A Bibliometric Study of Online Journal of Advances in Library and Information Science during the Period 2016-2020

Mr. Gautam A. Wani

Librarian Netaji Subhashchandra Science College Mulchera Ta. Mulchera, Dist. Gadchiroli (MS) 442707

Abstract:

This paper analysis on bibliometric study of the Journal of Advances in Library and Information Science (Online Journal) during 2016-2020 is carried out. 244 articles, and twenty issue were published in the journal during five (5) years covered. Highest number of (72) articles were published in 2017 and followed the lowest number of (23) article were published in 2020. The journal contained 2308 citations and average number of citation per article is 9. In authorship pattern, two authored citations are dominant than others and it is 56.14 %. This analysis has been taken through the various analysis techniques such as year wise distribution of articles, authorship pattern, major branches (Subjects wise) of library and information science, geographic scattering, average length of articles, different biographical sources of citations etc. At the end the study is result, discussion and concluded with some recommendations.

Keywords: Citation analysis, JALIS, Bibliometric Studies, Geographic scattering, Authorship Patter, Library and Information Science

INTRODUCTION:

Citation analysis is one form of Bibliometric study. It makes use of bibliographic references which are essential part of the primary scientific communication. The technique of citation analysis involves the process of collection, counting and analysis and interpretations of citations given in various types of literature and, thereby, helps in identification of significant sources of information, individuals, institutions and other aggregates of scientific activities. Citation analysis as a tool is used to identify the core references in a subject by counting the citations appended at the end of each scientific article. The author of a paper customarily presents references as authentic source of information having research value or to substantiate the point of view of ideas expressed in the cited paper.

BIBLIOMETRIC:

The term "Bibliometric" was first used by Alan Pritchard in 1969. Bibliometric is statistical analysis of written publication, such as books or articles. Bibliometric Methods are frequently used in the field of library and information science, including Scientometrics. It involves the analysis of a set of publications characterized by bibliographic variables such as author (s), the place of publication, the associated sub keywords, and the citations. It serves as a useful tool to the academic community to identifying most popular authors and potential publications. Bibliometric studies have helped librarians to use their meager resources in judicious selection of journals and other periodicals for their users.

In 1948, the great library scientist, S.R. Ranganathan, coined the term "Librametry", which historically appeared first and was intended to streamline the services of librarianship. Bibliometric is analogous to Ranganathan's librametrics, the Russian concept scientometrics, infometrics, and sub disciplines like econometrics, psychometrics, sociometrist, biometrics, techno metrics, chemo metrics, and climacterics, where mathematics and statistics are applied to study and solve problems in their respective fields. Scientometrics is now used for the application of quantitative methods to the history of science and overlaps with bibliometric to a considerable extent. (Thanuskodi, 2010)

Definition: According to **Paul Outlet in 1934** as "The measurement of all aspects related to the publication and reading of books and documents." According to **Alan Pritchard in 1969** as "The application of mathematics and statistical methods to books and other media of communication". <u>https://en.wikipedia.org/wiki/Bibliometrics</u>

For the purpose of the study the *Journal of* Advances in Library and Information Science of India was selected because it is very popular among India academic librarians and it opens great avenues for India LIS researchers to publish their research. The Journal of the Advances in Library and Information Science of India is a four issue per years an international peer-reviewed journal published by JALIS, Tamilnadu (ISSN: 2277-2219).

The main aim of the Journal of Advances in Library and Information Science (JALIS) is to publish original research articles, and studies that describe the latest research and developments in the area of library and information science. The journal publishes article based that are judged by critical reviewers, to make substantial contribution in the field of LIS. The journal covers all area of Library and Information Science, technology and interdisciplinary research.

The article reports the results of citation analysis of "Journal of Advances in Library and Information Science (An International Peer-Reviewed Journal - Online –ISSN: 2277-2219) journal published during the period 2016-2020.

REVIEW OF LITERATURE:

During the last few decades, many articles have addressed the bibliometric aspects of journals in many fields across the world. Some of the particular studies are; K. Kumar & Reddy (2012), Ramesh Kuri & Venugopal Hajje (2014), Jaba Moni Das & Dipen Deka (2020), Swapan Kumar Patra (2014), Sinnarkar, (2003), Gooden (2001), Das and Sen, Deshmukh (2011), Garg ,K. C. & Bebi (2014).

