

# Are E-Journals Used Effectively in NIT - Goa?

Dr. Nilima R. Bankar

Librarian (Associate Professor), Shri. Muktanand College, Gangapur, Dist. Aurangabad (MS), India

Email: [nilima.r.bankar\[at\]gmail.com](mailto:nilima.r.bankar[at]gmail.com)

**Abstract:** *National Institute of Technology (NIT) Goa is one of the premier institutes of Government of India. It strives for quality education and facility to its students. NIT Goa Library is one of the instances which maintain all the facilities to its stakeholders. NIT Goa Library is continuous growing library as its expansion is going on as well as providing the best facilities to its users. The present research paper aims to find out what types of e-journals are available in NIT Goa and how it has been accessed by its stakeholders? Are the stakeholders of Library facing difficulties while accessing e-journals?*

**Keywords:** E Journals, Availability, accessibility and NIT Goa Library

## 1. Introduction

This Century is the era of Electronics and Information. Information is the air we breathe. This plethora of information is astounding, and one can't help but gaze in bewilderment. We have to capture it and make it available to our users. And this task is surmountable only via the Internet.

The library is a symbol of humanity's collective memory. Information and communication technology, the Internet, and the web have resulted in a scenario in which we have more and more data on the web, but less and less information and knowledge. In the digital world, new types of information exchange, such as e-books and e-journals, are emerging. E-journals are another well-known phenomenon.

Electronic journals are scholarly journals or intellectual publications that can be accessed by electronic transmission. They are also known as E-journals and electronic serials. In reality, this implies that they are generally made available on the Internet. As a result, in this current era of technology, it is rational to assume that practically everyone has access to E-journals, owing to the fact that the Internet, in its purest form, is essentially free. One only has to have access to any piece of technology that allows them to surf the web, such as personal computers, personal digital assistants (PDAs), or even mobile phones, which are now considered vital items in our daily lives.

### National Institute of Technology (NIT) Goa:

The National Institute of Technology Goa abbreviated as NIT Goa is the most premier technical Institute in the state of Goa. NIT Goa was established in the year 2010 along with 9 other NIT's established far and wide across India and it is declared as 'Institute of National Importance'. NIT Goa is an autonomous institute and functioning under the aegis of Ministry of Education (MoE), Govt. of India. NIT Goa can be rated as the best NIT among the newly established NIT's due to its striving excellence in academic and research activities

### NIT Goa Library

Library in NIT Goa serves as a beautiful treasure house of knowledge to the students, faculties and research scholars who are the members of this institution. It was established

in the year of 2011. It has the qualitative documents and books on Science, Technology, Engineering, Economics & Finance, Management, Professional Communication and Ethics other subjects. Apart from standard textbooks, the library has a rich collection of digital magazines, international journals, newspapers and other dailies.

The main features of NIT Goa Library include:

- Library housekeeping activities are done by using a library automation software.
- Library reminds and alerts to its users on their transactions and assists them in searching database to save the time.
- Library has an Electronic journal database which gives access to popular journal publishers like- ACM, Springer, IEEE Xplore and Science Direct.
- It has a repository of previous year institution question papers, Gate question papers and Digital Magazines.
- Library assists researchers in obeying the copyright rules and following the ethical pattern for research publications by providing the access of anti-plagiarism tool.

According to Pullinger, David and Brain, Schkel. (1990), "An E-journal is one whose input text may be entered directly by a computer or by other file transfer mechanisms in a machine-readable form, whose editorial processing is facilitated by a computer and whose articles are thus made available in the electronic form to readers"

## 2. Significance of this study

In this era of information explosion, an increasing number of publications are becoming Web-based. The majority of science and technology libraries have altered people's perceptions of their purposes and offerings. The goal of this study is to examine the challenges or constraints that various stakeholders at NIT Goa have while utilising e-journals, as well as to identify their recommendations for improving E-journal use for academic purposes.

Furthermore, in this era where the internet plays a pivotal role in our lives, various avenues that are available to us are often neglected, owing to the fact that we are overwhelmed by everything that is available. Hence this study also aims to highlight this negligence with respect to E-journals and also shed light on how effectively this leviathan resource is being utilised.

### 3. Objectives of this study

The main objectives of the present study are as follows:

- 1) To ascertain the level of awareness among various stakeholders about the existence of the E-journals and about E-journals subscribed by the library of NIT Goa.
- 2) To explore the use of electronic journals.
- 3) To find out the purpose and utilisation of E-journals by students, faculty and research scholars.
- 4) To analyse the frequency of usage of E-journals by students, faculties, and research scholars.
- 5) To find out the hindrances and problems encountered by the stakeholders while accessing and using E-journals.
- 6) To study the satisfaction level of users about availability and coverage of online journals.

