



AN ANALYSIS ON TECHNICAL COLLEGE LIBRARIES WITH SPECIAL REFERENCE TO NAGPUR, MAHARASHTRA

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Abstract:

Technical college libraries play a vital role in supporting academic and professional education by providing access to specialized information resources, digital tools, and research facilities. These libraries serve as knowledge hubs, offering not only textbooks and reference materials but also journals, e-resources, databases, and technical documentation essential for engineering, science, management, and vocational studies. The integration of information and communication technologies has transformed their functioning, enabling online catalogues, digital repositories, and remote access to scholarly content. Technical libraries also act as learning resource centres where students, faculty, and researchers develop skills in information literacy, critical thinking, and lifelong learning. Despite challenges such as inadequate funding, lack of updated infrastructure, and uneven access to digital resources, technical college libraries continue to be indispensable in enhancing teaching, learning, and research. Strengthening their services through automation, networking and user-centric approaches ensures their relevance in a rapidly changing educational and technological environment. In this article, an analysis on technical college libraries with special reference to Nagpur, Maharashtra has been discussed.

Keywords: Technical, College, Libraries, Nagpur, Maharashtra.

INTRODUCTION:

Technical college libraries form the backbone of academic and professional education in science, technology, and vocational fields. (Anuradha, P., 2017) They serve as essential centres of learning that provide students, teachers, and researchers with access to knowledge resources in engineering, applied sciences, computer studies, and various technical disciplines. (Chand, S., 2020) Unlike general libraries, technical college libraries are specialized in nature, focusing on textbooks, reference works, journals, standards, manuals, patents, research reports, and digital databases that directly support technical curricula and industry-oriented training. (Dalve, D.P. & Nawathe, M.S.S., 2017) With rapid advances in science and technology, the role of these libraries has expanded beyond the traditional collection of printed books. Modern technical college libraries now integrate digital learning resources, online journals, e-books, open educational resources, and institutional repositories. (Patil, V. & Fernandes, J., 2017) They also adopt new technologies like library automation, digital cataloguing, and e-resource management systems to ensure quick access to information. (Raja, T. & Kennedy, I.R.K., 2019) Furthermore, these libraries play a crucial role in nurturing research aptitude, problem-solving skills, and innovation among students. (Tekale, R.B. & Dalve, D.B., 2017) They act as knowledge hubs where learners not only gather information but also develop critical thinking, technical writing, and project-oriented competencies. (Rathna, P. & Divyananda, K., 2018) In this sense, the technical college library is not just a support system but an integral part of the teaching-learning and research process. (Sharma, O. & Modak, A., 2019) Thus, the study of technical college libraries is significant for understanding how knowledge is organized, disseminated, and utilized in the context of modern technical education, while also reflecting on the challenges of digitization, resource management, and equitable access to

information. (Burhansab, P.A., Batcha, M.S. & Ahmad, M., 2020) The objective of this research was to analyse the technical college libraries with special reference to Nagpur, Maharashtra.

RESEARCH METHODOLOGY:

Study Area: The study area was Nagpur, Maharashtra. Five technical colleges were selected for this study.

Variables:

Dependent Variables: Gender, Students academic level, faculty members.

Independent Variables: Technical Colleges, Libraries.

Research Design: In this research, qualitative and quantitative research design were used.

Sources of Data: In this research, primary and secondary data were used.

Sampling Plan: In this research, simple random sampling was used.

Sample Size: Students (i.e. Under Graduate & Post Graduate students) and faculty members were constituted the population of the study. The sample size was 500 (Male: 250 and Female: 250).

Methodology:

The respondents were selected from the five technical colleges located at Nagpur, Maharashtra, India. Students and faculty members belong to the selected colleges, but primary data have been collected outside the college premises. After clearing the research objectives, the structured questionnaires were distributed in favor of each respondent. Sufficient time was given in favor of each respondent. Then, after collection of the sheets, these were preserved for further data analysis and interpretation.

Research Tools: In this research, structured questionnaires (5 Point Likert Scale sheet) tool were used.

Data Analysis and Interpretation: In this research, pie charts & SPSS software were used.

DATA ANALYSIS, INTERPRETATION, RESULTS AND DISCUSSION:

Personal Profile:

Table 1. Level of the respondent:

Level of the respondent	Respondents	%
UG student	300	60
PG student	100	20
Faculty member	100	20
Total	500	100

(Source: Primary Data, Survey)