According to **K. Kumar & Reddy** (2012) This study Citations in Master's degree dissertations submitted to the Department of Library and Information Science, Sri Venkateswara University, Tirupathi during the period 2000 - 2007, were analyzed for finding possible relationships between citing, citing articles and bibliographic forms. Frequency and percentage distributions (presented in charts, tables and graphs) and measures of central tendency were used to analyses data. Findings showed that journals were the most utilized reference materials in the dissertations. Also, library science in general had the highest number of citations followed by library management and cataloguing. The lowest numbers of citations were from education,

literature and social sciences respectively. The findings from this study could serve as a user study with implications for collection, development and user services designing in libraries.

Ramesh Kuri & Venugopal Hajje (2014) this study analyses the citations cited in the "Pearl" Journal during 2009-2011. This analysis has been taken through the various analysis techniques such as Authorship pattern, Domain wise distribution of citations, Age of citations, most prominent journals cited and different sources of citations etc. At the end the study is concluded with some recommendations.

Jaba Moni Das & Dipen Deka (2020) this study applies the citation analysis method to analyze Library and Information Science (LIS) doctoral theses submitted to Manipur University during 1989-2017. A total of 2,725 citations appended to 27 LIS doctoral theses examined for bibliographic forms, authorship pattern, and their collaboration level, chronological-wise distribution, the applicability of Bradford's law, rank-wise list, core journal list, country-wise list. The study finds that journals are the most cited resources, followed by books. Single-authored works are found dominant in both journal and book citations. The country-wise distribution of journals reveals that 412 citations (38.52%) were from India, followed by the UK with 275 citations (25.74%) and the USA with 271 citations (25.37%). Swapan Kumar Patra (2014) this study Indian library and information science (LIS) journals are not indexed in Web of Science (*WoS*) database and lately Scopus® database of Elsevier B.V. has indexed three Indian LIS journals. Hence, Google Scholar (GS) is the only available global database for the citation analysis of Indian LIS journals. Based on GS, this study has traced the citation and authorship patterns of selected LIS journals. Although, GS covers wide spectrum of scholarly literature worldwide, this study found that Indian LIS journals have low visibility even in GS database. In terms of citations, multiple-authored articles generally got more citations than the single-authored articles. This study suggests LIS researchers to increase collaborations for better visibility of their research.

Sinnarkar, (2003) **a** citation database of scientists belonging to National Environmental Engineering Research Institute has been developed in CDS-ISIS for the creation of an institutional database of citations. The study, suggests that creation of such institutional databases can be a step towards the creation of an Indian Science Citation Index.

Gooden (2001)28 studied 30 dissertations and generated a total of 3,704 citations. It was found that Journal articles were cited more frequently than monographs: 85.8% of the citations were journal articles and 8.4% of the citations were monographs.

Das and Sen (2001) **29** analyzed 1049 citations appended to 34 research articles of *Journal of Biosciences*; 2000. It was found that out of the total citation, journal articles comprises 85.89% and monographs 10.1%.

Deshmukh (2011) this studies the Analysis of 4141 citations appended to articles in volumes 44 to 57 of Annals of Library and Information Studies shows that the source journal is the most cited. The half-life of LIS literature is found to be 9 years for journals and 14 years for books respectively. The core periodicals as per the 4141 citations have been listed according to the productivity.

Garg ,K. C. & Bebi (2014) The studies the analysis of the number of articles published in Annals of Library and Information Studies (ALIS) and DESIDOC Journal of Library and Information Technology (DJLIT) during 2010-2013 and the citations obtained by these articles during 2010-2014 (April) using Google. The study develops immediacy index and impact factor of the two journals, besides, identifying the highly cited authors/papers. Findings reveal that DJLIT published more papers than ALIS and also received more citations.

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

However, citation per paper for both the journals is almost equal. DJLIT have a better immediacy index than ALIS. Impact factor of both the journals was less than one in 2012; however, it increased in 2013 and was more than one in 2013.