The study explores the accessibility, availability, understand ability, sources, user friendly,

#### 1) Accessibility

Accessibility plays a vital role in determining how well E-Journals are being utilised at NIT Goa. Accessibility simply means “the quality of being able to be reached or entered”. It could also be construed as geographic accessibility, which suggests how easily the client can physically reach the resource.

E-Journals should be widely accessible to the students, faculty and other stakeholders. This could essentially be surmised as providing affordances to the stakeholders, such that they could make use of E-Journals with ease.

#### Availability

Availability is paramount in the analysis of E-Journal utilisation. Availability is often misconstrued as accessibility. But the difference, though subtle, is crucial.

The degree to which a system is operable in a given period or interval of time is called availability. Whereas accessibility speaks about the affordances and if the affordance allows an entrance into the system.

Availability encompasses when the resource can be accessed. Is the system for accessing E-Journals available throughout the day? Is it available only during the hours when the institute is open? These are some of the important questions that must be answered. Another important question would be that when the system is available, who has the prerogative to access it?

#### 2) Understandability

The stakeholders may have access to E-Journals and the systems to access E-Journals may even be available, but if the users do not understand E-Journals, it is all in vain. It is like attempting to throw a rock into the abyss to see if it hits the bottom.

Understandability is the ability to be understood, essentially meaning that when a stakeholder gets hold of an E-Journal, they not only blindly go through it but intently peruse through it, understanding what has been read. The various stakeholders must be provided with opportunities to equip

themselves with the knowledge necessary to understand E-Journals.

#### User Friendly

A system is said to be user friendly if its human users find it easy to use. If the affordances that have been provided to the user are not user friendly, it will deter the user from accessing the resource. The convenience of the user takes top priority. Hence the affordances provided must be simple and easy to use.

#### 3) Sources

Researchers require journals of different publishers that involve international and local publishers for their research activities. There are many hurdles often faced by educational institutions to provide access to the required journals as some may allow only limited members while others may charge a hefty payment for access.

#### 4) Membership

Membership in various e-journals is extremely crucial for an academician's life. Throughout his course of study or research, getting access to the required e-journals plays a vital role.

As a developing institution, providing membership to popular e-journal websites and gathering funds to provide the paid version of facilities to students and researchers have a pivotal role in their academics. More membership given to other less popular e-journal websites can ensure that the end-users get a chance to read more and thereby learn more seamlessly.

#### 5) Awareness

Every student pursuing an academic life should know about the importance of e-journals and how e-journals can be significant for their learning curve. From the start of their professional course life, they should be familiar and get accustomed and moreover, develop a habit to access e-journals in their day-to-day life.

Faculties and research scholars can encourage their students to read more e-journals when they publish new ones, or by making them do projects/assignments based on these papers.

#### 6) Notifications

Proper notification facilities to e-journals can improve the visibility of the journal hosted and it would indirectly give a boost for the readers to read any related journals. Getting the notifications via email/push notifications has to be ensured on an institute basis.

In the first stage of research, I personally approached some of the members of the college library and the labs to understand how E-journals are accessed. Some of the ideas furnished in this section is from the personal experiences after visiting. There are many avenues that can be used to access E-journals in the NIT-Goa campus, such as using college intranet, taking subscriptions, or using the openly available journals on the internet. Using college intranet requires that every student come to college and use their LAN ethernet cable. Another option would be to use the college WiFi and visit the digital library. The digital library

is a research database like IEEE Xplore Digital Library, ScienceDirect, SpringerLink, and ACM Digital Library. Each of the aforementioned digital libraries is accessible and pre-logged in when using the college intranet, allowing research scholars and students to access paid journals for free via the college intranet network. Although the IEEE Xplore digital library enables access to research articles via institute email IDs, NIT Goa has not yet subscribed and availed this service. If NIT Goa chooses to employ this service and offers institute email to every student, then every student will be able to read research papers without having to use the college intranet network, which will allow them to conduct research off campus as well.

The second stage of research involved interviewing a random population of stakeholders to understand their awareness about E-journals and their utilisation. The stakeholders involved were students, faculty and research scholars. This stage served as the cornerstone, on which the questionnaire of the next stage was devised.

