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EFFECTIVE USE OF E-RESOURCES BY THE STUDENTS OF JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD COLLEGE OF ENGINEERING, JAGITHYALA, - A CASE STUDY

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ABSTRACT :
         The study mainly focused on usage of E-resources by the students of Jawaharlal Nehru Technological University Hyderabad College of Engineering, Jagithyala. A majority 49% of students expressed that they are using e-resources for their subject knowledge and in preparing their Project report 30% students are using e-resources. A Majority of the students 90% preferred E-Journals as their primary e-resources, 58% students using E-newspapers, 50% students using E-Books.ICT has broughtmodern changes in the performance of libraries and for a variety of applications in libraries. It helps libraries in creating database of their collections and formation them available for simple access to users within and outside the libraries through networks.

KEYWORDS : E-resources, ICT, AICTE, E-Journals, E-Books.

INTRODUCTION
         Most of the educational libraries are now playing attention to supply information services using most up to date information technology tools like CD, DVDs and other automated Online databases through E-Networks, Internet Today libraries are functioning under continuously changing environment and face a combination of multifaceted challenges like IT revolution, information explosion, network evolution, shrinking library budgets, escalating prices of documents, high level of user expectations, and information resources available in various media and so on. It provides a wide range of opportunities, which could tender solutions to these major challenges. Rapid advances in modern technologies have considerably enhanced the capabilities of storage, processing, communicating, sharing, retrieval, repackaging and managing the volatile growth of information effectively and economically in libraries.
         etc. Electronic services have made tremendous impact on the academic activities of the faculty, researchers and students. With the introduction of electronic services, significant transition could be seen in their approach and the way in which they seek information and the methods they employ for research and learning activities.
         A Profile of JNTUH College of Engineering, Jagithyala: The College was established in 2007.JNTUH College of Engineering Jagtithyala, It is situated at Kondagattu Anjaneyaswamy temple 2Km away from Jagithyal. The college has a vast campus sprawling over an area of 100 acres. JNTUHCEJ which aims to be an institute of excellence in training the students to meet the global needs is supported by highly experienced, well qualified, veteran professors drawn from research and industry.
         JNTUH College of Engineering JagithyalaLibrary: A Profile: The Library is caters to the needs of about 2300 users comprising Under-Graduate, Post-Graduate students, Teaching and Non-Teaching Staff. It has a collection of 19,000 books with 750 Titles, back volumes, pamphlets, standards, CD-ROM. The library

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subscribed to around 25 National & International Print Journals. The Digital Library has campus LAN connectivity through Computer Center. The library subscribed the data base such as AICTE,IEEE, ACM, &ASME.

Availability of E-Resources subscription by the JNTUH Jagithyal.

Name of E-resources	URL of E-resourcec
IEEE	http://www,ieeexplore.ieee.org
ASCE	http://scitation.aip.org/publication/myBrowsePub.jsp #ASC
ASME	http://www.asmedl.org
Science Direct (EE, ME, CS, IT &IS)	http://www.sciencedirect.com
Emerald	*http://www.uibsdehradun.com/library*

REVIEW OF LITERATURE:
1. Venkateswarlu and Chandrasekhara Rao(2016) said that E-resources are playing a vital role in disseminating information to remote users scattered across the globe. These web-based resources can be accessed and used with interruption via high bandwidth Internet connectivity and other infrastructural facilities.
2. Anjaiah and Nageshwara Rao(2015)found in their study that there is urgent need to provide e-resources to faculty to enrich knowledge which is need to development. The AICTE consortium e-resources such as E-books, E-Journals and E-articles, e-technical reports should be procured by the library which are most useful to the all the faculty members without any downloading problems.
3. Oyedapo and Abiodun (2013)carried out a survey on "The Use of Electronic Resources in Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria", examined issues like how   libraries and information centers are gradually shifting from print to electronic resources particularly in tertiary institutions around the globe.
4. Jaspal Kaur (2012). examined the use of electronic resources by teachers of degree colleges in Chandigarh. It indicated that the teachers of the colleges use search engines as a major source to access e-resources, the study recommends awareness programmes and training on web searching and information retrieval skills.
5. Okorie and Agboola (2012) investigated the advantages of e-resources as a means of easily and rapidly accessing of books, journals, magazines, thesis and images of various types that are now widely recognized. An important advantage of e-resources to academics is the increased accessibility to information sources that are current and relevant to research, learning and studying.
6. Thanuskodi and Ravi (2011) made an attempt to examine the usage of digital resources by 140 faculty and research scholars at M S University, Tirunelveli, It was revealed that majority of the faculty members were learning the required skills to use digital resources through self-study.
7. Kumar and Kumar (2010) examined in their study the 'User perception of Library and Information services in Agricultural science Universities in South India' which explored the results of the study that the respondents are aware of e-resources and also the internet
8. Gupta and Rawatani (2008) users faced problem while accessing e-consortium and lack of awareness of e-resources available. It was suggested that a training programme should be conducted regularly to improve the usage of e-journal consortium.