OBJECTIVES:

The specific objectives of the present study are to know

- 1. To make an analysis of article citations published in Journal of Advances in Library and Information Science.
- 2. To study the citation pattern of articles.
- 3. To study the year wise distribution of articles and the average number of contributions per volumes.
- 4. To examine the authorship patterns
- 5. To examine the year Wise Distributions of Citations
- 6. The distribution of citations in the subjects wise of library and information science.
- 7. To study the Geographic scattering of cited journals.
- 8. To examine the average length of articles.
- 9. To investigate the various bibliographical sources cited by authors.

SCOPE AND LIMITATION:

The scope of the present study is restricted to the field of library and Information science research. The source journals selected for the study was "Journal of Advances in Library and Information Science (An International Peer-Reviewed Journal - Online –ISSN: 2277-2219) " an important vehicle of library and Information science Research. All the volumes of the journal published during the period 2016-2020 (i.e. 05 years) have been taken up for the study.

METHODOLOGY:

For the purpose of this study, the "Journal of Advances in Library and Information Science (An International Peer-Reviewed Journal - Online –ISSN: 2277-2219) has been selected as the source journal. For the analysis of the study, Five volumes / Twenty Issue (V-5, I-20) containing 20 issues of "Journal of Advances in Library and Information Science " published during the year 2016 to 2020 have been taken up for evaluation. Twenty issues pertaining to five volumes from 2016 to 2020 were scanned and relevant details of the citations at the end of each place were noted for the study.

The details with regard to each published article such as number of articles in each issue of the journal, number of authors, name of authors, place of authors, number of references and their forms, number of pages, etc., were recorded and analyzed for making observations. The data were collected; organized and analyzed using MS-Excel spreadsheets. The recorded data was tabulated for analysis. The tables and graphs were generated in accordance with the objectives of the study. The gathered data after due scrutiny, were tabulated and processed for analysis and subsequent interpretation.

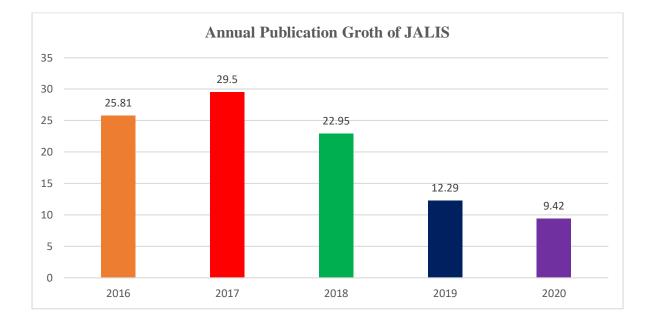
DATA ANALYSIS:

Year wise distributions:

Above the Table No, 1 shows the overall Year wise distributions of articles to the Journal of Advances in Library and Information Science during the period 2016-2020. The table above reveals the number of articles published per volume of a year. Among total of 244 articles of all selected volumes Majority 72 (29.50%) of articles have come in Vol-6 (2017); followed to this the number declined to 63 (25.81%) in Volume 5 (2016), 56 (22.95) in Volume 7 (2018), 30 (12.29%) in Volume 8 (2019) and 23 (9.42%) in Volume 9 (2020) respectively.

Sir No.	Year of Publication	Volume No.	Total No Issue	No. of Articles	Percentage%
1	2016	5	4	63	25.81
2	2017	6	4	72	29.50
3	2018	7	4	56	22.95
4	2019	8	4	30	12.29
5	2020	9	4	23	9.42
,	Total No.	5	20	244	100

Table No.	1	Number	of	Article	per	Years
-----------	---	--------	----	---------	-----	-------



Volume-wise distribution of articles:

Table No. 2 Number of Article per Issue

Table No. 2 shows the overall issue wise distributions of articles to the Journal of Advances in Library and Information Science during the period 2016-2020. The table above reveals the number of articles published per issue, per volume of a year.