Starting with the students, the random population that was interviewed was a mixed bag with respect to the notion of E-journals. While some seemed complacent as they downright denied having any knowledge about E-journals, some others seemed to have misconceptions about what E-journals are. Some students had a fair idea about E-journals and some others were treading a path that would lead them to publishing their own research papers some day. It wouldn't be a farce to state that the level of ignorance was alleviated by the fact that most students had a fair idea about E-journals. As a matter of fact, some were also using them on a regular basis.

On the other hand, coming as no surprise, the faculty and research scholars seemed rather adept with E-journals. They have indeed imbibed the true essence of E-journals. They not only access and use E-journals rather efficiently, but most have also published several papers on reputed E-journals. The survey was populated among BTech, MTech and PhD students of NIT Goa. The survey was successful and highly opinionated responses were obtained through the survey. 71.1% of BTech students, 25% of MTech students and 3.9% of PhD scholars participated in this survey.

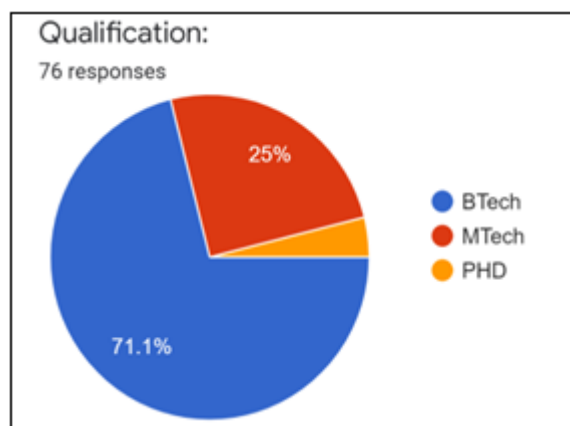


Figure 1: Qualification census of the participants

It is observed that 46.1% percent of students are aware about E-journals but 53.9% percent of students have no awareness

about E-journals in the institute. This data shows that a wide range of BTech students are not aware of E-journals compared to MTech and PhD scholars. It also shows that E-journals are less popular among students and need to be made more lucrative.

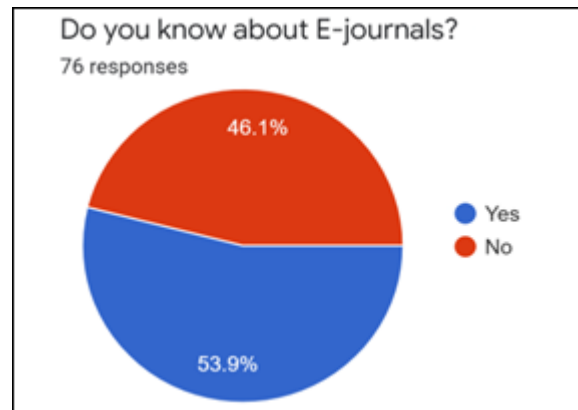


Figure 2: E-journal awareness response from participants

Regarding the usage of E-journals, different sections of people had varied opinions. Some of the people use E-journals daily, some often, and some had never used e-journals for their day to day research activities. 9.2% percentage of the participants always use E-journals in their day to day research activities and project works. 40.8% of students occasionally use E-journals from the institution and 50% had never used E-journals. It is debilitating that only 9.2% of students use E-journals on a daily basis, which shows the dearth of awareness and popularity among the student community. This will in turn have an adverse effect on the research output and the quality of publications. The gist is that this would lead to an abominable use of a valuable resource.

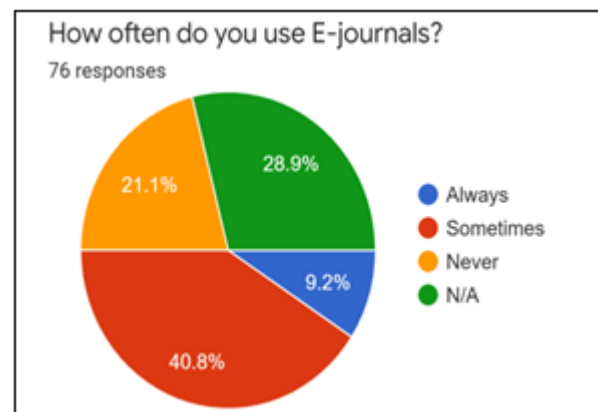


Figure 3

Ignorance and apathy seems to run deep as we pour over the fact that 65.8% of the participants in the survey have absolutely no idea what an E-Journal is. This general lack of awareness gives rise to several serious questions and the various implications that arise, need to be addressed.