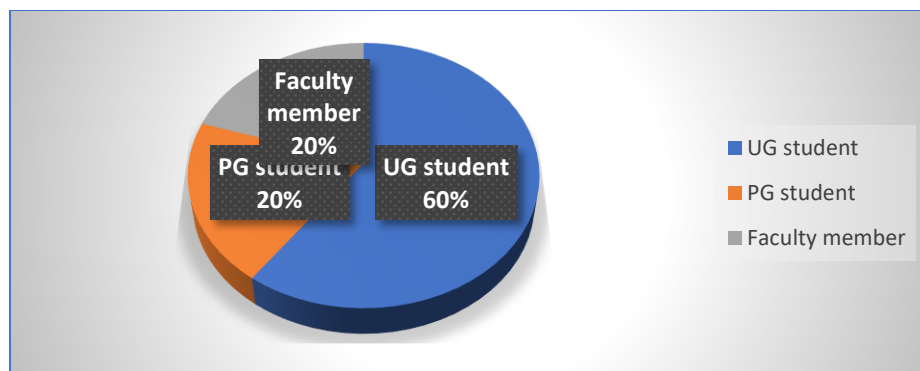


Figure 1. Level of the respondent (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

UG student: 60%

PG student: 20%

Faculty member: 20%

Table 2. Gender:

Gender	Respondents	%
Male	250	50
Female	250	50
Total	500	100

(Source: Primary Data, Survey)

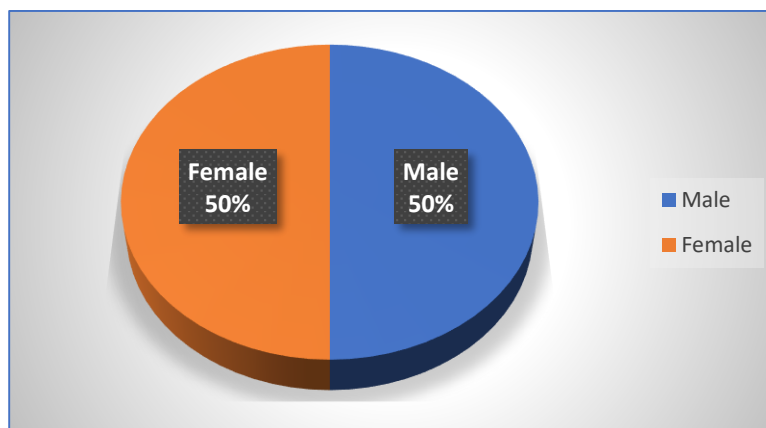


Figure 2. Gender (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Male: 50%, Female: 50%

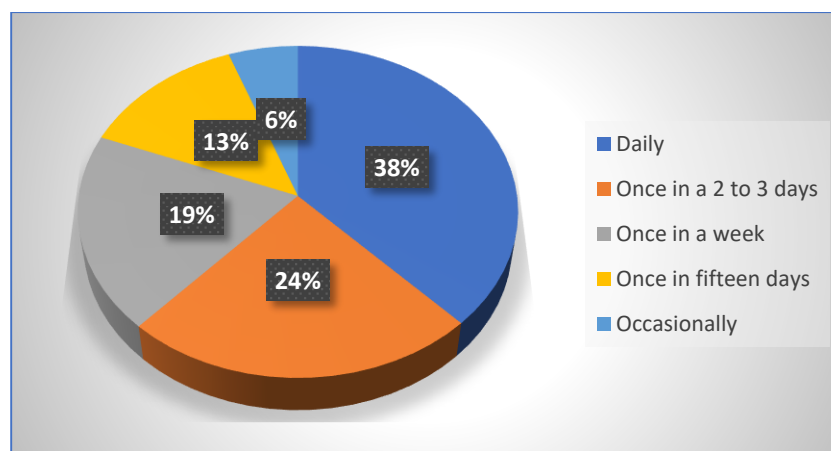
Technical College Libraries for Users:

[Abbreviations and Points: Strongly Agree (SA): 5 Points, agree (A): 4 Points, Neutral (N): 3 Points, disagree (D): 2 Points, Strongly Disagree (SD): 1 Point]

Table 3. Frequency of library visit:

Frequency of library visit	Respondents	%
Daily	189	37.8
Once in a 2 to 3 days	120	24
Once in a week	96	19.2
Once in fifteen days	67	13.4
Occasionally	28	5.6
Total	500	100

(Source: Primary Data, Survey)

**Figure 3. Frequency of library visit (%)**

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Daily: 37.8%

Once in a 2 to 3 days: 24%

Once in a week: 19.2%

Once in fifteen days: 13.4%

Occasionally: 5.6%

Table 4. The main purpose for visiting library is:

Main purpose for visiting library	Respondents	%
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To borrow and return books	177	35.4
Journals & Newspapers	54	10.8
Internet browsing	25	5
Others	18	3.6
More than 1 mentioned above	226	45.2
Total	500	100

(Source: Primary Data, Survey)

