

Table 1.Awareness of the availability of e-resources

S. No.	Electronics Resources	No. of respondents	Percentage (%)
1	IEEE Xplore	99	82.50
2	Elsevier	97	80.83
3	Taylor & Francis	65	54.16
4	Springer	97	80.83
5	Emerald	35	29.16

3

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

6	Institution of Civil Engineers	24	20.00
7	McGraw Hill Education	52	43.33
8	New Age International	32	26.66
9	Packt	11	09.16

Note- Respondents were given the option of providing multiple responses.
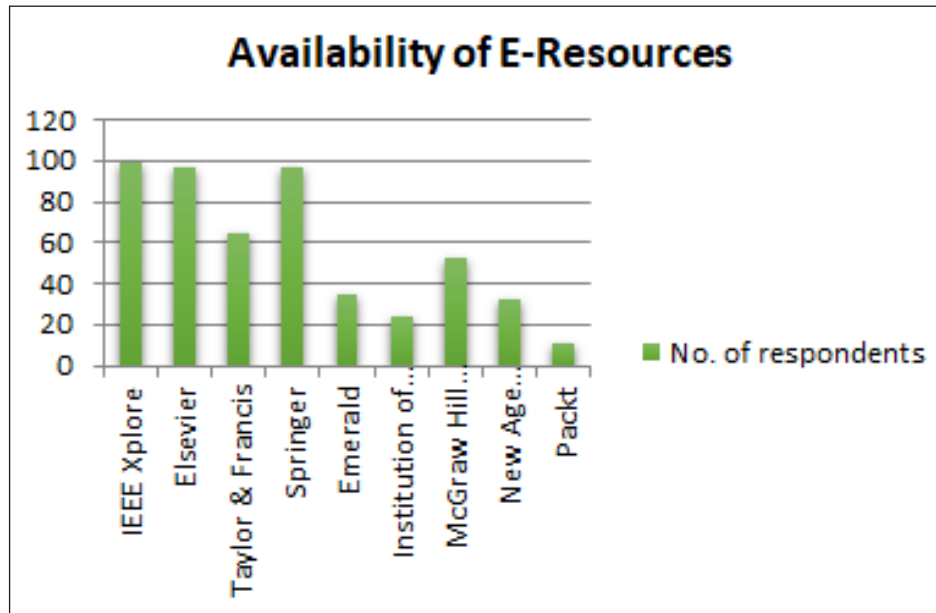
Graph 1.Availability of E-Resources

Table 2.Purpose of using the e-resources

S. No.	Purpose	No. of respondents	Percentage (%)
1	Projects/seminars	79	65.83
2	Research	115	95.83
3	Teaching	99	82.50
4	For knowledge updation	69	57.50

Note- Respondents were given the option of providing multiple responses.

It can be specified from the Table-1 that the majority of respondents 99(82.50%) are aware of IEEE resources, followed by 97(80.83%) of them are aware of 'Elsevier (ScienceDirect)' & 'Springer', while 65(54.16%) of faculty members were aware of 'Taylor & Francis'. Whereas, 'packt' is the least used 11(9.16%) e-resource among faculties (Graph no. 1).

Table-2 shows that there were 115 (95.83%) respondents using e-resources for the research, followed by 99 (82.50%) of the respondents using the e-resources for teaching, whereas 79(65.83%) respondents using for the preparation of projects & Seminars, 69(57.50%) respondents using for knowledge updation. The study found that the highest number of faculties using e-resources for research activates.

Table-3 denotes that the majority 47(39.16%) of the respondents are using the e-resources 2-3 times a week, whereas 31(25.83%) of the respondents stated 'Daily'. While, 18(15%) of them are using 'weekly, 18(15%) of the respondents using only '2-3 times per month'. A less 6(5%) of respondents are 'not very often' using e-resources.

Table-4 indicated the preferred medium of information sources by the respondents. It is found that most of the respondents 93(77.50%) are prefer to use both 'print resources as well as e-resources'. Followed by 23(19.16%) of the respondents prefer 'print resources' and a least number 04(03.33%) of them prefer only 'e-resources'.