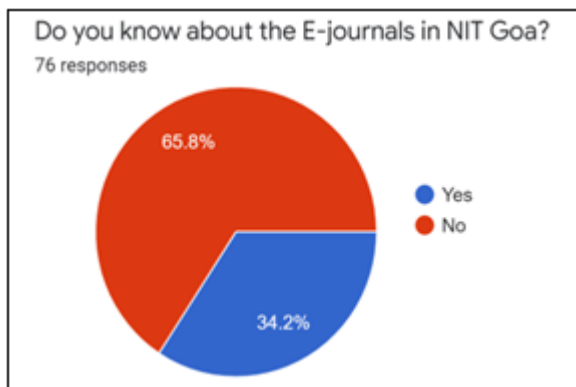


Figure 4

Of the people who are aware of E-journals at NIT Goa, it is alarming to discover that 61.8% of students do not use the library nor the intranet facility provided by the institution. This scenario arises partly due to lack of briefing about the resources in the campus, or the participants might not have unleashed the true essence of E-journals in their academic activities. 38.1% percentage of students access the library and utilise intranet facilities to access journals. This gap can be bridged by proper briefing about resources, awareness about significance of E-journals and encouraging them to do assignments and class work with the use of published top level journals.

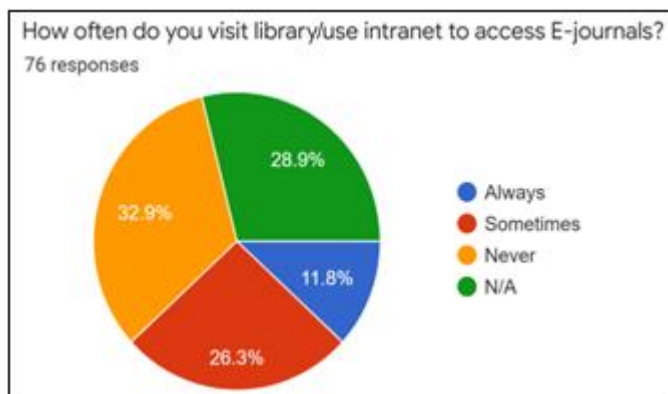


Figure 5

It is disappointing to observe that 43.4 % of the participants are not able to get the required journals in NIT Goa through library/intranet facilities for conducting their research activities. This will negatively affect the research output and acquiring funded projects to the institute. In order to produce quality research, the institute must allocate sufficient funds to provide membership in required journals, apart from the common funds for the scholars and students to expand knowledge without any inhibitions. When prompt resources are made available, it alleviates the burden of students, which will boost their productivity in actually solving the problem rather than wandering for accessibility to these resources.

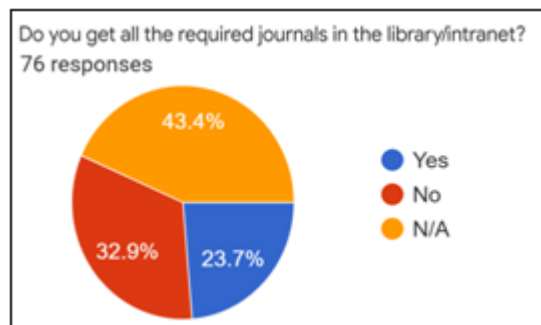


Figure 6

The participants reported that when E-journals are not available in library/intranet the following avenues were explored by them to access E-journals:

- Some of the participants used pirated E-journal accessing sources like Scihub to access the journals that they required.
- Some of the participants used freely available journals from the internet.
- Some of the participants used open source journals from the internet.
- Some of the participants only used college intranet to access journals.

When the question of how participants learned about E-journals was probed, the answers were unexpected. The belief that the most common source would be the faculty was shattered. On the contrary, the faculty contribution was a miniscule 9.2%. It was observed that the most common resource was actually the internet itself. It is refreshing to see how self-reliant the participants are. Furthermore, it shows that the generation has come ahead leap and bounds. 10.5 % learned about E-journals from the college website. Even the peers seem to have played a significant role in an individual's acquisition of this knowledge, and their contribution was a substantial 19.7%.