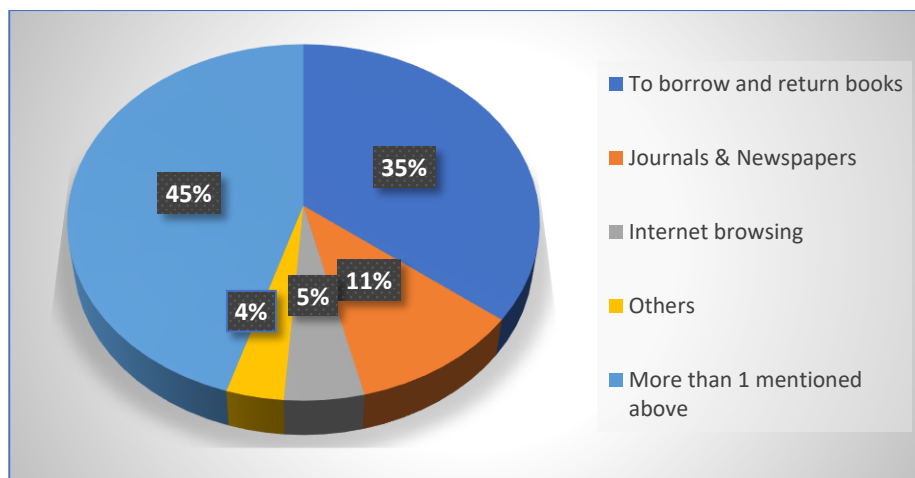


Figure 4. The main purpose for visiting library (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

To borrow and return books: 35.4%

Journals & Newspapers: 10.8%

Internet browsing: 5%

Others: 3.6%

More than 1 mentioned above: 45.2%

Table 5. Spend in the library per visit:

Spend in the library per visit	Respondents	%
Less than 1 hour	211	42.2
1-2 hours	209	41.8
2-3 hours	50	10
3-4 hours	21	4.2

4 hours above	9	1.8
Total	500	100

(Source: Primary Data, Survey)

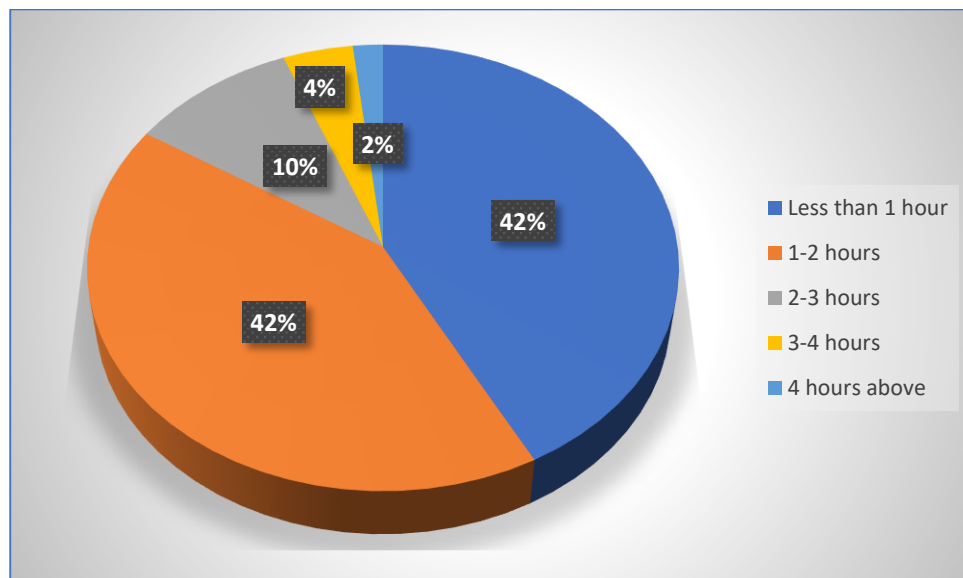


Figure 5. Spend in the library per visit (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Less than 1 hour: 42.2%

1-2 hours: 41.8%

2-3 hours: 10%

3-4 hours: 4.2%

4 hours above: 1.8%

Table 6. Satisfied towards library opening time:

Options	Respondents	%
Yes	376	75.2
No	124	24.8
Total	500	100

(Source: Primary Data, Survey)