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

4

Table 3.Frequency of using e-resources

S. No.	Frequency	No. of respondents	Percentage (%)
1	Daily	31	25.83
2	2-3 times a week	47	39.16
3	Once a week	18	15.00
4	2-3 times a month	18	15.00
5	Not very often	06	05.00
	Total	120	100

Table 4.Preferred medium of information resources

S. No.	Media of information	No. of respondents	Percentage (%)
1	Print Resources	23	19.16
2	E-Resources	04	03.33
3	Both	93	77.50
	Total	120	100

Table 5.Platform preference to access e-resources

S. No.	Platform	No. of respondents	Percentage (%)
1	IP Based access	75	62.50
2	Knimbus: Mobile App & Remote Access	59	49.16

Table 6.Usefulness of e-Journal databases

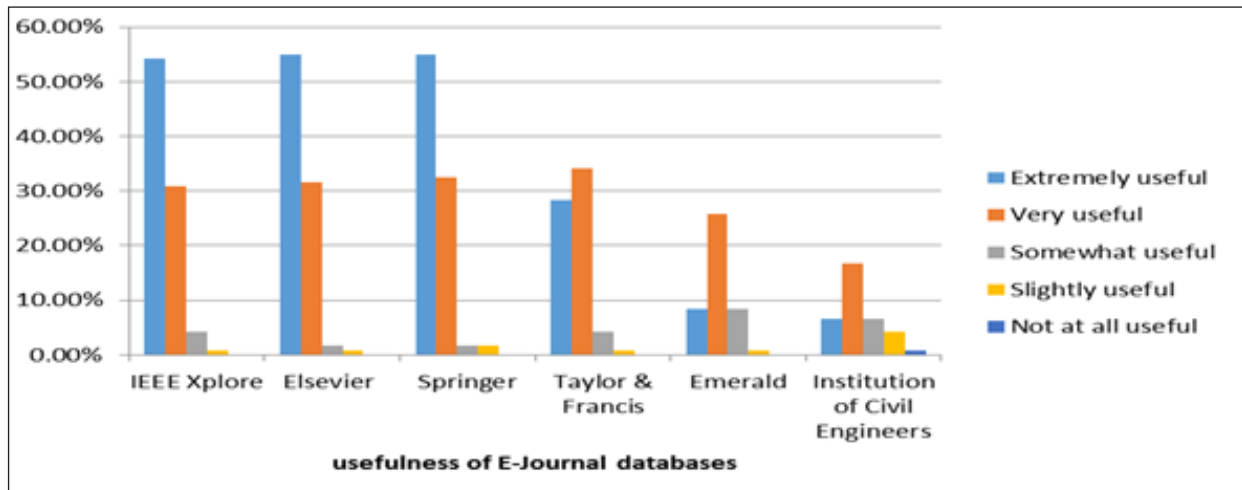| S. No.	E-Resources	1	2	3	4	5
1	IEEE Xplore	65(54.16%)	37(30.83%)	5(4.16%)	1(0.83%)	-
2	Elsevier	66(55%)	38(31.66%)	2(1.66%)	1(0.83%)	-
3	Springer	66(55%)	39(32.50%)	2(1.66%)	2(1.66%)	-
4	Taylor & Francis	34(28.33%)	41(34.16%)	5(4.16%)	1(0.83%)	-
5	Emerald	10(8.33%)	31(25.83%)	10(8.33%)	1(0.83%)	-
6	Institution of Civil Engineers	08(6.66%)	20(16.66%)	08(6.66%)	5(4.16%)	1(0.83%)

Note- Respondents were given the option of providing multiple responses.

Table-5 describes that majority of respondents 75 (62.50 %) prefer to access e-resources through IP based and 59 (49.16%) of respondents prefer to access through the Knimbus platform i.e through remote access.

Table-6 describes the usefulness of e-journal databases. Majority 66(55%) of faculties opined that Elsevier & Springer databases are extremely useful, followed by 65(54.16%) of respondents mentioned that IEEE Xplore is extremely useful, 41(34.16%) of faculties says that Taylor & Francis is very useful, 31(25.83%) respondents says Emerald & 20(16.66%) of respondents opined that Institution of Civil Engineers(ICE) databases are very useful (Graph no. 2).