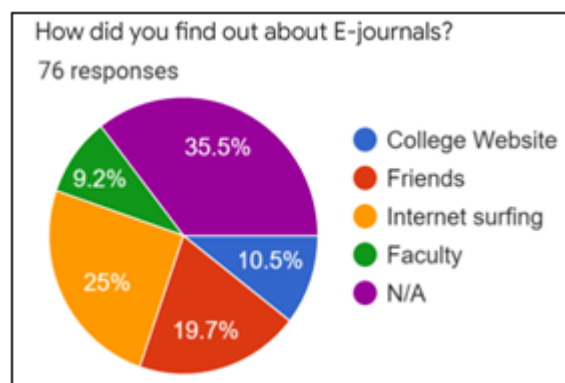


Figure 7

The dereliction of E-journals has several repercussions. On the other hand, usage of E-journals gives impetus to several outcomes. It is fortunate to observe the statistics, as 32.9% are using E-journals regularly for their ongoing research activities. This populace includes a higher proportion of PhD scholars and Postgraduate students. The majority of the usage was for Academic activities and Project related works.

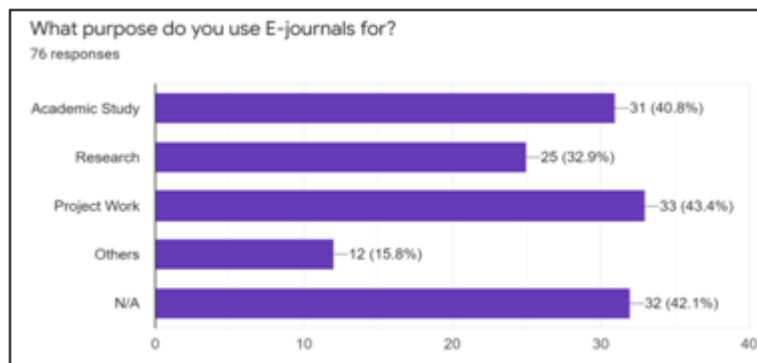


Figure 8

When it is enquired if the students get access to popular E-journal websites like IEEE, ACM, Springer etc in NIT Goa, 22.4% said they have access and the 35.5% said that they do not. The institution needs to provide access to these E-journals as it will help to better expose the students to a plethora of subjects and different types of E-journals.

The participants rated their ease of access to E-journals on a scale of 1-10. The distribution of the rating was highly varied. It was noted that 7.9 % rated a point of 9 for their ease of access. Around 60% percentage of the students found it difficult to access E-journals in the campus , and it showed the lack of availability. The distribution of the rating is displayed below:

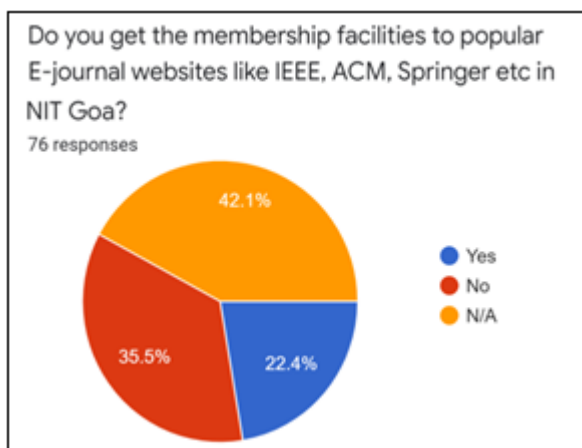


Figure 9

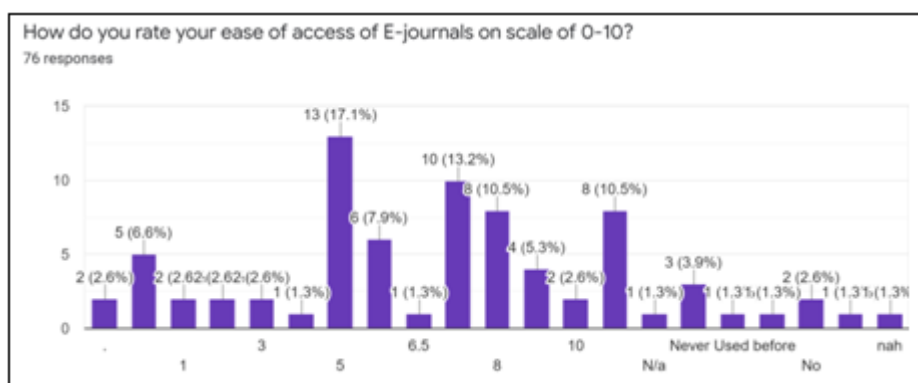


Figure 10

The students are asked if they were ever briefed about E-journals, and the results were astounding. It was observed that 32.1% percentage of students did not receive any briefing about E-journals during their course curriculum. There is a need to bridge this gap for a better utilisation of E-journals so that it can develop research interests in students and thereby generate quality research work. Proper induction sessions need to be conducted for the fresher-sophomore years to imbibe the awareness about the journal facilities in the campus.