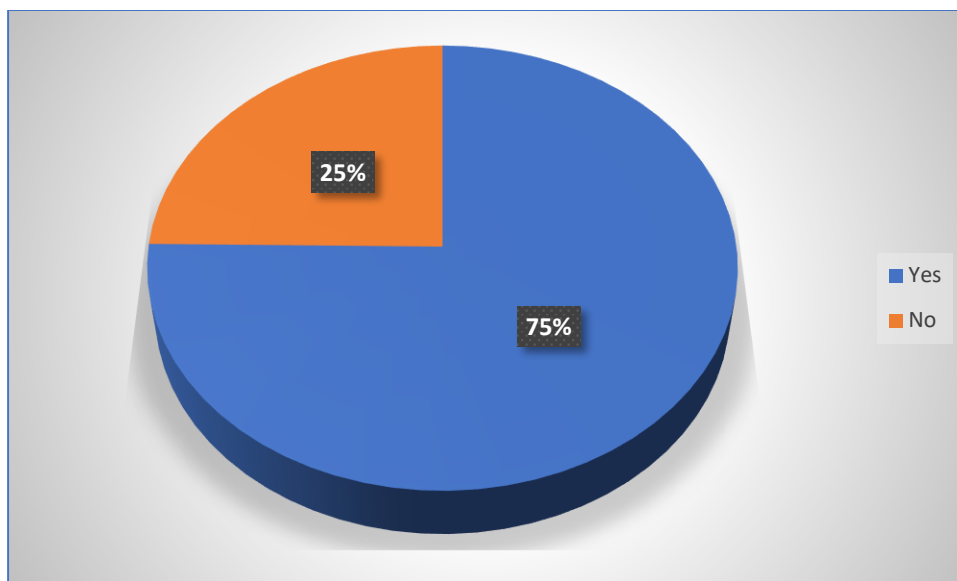


Figure 6. Satisfied towards library opening time (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 75.2%

No: 24.8%

Table 7. Sufficient reading space:

Options	Respondents	%
Yes	333	66.6
No	167	33.4
Total	500	100

(Source: Primary Data, Survey)

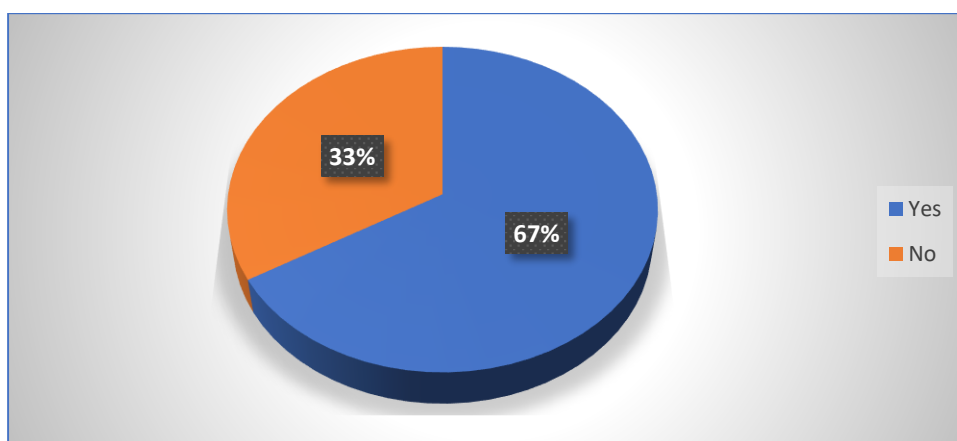


Figure 7. Sufficient reading space (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 66.6%

No: 33.4%

Table 8. Comfortable with physical facilities:

Options	Respondents	%
Yes	284	56.8
No	216	43.2
Total	500	100

(Source: Primary Data, Survey)

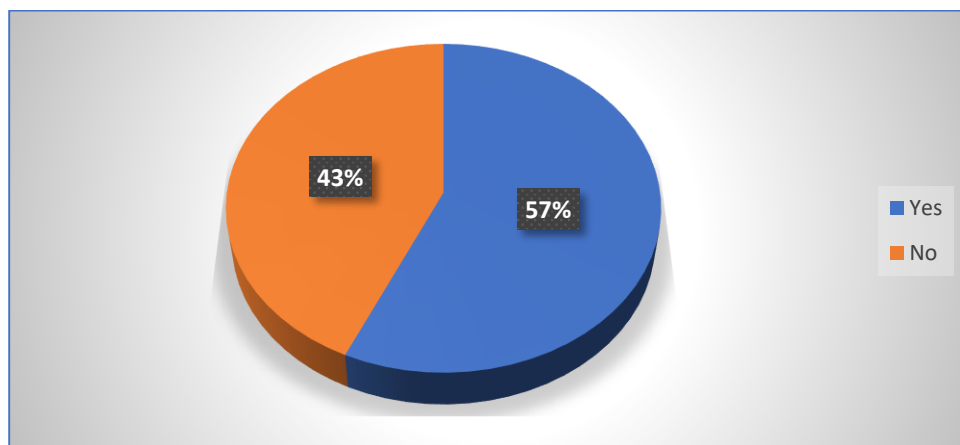


Figure 8. Comfortable with physical facilities (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 56.8%

No: 43.2%

Table 9. Satisfaction related to library services:

Options	Respondents	%
Yes	293	58.6
No	207	41.4
Total	500	100

(Source: Primary Data, Survey)