It can be specified from the Table-7 that, Majority 55(45.83%) of respondents felt the McGraw Hill education database extremely useful followed by Elsevier, Taylor & Francis 44(36.66%) are also extremely useful to the respondents, whereas 41(34.16%) of faculties opined that new age international database is very useful, 25(20.83%) of faculties stated as packt database is very useful to them (Graph no. 3).
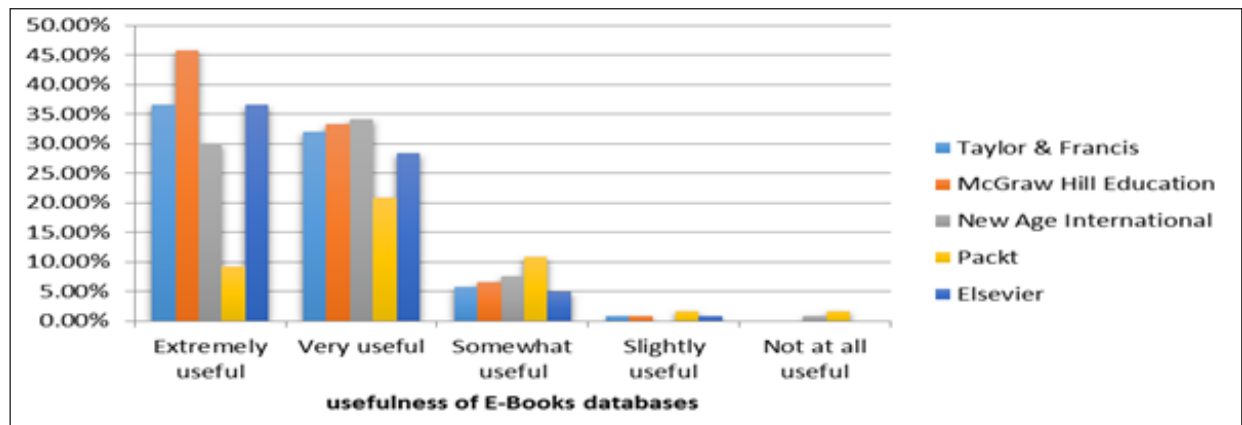
5

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

1-Extremely useful, 2 Very useful, 3. Somewhat useful, 4. Slightly useful, 5.Not at all useful

Graph 2.Usefulness of E-Journal Databases

Table 7.Usefulness of E-Books databases

S. No.	E-Resources	1	2	3	4	5
1	Taylor & Francis	44(36.66%)	39(32%)	7(5.83%)	1(0.83%)	--
2	McGraw Hill Education	55(45.83%)	40(33.33%)	8(6.66%)	1(0.83%)	--
3	New Age International	36(30%)	41 (34.16%)	9(7.5%)	--	1(0.83%)
4	Packt	11(9.16%)	25(20.83%)	13(10.83%)	2(1.66%)	2(1.66%)
5	Elsevier	44(36.66%)	34(28.33%)	6(5%)	1(0.83%)	--

Note- Respondents were given the option of providing multiple responses.

1-Extremely useful, 2 Very useful, 3. Somewhat useful, 4. Slightly useful, 5.Not at all useful

**Graph 3.Usefulness of E-Books Da ases**

Table-8 illustrates the various problems faced by respondents while access to e-resources. The majority of 45(37.50%) respondents feels that 'Lack of knowledge to use e-resources' is the main problem to access the e-resources, followed by 44(36.66 %) feels that 'lack of awareness about e-resources', 39 (32.50%) 'Slow internet bandwidth' while accessing e-resources, 32(26.66%) 'Problem in internet connection', 31(25.83%) lack of technical infrastructure, 20(16.66%) 'Lack of lab facility' & 'Lack of relevant information Sources' are the barriers in accessing e-resources. A very few faculties 7(5.83%) stats, that 'Lack of trained library staff' is a problem in accessing e-resources (Graph no. 4).