OBJECTIVES:
1. To find out the awareness about E- Resources of the users.
2. To identify the frequency of the users.
3. To find out the awareness and use of different types of electronic resources.

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4. To know the purpose and useof electronic resources.
5. To find out effective usage of e-resources in JNTUH College of Engineering Jagithyala.
6. To find out the problems faced by the users while accessing and using E-resources.
7. Suggest the recommendations for the improvement of e-resources and also development of library.

METHODOLOGY:

      For the present study, the survey method is adopted. A total of 150 Questionnaire were distributed to Under-Graduate students and Post-Graduate students of the JNTUH College of Engineering, Jagithyala. However, 120 (80%) questionnaires were received. The collected data were analyzed and presented in the following.

DATA ANALYSIS AND INTERPRETATION:

Table 1:The distribution of Questionnaire.

Category-wise	Questionnaires Distributed	Questionnaires Received	Percentage(%)
UG	100	83	83%
PG	50	37	74%
Total	150	120	80%

      Table .1 Represents the distribution of questionnaires and response rate. A total number of 150 questionnaires were distributed among the 100 Under Graduate students and 50 Post Graduate students. Out of 150, only 120 (80%) questionnaires were received, in this 120 respondents 83(83%) were UGand 37 (63%) were PG students.

Table 2:Awareness about E- resources.

Opinion	Users	Percentage(%)
Yes	92	76%
No	28	24%
Total	120	100%

      Table 2 shows that the majority of respondents 92 (76%) are using electronic resources and only 28 (24%) are not using them. The above analysis indicates that the users who are not using the e-resources either may not be aware of them or not interested in using them.

Table 3: Frequency of Using E- resources.

Frequency	Users	Percentage(%)
Daily	50	42%
Weekly	62	52%
Monthly	6	5%
Rarely	2	1%
Total	120	100%

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Data in table.3 reveals that a majority of the respondents 62 (52%) using of e-resources by weekly, followed by 50 (42%) respondents using daily, 6(5%) respondents using monthly and 2 (1%) respondents using of e-resources rarely.

Table 4: Purposes of using e-resources.

Description	Users	Percentage(%)
For Subject knowledge	49	41%
For Examination	22	19%
For Project-work	30	25%
For Communication	10	8%
Self Improvement	9	7%
Total	120	100%

Data in table-4 shows that a majority of the respondents 49 (41%) opinions that they are using e-resources for subject knowledge, followed by 30 (25%) respondents Said that they are using for Project-work, 22 (19%) respondents Said that they are using for examination, 10 (8%) respondents Said they are using for communication and 9 (7%) said that they are using e-resources for self improvement.

Table 5: Access and use of E-resources.

E-Resources	Users	Percentage (%)
ASME journals	26	22%
Elsevier's Science Direct	45	37%
J-Gate Consortia	69	56%
IEEE/IEE library online	109	91%
ACCESS Engineering	96	80%

Data in table.5 shows that a majority of the respondents 109 (91%) Frequently using IEEE/IEE, followed by 96 (80%) respondents preferred Access Engineering, 69 (56%) respondents using J-Gate Consortia, 45 (37%) respondents using Elsevier's Science Direct and 26 (22%) respondents using ASME journals.

Table 6: Use of full text e-resources / data bases.

E-resources	Users	Percentage (%)
E-journals	108	90%
E-books	61	50%
E-theses	38	31%
E-magazines	23	19%
E-news papers	70	58%
OPAC	52	43%

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Data in table.6 reveals that a majority of the respondents 108 (90%) preferred E-journals as their primary e-resources, followed by 70 (58%) respondents preferred e-newspapers, 61(50%) respondents preferred e-books, 52 (43%) respondents preferred OPAC, 38 (31%) respondents preferred e-theses, 23 (19%) respondents preferred e-magazines.

Table 7: Criteria of using e-resources.