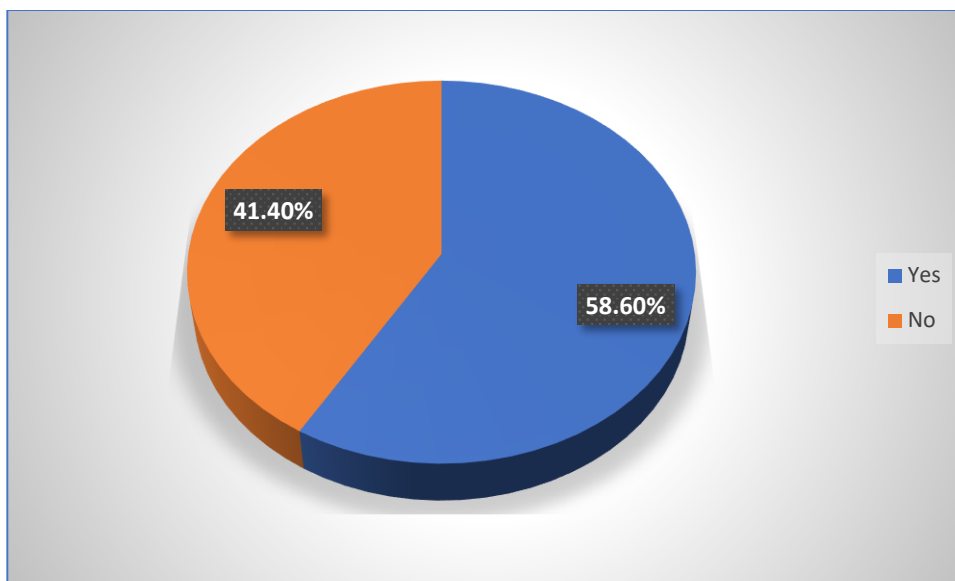


Figure 9. Satisfaction related to library services (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 58.6%

No: 41.4%

Table 10. Satisfaction related to catalogue & online requisition:

Options	Respondents	%
Yes	314	62.8
No	186	37.2
Total	500	100

(Source: Primary Data, Survey)

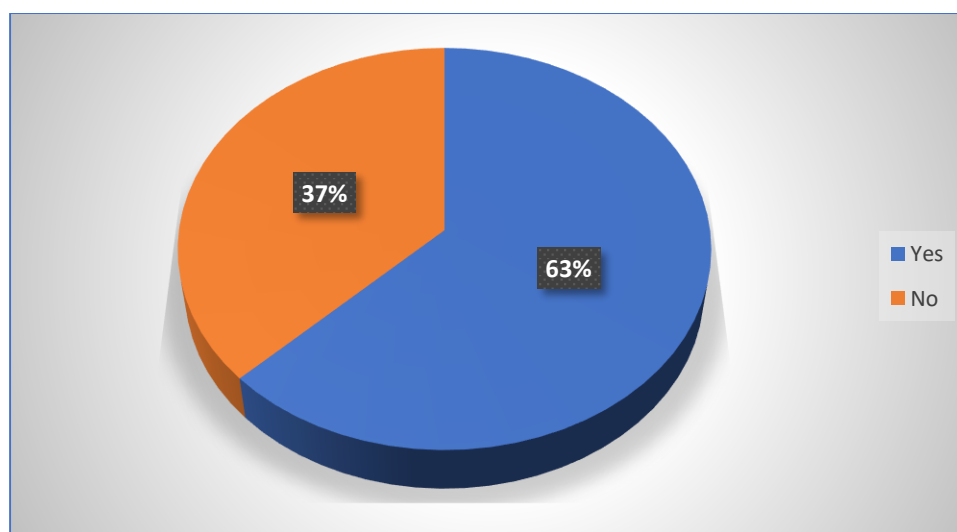


Figure 10. Satisfaction related to catalogue & online requisition (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 62.8%

No: 37.2%

Table 11. Satisfaction related to self-circulation:

Options	Respondents	%
Yes	288	57.6
No	212	42.4
Total	500	100

(Source: Primary Data, Survey)

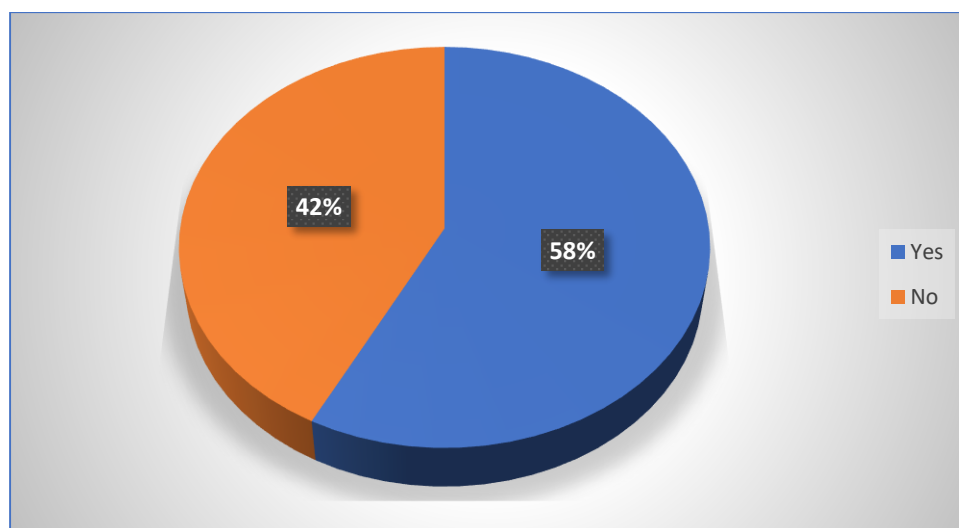


Figure 11. Satisfaction related to self-circulation (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 57.6%