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

6

Table 8.Issues faced while accessing Electronics Resources

S. No.	Problems	No. of respondents	Percentage (%)
1	Lack of awareness about E-Resources	44	36.66
2	Lack of technical infrastructure	31	25.83
3	Lack of knowledge to use e-resources	45	37.50
4	Lack of lab facility	20	16.66
5	The problem in internet connection	32	26.66
6	Slow internet bandwidth	39	32.50
7	Lack of relevant information sources	20	16.66
8	Lack of trained library staff	7	05.83

Note- Respondents were given the option of providing multiple responses.
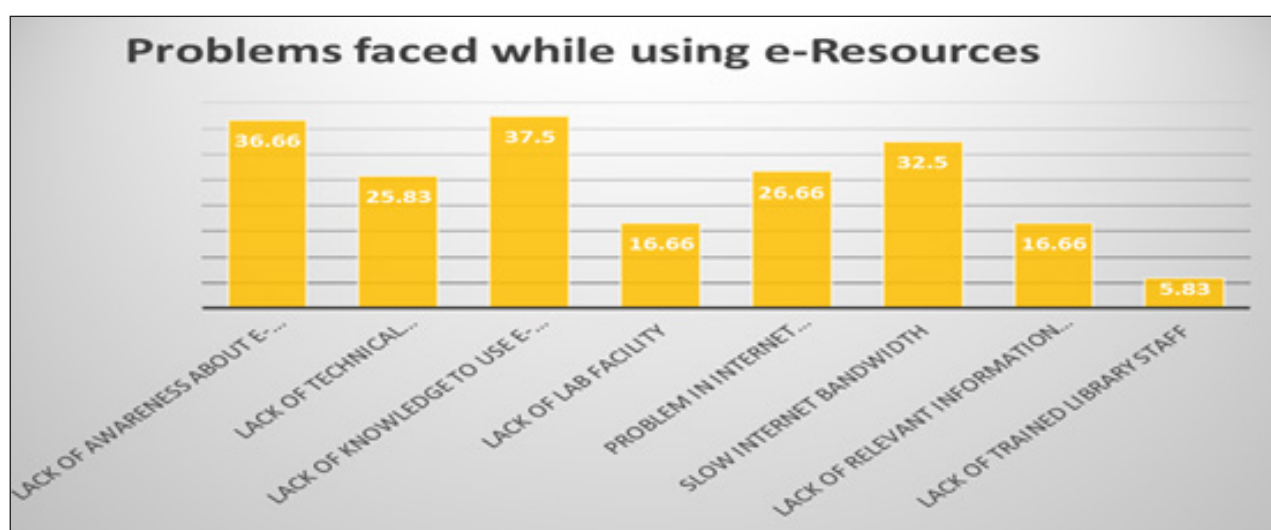
Graph 4.Problems faced while using e-Resources

Table 9.Impact on research output

S. No.	Positive impact	No. of respondents	Percentage (%)
1	Definitely	82	68.33
2	Probably	8	06.66
3	Possibly	30	25.00
	Total	120	100.00

Table 10.Level of satisfaction of e-resource databases

Sl.No.	Level of satisfaction	No. of respondents	Percentage (%)
1	Very satisfied	76	63.33
2	Satisfied	30	25.00
3	Ok	12	10.00
4	Dissatisfied	1	00.83
5	Very Dissatisfied	1	00.83
	Total	120	100

7

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

Table 11.Orientation program at regular intervals

Sl. No	Orientation Programme	No. of respondents	Percentage (%)
1	Yes	93	77.50
2	No	27	22.50
	Total	120	100

The above table 9 describes the level of positive impact on research output by accessing e-resources. The majority of faculties 82(68.33%) agreed that e-resources have a positive impact on the research output of the institution. Whereas, 30(25%) of the faculties feel that possibly e-resources have a positive impact on the research output of the institution.

Table-10. Indicates that most of the faculties 76 (63.33%) are very satisfied with e-resources provided by the Library, followed by 30(25%) of them are satisfied with e-resources and it is also observed that 12(10%) of the respondent's satisfaction level is ok and 1(0.83%) of the faculties are dissatisfied with e-resources subscribed by Library.

Table-11: describes that the majority of 93(77.50%) faculties responded as orientation program is required on e-resources at regular intervals, followed by 27(22.50%) faculties who say they don't need orientation program to use e-resources.