Options	Users	Percentage (%)
Speed of Access	51	32%
More Information	32	20%
Easy Access	24	15%
Reliability	16	10%
Time Saving	37	23%

The above table-7 shows that a majority of the respondents 51 (32%) opinion that speed of access is the primary criteria to access the e-resources, followed 37 (23%) respondents Said that time saving is the criteria to prefer e-resources, 32 (20%) respondents feels that more information is the cause to access e-resources, 32 (20%) respondents Said that easy access is the criteria and 16 (10%) respondents Said reliability is the criteria of using e-resources.

Table 8: Difficulties face in accessing the E-Resources.

Difficulties	Users	Percentage (%)
Language Barriers	16	13%
Broken Links	42	35%
Instability of networks	24	20%
Information Overload	30	25%
Password	94	78%

The table.8 that majority of the respondents 94 (78%) feels that passwords is major issue in accessing e-resources, followed by 42(35%) of respondents saidthat Broken links is the issue in the accessing the e-resources, 30(25%) respondents said that information overload is the issue in the accessing the e-resources, 21(13%) feel Instability of networks is the barrier to access the resources respectively.

Table 9:User's Satisfaction on E-Resources.

User response	Respondents	%
Highly Satisfied	14	11%
Satisfied	72	60%
Not satisfied	34	29%
Total	120	100%

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Table.9 shows that a majority of respondents 72 (60%) that they are satisfied on e-resources available in their library followed by 34 (29%) respondentswere not satisfied with the available e-resources, 14(11%) respondentswere highly satisfied on e-resources available in their library.

FINDINGS:

From the above analysis the following findings were found:

1. It is observed that the majority of respondents 92 (76%) are using electronic resources and only 28 (24%) are not using them. The above analysis indicates that the users who are not using the e-resources either may not be aware of them or not interested in using them.
2. It is observed thata majority of the respondents 62 (52%) using of e-resources by weekly, followed by 50 (42%) respondents using daily, 6(5%) respondents using monthly and 2 (1%) respondents using of e-resources rarely.
3. A majority of a majority of the respondents 49 (41%) opinions that they are using e-resources for subject knowledge, followed by 30 (25%) respondents Said that they are using for Project-work, 22 (19%) respondents Said that they are using for examination, 10 (8%) respondents Said they are using for communication and 9 (7%) Said that they are using e-resources for self improvement.
4. It is shows that thea majority of the respondents 109 (91%) Frequently using IEEE/IEE, followed by 96 (80%) respondents preferred Access Engineering, 69 (56%) respondents using J-Gate Consortia, 45 (37%) respondents using Elsevier's Science Direct and 26 (22%) respondents using ASME journals
5. Majority of the respondents 108 (90%) preferred E-journals as their primary e-resources, followed by 70 (58%) respondents preferred e-news papers, 61(50%) respondents preferred e-books, 52 (43%) respondents preferred OPAC, 38 (31%) respondents preferred e-theses, 23 (19%) respondents preferred e-magazines.
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7. majority of the respondents 94 (78%) feels that passwords is major issue in accessing e-resources, followed by 42(35%) of respondents said that Broken links is the issue in the accessing the e-resources, 30(25%) respondents said that information overload is the issue in the accessing the e-resources, 21(13%) feel Instability of networks is the barrier to access the resources respectively.
8. It is shows that a majority of respondents 72 (60%) that they are satisfied on e-resources available in their library followed by 34 (29%) respondents were not satisfied with the available e-resources, 14(11%) respondents were highly satisfied on e-resources available in their library.

SUGGESTIONS:

Based on the study and its outcome, the following suggestions were made to improve the e-resources in the engineering college libraries.

1. There is need to make knowledge about E-Resources
2. There is urgent need to training for users in using the electronic resources and services and conduct training on information literacy programmes by the college at regular intervals.
3. There is very much need to avoid the downloading and password problems of articles from AICTE Consortium.
4. The INDEST –AICTE Consortium e-resources such as E-books, E-journals, should be procured by the library which are most useful to the all the users without any downloading problems.

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CONCLUSION:

This study show that Electronic Resources like e-journals, e-books, online databases etc., are playing a very significant role in disseminating information to distant users spread across the world. The usage of e-resources in engineering college libraries is very common and it's so important to know most up-to-date developments and innovations in the field of engineering and technology. It also exposed that greater part of respondents are needy on e-journals to get needed and related information for their course work. The e-journals are serving them very much in their working environment. The engineering college libraries need to be prepared with proper infrastructural amenities and also providing training workshops for efficient use of e-resources by library users of Engineering colleges.

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