No: 42.4%

Table 12. Satisfaction related to reading hall environment:

Options	Respondents	%
Yes	267	53.4
No	233	46.6
Total	500	100

(Source: Primary Data, Survey)

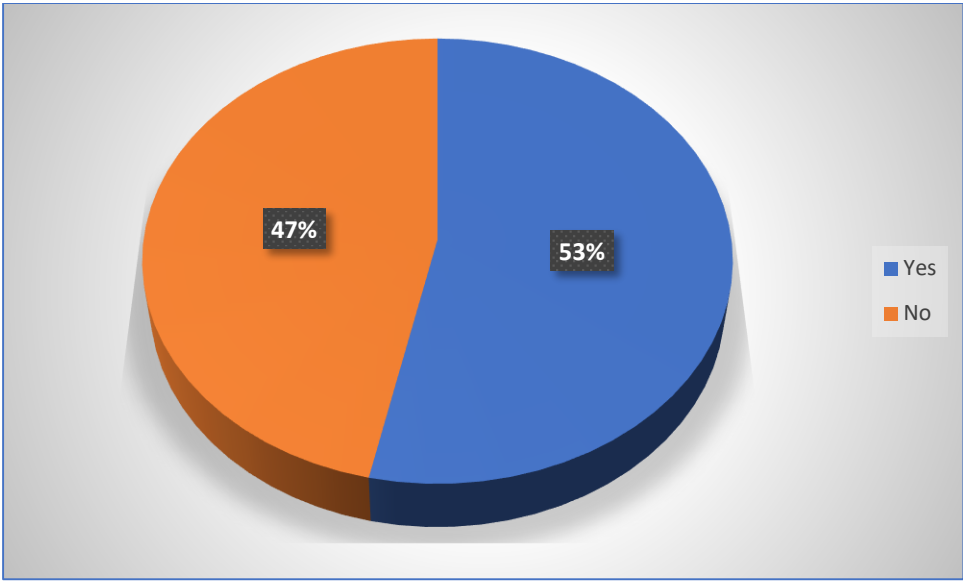


Figure 12. Satisfaction related to reading hall environment (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 53.4%

No: 46.6%

Table 13. Satisfaction related to internet facilities:

Options	Respondents	%
Yes	401	80.2%
No	99	19.8%
Total	500	100

(Source: Primary Data, Survey)

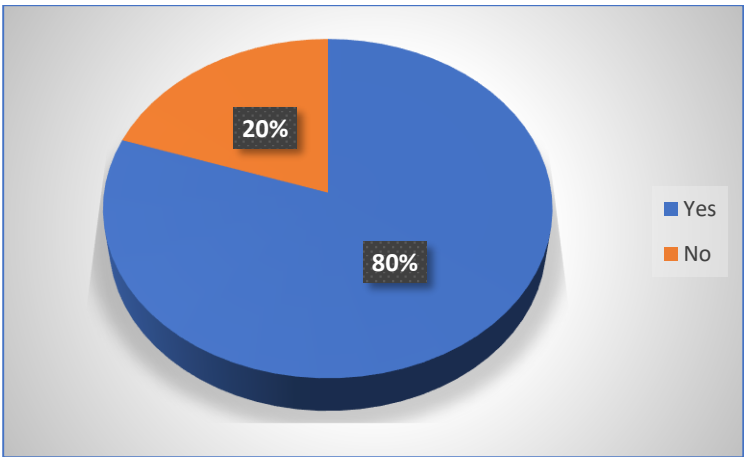


Figure 13. Satisfaction related to internet facilities (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Yes: 80.2%

No: 19.8%

Table 14. Books/ E-books:

Options	Respondents	%
Frequent	337	67.4
Not Frequent	163	32.6
Total	500	100

(Source: Primary Data, Survey)