Findings

The major findings of the study are as follows

Study shows that majority of 99 (82.50%) respondents are aware of IEEE resources, whereas 11(09.16%) respondents are least aware of 'packt database'

Most of the respondents 115(95.83%) using e-resources for research purpose

The majority of respondents 47(39.16%) use e-resources 2-3 times a week. whereas 31(25.83%) of the respondents interested in using e-resources 'Daily'.

It is found that most of the respondents 93(77.50%) are prefer to use both 'print resources as well as e-resources'.

The majority of respondents 75(62.50 %) opined that they prefer to access e-resources through IP base

It's found in the study that, majority of respondents rated as E-Journal databases & E-Books subscribed by the NMIT Library are extremely useful

The majority of respondents 45(37.50%) feels that 'Lack of knowledge to use e-resources' is the main problem to access the e-resources

The highest number of respondents 82(68.33%) agree that definitely, e-resources have a positive impact on the research output of the institution

Respondents 76 (63.33%) are very satisfied with various e-resources provided by the library

A total of 93(77.50%) respondents stated that an orientation program is required in the use of e-resources at regular intervals.

Recommendations

The study examined the impact of available e-resources in terms of awareness and use with negligible constraints by the faculty members of Nitte Meenakshi Institute of Technology, Bengaluru.

Students and faculty members are using the IEEE database more compare to other resources. Hence, it's observed that users need training and orientation programs at regular intervals for quick access and effective retrieval of other available e-resources.

Respondents are very satisfied with various e-resources provided by the library. Though, users are shown interest in print resources compare to e-resources. The library needs to take initiative to switch user's interests from print to e-resources.

Users stated that lack of lab facility, lack of relevant information sources, and problem in internet connection are the problems in effective access to e-resources. Hence, addressing these issues on time may result in the effective use of e-resources.

Library staff should act as the bridge between the growing information needs of the user and various information resources. For which library staff needs to be updated regularly

Conclusion

Electronic information resources are enriching and accelerating academic, research, and developmental activities. It is so evident that users are switching gradually from print resources to e-resources since electronic resources are available 24/7 without any geographical boundaries.

The present study examined the use and awareness of electronic resources by faculties of Nitte Meenakshi Institute of Technology Library, Bengaluru. results of the study show that the majority of the faculty members are using e-resources to enhance teaching and research

Prathibha S N et al.
J. Adv. Res. Lib. Inform. Sci. 2023; 10(4)

8

activities in their areas. It is noticed in this study that users are satisfied with the various e-resources provided by the library but they need more training on available resources and timely assistance from trained library staff to make use of existing e-resources still more efficiently.

References

1. Archana (S N) and Humayoon (K S) E-Resources in the Engineering College Libraries of Kerala: Problems towards Sustainable Collection Development.
2. Aravind (S). Use of electronic resources in engineering college libraries: User study. Journal of Advances in Library and Information Science. 6, 1; 2017; 85-89.
3. Sivakami (N) and Rajendran (N) Awareness, Access and Usage of E-resources among Faculty Members in Arts and Science Colleges. Library Philosophy and Practice. 2019; 1-9.
4. Pitla (R S K) Kona (R) and Gowridevi (R) Use of Electronic Information Resources in Engineering College Libraries. Library Philosophy and Practice. 2020; 1-25.
5. Veeramallu (D). Kona (R). and Rudraksha (G). User Opinion and Satisfaction about Library Information Resources in Engineering College Libraries. 2021.
6. Jotangia (N K) and Gondalia (J P) Awareness and Usage of Electronic Resources by the Faculty and Students of self-finance Post Graduate engineering colleges affiliated to GTU: A Study. Journal of Web Engineering & Technology. 7, 2; 2020; 5-13.
7. Sawai (A B) and Chavan (S P) Awareness and use of e-resources in college libraries: A survey. Library Philosophy and Practice. 2020; 1-8.
8. Chandel (A S) and Saikia (M) Challenges and opportunities of e-resources. Annals of library and information studies. 59, 9; 2012; 148-154.
9. Iqbal Bhat and Mahesh (V) Use of E-resources by Faculty Members and Students. DESIDOC Journal of Library & Information Technology. 34, 1; 2014; 28-34.
10. Kumar, Sampath (B Y) and Kumar (G T) Perception and usage of e-resources and the internet by Indian academics. The Electronic Library. 28, 1; 2010; 137–56.