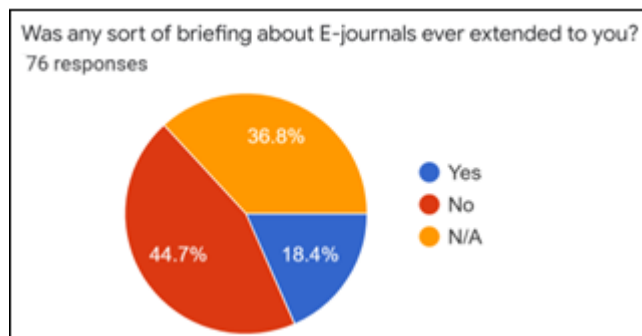


Figure 11

#### 4. Conclusion and Recommendations

The survey was conducted successfully among students, scholars and the faculty community in NIT Goa and both genuine and enthusiastic responses were obtained after the survey. The need to develop E-journal resources in the campus is crucial and will eliminate a big gap between the research community and fellow academicians of tomorrow.

The following recommendations are a culmination of responses from the participants of the survey and our own suggestions:

- Provision of proper and functioning Wi-Fi facility in hostels and library were requested by a proportion of the participants, as it will help students to spend more time surfing E-journals, books, lab works, etc.
- The speed of the internet should be high in the college, hostels and other places where the internet can be accessed.
- Journals covering new and upcoming research topics need to be made available to the students.
- There have been multiple suggestions from students to conduct awareness class so that all the student get to know more about E-journals
- It has been suggested that the awareness of E-journals can be increased by putting up posters on notice boards and by circulating new releases and interesting articles on WhatsApp groups and social media.
- Another popular recommendation was the creation of social media groups solely dedicated to spread E-journals only through admin access
- Creation of a mobile app to access E-journals was also an innovative suggestion by a portion of the participants

#### References

- [1] Barbara J. Bergman (2005). Looking at electronic resources librarians. Is there gender equity within this emerging specialty? *New Library World*, Vol.106 No. 1210/1211 pp.116-127.
- [2] Bozena Bed narek – Michalska (2002). Creasing a job description for an electronic resource librarian” *Library Management*, Vol.23 No.8/9,pp.378-383.
- [3] Jantz, R. (2001, June). E-books and new library service models: an analysis of the impact of E-book technology on academic libraries. *Information 20* (2) June 2001, pp.104-113. 11.
- [4] Jagtarsingh, (2001, December 10-13). Electronic journals: issues and implications. In: *digital libraries*:

dynamic landscapes for knowledge creation, access and management”. At 4th International Conference of Asian digital libraries. ICADL 2001. Bangalore, pp 430-433.

- [5] Kannappanavar, B.U., and Rajanikanta, S.T. (2008). Effective Use of E-Learning Materials in Medical College Libraries in Karnataka: A study”. *SRELS Journal of Information Management* Vol.45, No.4 December 2008, Paper AX p437-454.
- [6] Lohar, M.S. and Roopashree, T.N. (2006). Use of electronic resources by faculty members in B.I.E.T., Davanagere: a survey “ *SRELS Journal of Information Management* Vol.43, No.1, pp.101-112.
- [7] Pankaj Kumar Singh (2009). User Awareness and Use of Online Journals at the Jamila Millia Islamia Library: A Survey. *IASLIC Bulletin* 54(4), 2009, pp. 210-218.
- [8] Sajjad ur Rehman and Vivian Ramzy (2004). Awareness and use of electronic information resources at the health sciences center of Kuwait University. *Library Review*, Vol.53 No.3 pp.150-156
- [9] Singh S.P. (2004). Collection management in the electronic environment, *The Bottom Line: Man. Library Finances*, Vol. No.2 pp.55-60
- [10] Varatharajan, N. & Chandrashekar, M. (2007). Digital Library Initiatives at Higher Education and Research Institutions in India, *Library Philosophy and Practice*.
- [11] <http://nitgoa.ac.in/DisplayDeptPage.aspx?page=eq> 12. Accessed on 07<sup>th</sup> May 2022.
- [12] <http://nitgoa.ac.in/DisplayDeptPage.aspx?page=ee> Accessed on 09<sup>th</sup> May 2022.