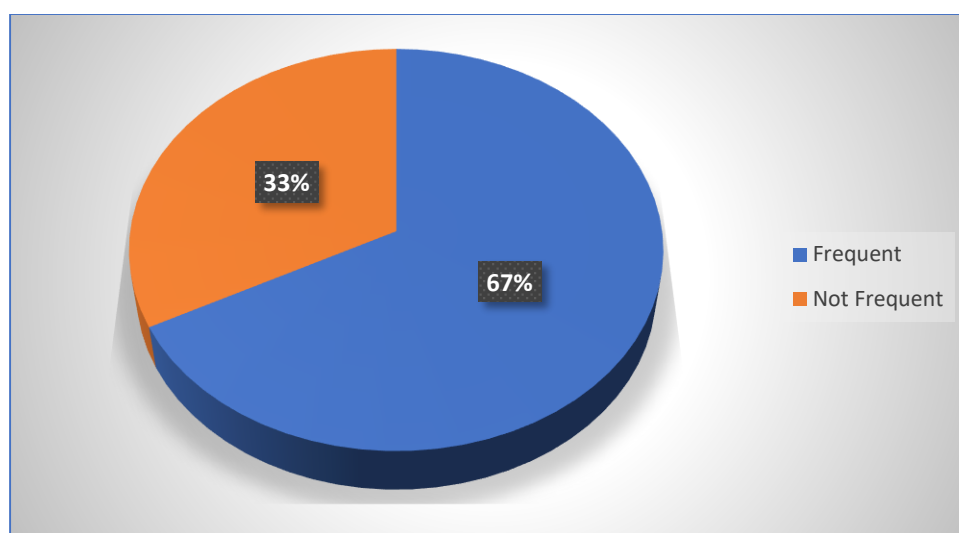


Figure 14. Books/ E-books (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Frequent: 67.4%

Not Frequent: 32.6%

Table 15. Database/Online:

Options	Respondents	%
Frequent	294	58.8
Not Frequent	206	41.2
Total	500	100

(Source: Primary Data, Survey)

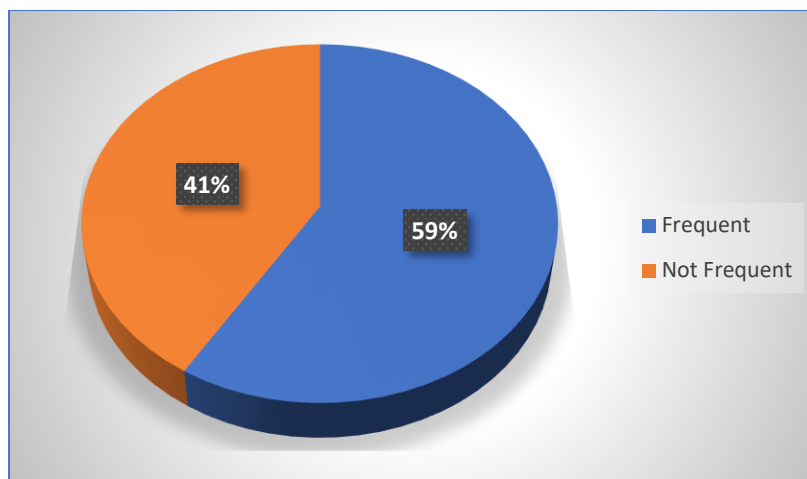


Figure 15. Database/Online (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Frequent: 58.8%

Not Frequent: 41.2%

Table 16. Journal/ E-journal:

Options	Respondents	%
Frequent	365	73
Not Frequent	135	27
Total	500	100

(Source: Primary Data, Survey)

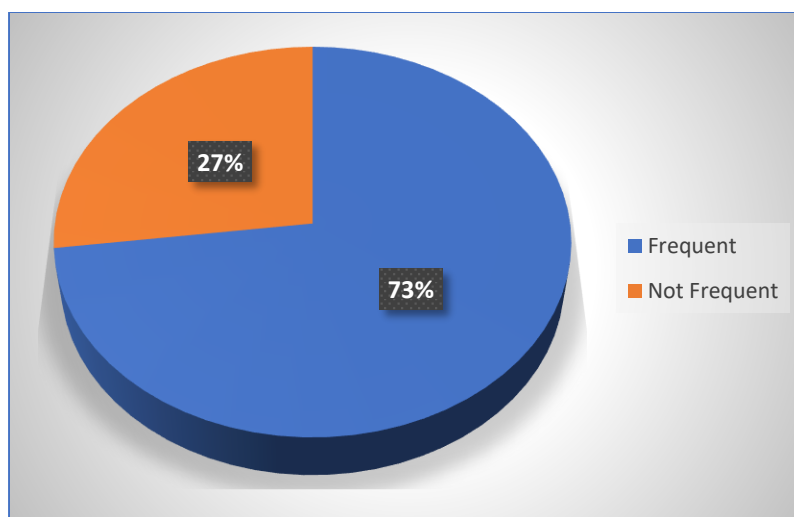


Figure 16. Journal/ E-journal (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

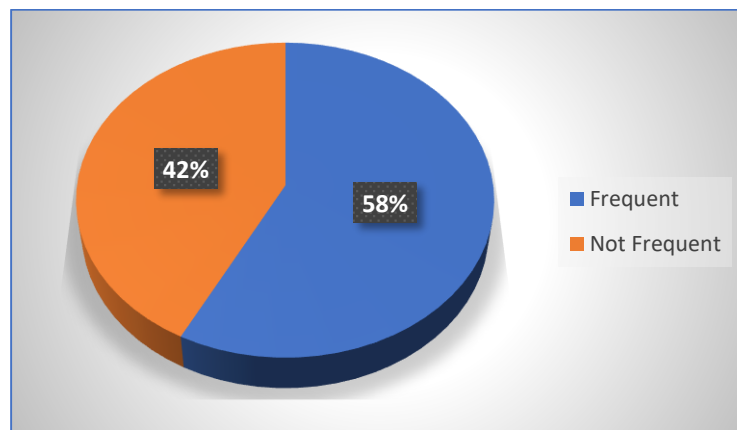
Frequent: 73%

Not Frequent: 27%

Table 17. Internet Website:

Options	Respondents	%
Frequent	288	57.6
Not Frequent	212	42.4
Total	500	100

(Source: Primary Data, Survey)

**Figure 17. Internet Website (%)**

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Frequent: 57.6%

Not Frequent: 42.4%

Table 18. Abstracting & Indexing:

Options	Respondents	%
Frequent	382	76.4
Not Frequent	118	23.6
Total	500	100

(Source: Primary Data, Survey)

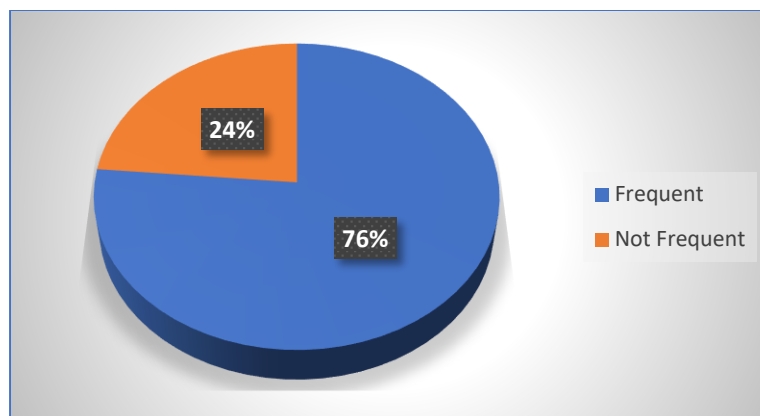


Figure 18. Abstracting & Indexing (%)

As per data analysis & interpretation, it was observed that the % of respondents as follows:

Frequent: 76.4%

Not Frequent: 23.6%

CONCLUSION:

Technical college libraries serve as the backbone of academic and professional learning by providing access to specialized knowledge, advanced technological resources, and updated information essential for technical education. (Trivedi, R., 2019) They not only act as repositories of books and journals but also evolve as digital learning hubs, offering e-resources, online databases, and modern information services to meet the needs of students, faculty, and researchers. The effective functioning of these libraries enhances teaching, learning, and research by fostering innovation, creativity, and technical competence. In the rapidly changing global knowledge economy, technical college libraries must continuously adapt to new technologies, user needs, and emerging trends in information management. Strengthening their infrastructure, digital services, and user-centric approach ensures that they remain integral to academic excellence and the professional development of future technocrats.

REFERENCES:

- Anuradha, P. (2017). The impact of digital technologies on academic libraries: challenges and opportunities. *IP Indian Journal of Library Science and Information Technology*, 2(2), 46-50.
- Burhansab, P.A., Batcha, M.S. & Ahmad, M. (2020). A Study on Library Resources with Services Satisfaction based on Library Users Affiliated Colleges to Solapur University. *International Journal of Academic Research & Development*, 6(2), 73-78.
- Chand, S. (2020). User satisfaction in educational institutions libraries: A case study of advanced institute of education. *IP Indian J Libr. Sci Inf Technol.*, 5(1), 8-11.
- Dalve, D.P. & Nawathe, M.S.S. (2017). Computerization of College Libraries affiliated to Dr. Baba Saheb Ambedkar University, Aurangabad (M.S.): A Study. *Journal of Advances in Library and Information Science*, 6(2), 114-119.
- Patil, V. & Fernandes, J. (2017). The Impact of Accreditation on Engineering College Libraries in Mumbai with regard to Infrastructure. *International Journal of Library & Information Science*, 6(6), 96-105.
- Raja, T. & Kennedy, I.R.K. (2019). Initiating the Ecosystem in College Libraries: An Overview. *Indian Journal of Information Sources and Services*, 9(S1), 16-18.

- Rathna, P. & Divyananda, K. (2018). Emerging Technology Skills among Library Professionals of Autonomous Engineering College Libraries in Karnataka. *Indian Journal of Information Sources and Services*, 8(2), 24–32.
- Sharma, O. & Modak, A. (2019). A Study of Library Automation in College Libraries Management. *Journal of Emerging Technologies and Innovative Research*, 6(4), 406-414.
- Tekale, R.B. & Dalve, D.B. (2017). Impact of Information Technology on Academic Libraries. *New Man International Journal of Multidisciplinary Studies*, 4(2), 239-244.
- Trivedi, R. (2019). Role of libraries in technical education. *IP Indian Journal of Library Science and Information Technology*, 4(2), 54-60.