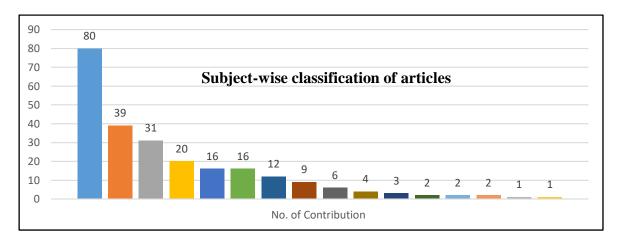
Year	Ν	lume No.	А	rticle/Co	er of the ontribut ch issue	Total No. of	Percentage	
		Fotal sues	1	2	3	4	articles	%
2016	5	4	17	15	14	17	63	25.81
2017	6	4	15	15	18	24	72	29.50
2018	7	4	25	14	7	10	56	22.95
2019	8	4	6	8	8	8	30	12.29
2020	9	4	4	5	7	7	23	9.42
Tota	1	20	67	57	54	66	244	100

Subject-wise classification of articles:

Subject wise distribution of cited works by authors in this journal is presented in the table above. The literature used by authors scattered among various subjects and disciplines. The authors consulted multidisciplinary literature in their research. The literature covered subjects like Classification/Cataloguing, Knowledge management, Information Literacy, Bibliometric Studies, Library automation, ICT, Library Management, and LIS Education, Webometrics. Content analysis. Citation analysis, Scientometric studies, Knowledge management, Information Seeking Behavior etc. The table No. 5.5 shows it could be seen from a scrutiny of the table that a total of 244 contributions are spread over 16 subjects. It could be seen that the highest number of 80 (32.78 %) Others LIS Domains, followed by 39 (15.98) Scientometric studies, 31 (12.70%) E-Resources, 20 (8.19%) Bibliometric studies, 16 (6.55%) Information and Communication Technology (ICT) & Library Resources & Services, 12 (4.91) Information Seeking Behavior, 9 (3.68%) Citation Analysis, 6 (2.45%) Information Literacy, 4 (1.63%) Collection Development, 3 (1.22%) LIS Education, 2(0.81%) Library Automation, Content Analysis, Webometric studies, and last Library Management, Knowledge management 1 (0.40%).

Table No. 3 Subject-wise classification of articles

Sl. No	Subject Domains	No. of Contribution	Percentage %				
1	Others LIS Domains	80	32.78				
2	Scientometric studies	39	15.98				
3	E-Resources	31	12.70				
4	Bibliometric studies	20	8.19				
5	Information and Communication Technology (ICT)	16	6.55				
6	Library Resources & Services	16	6.55				
7	Information Seeking Behavior	12	4.91				
8	Citation Analysis	9	3.68				
9	Information Literacy	6	2.45				
10	Collection Development	4	1.63				
11	LIS Education	3	1.22				
12	Library Automation	2	0.81				
13	Content Analysis	2	0.81				
14	Webometric studies	2	0.81				
15	Library Management	1	0.40				
16	Knowledge management	1	0.40				
	Total 244						



Citation Authorship Pattern:

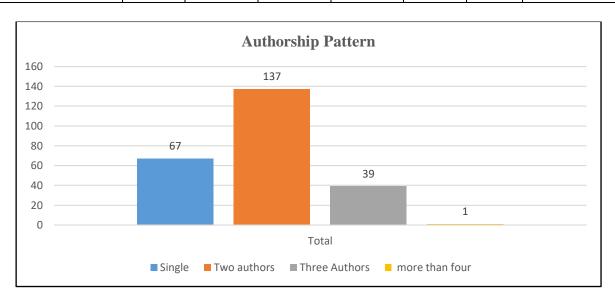
The study of authorship pattern and productivity is a significant factor in scientometric analysis. It has necessitated concentrating on the authorship pattern with a view to analyze the magnitude of research contribution in any discipline in general and journal namely Journal of Advances in Library and Information Science in particular. Table-5 shows the details about the authorship pattern. In above the table No. 5.4 indicates that majority of authors preferred to publish their research results in two authorship mode 137 (56.14)

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

%) followed by single authorship mode (27.45 %) and three authorship mode (15.98 %) while, articles published more than four and more than four authors (1 articles, 0.40 %) were quite negligible.

A with our chim		Y	Tatal	Percentage			
Authorship	2016-5	2017-6	2018-7	2019-8	2020-9	Total	%
Single	15	22	16	9	5	67	27.45
Two authors	39	37	32	16	13	137	56.14
Three Authors	09	13	7	5	5	39	15.98
Four and more than four	00	00	1	00	00	01	0.40
Total	63	72	56	30	23	244	100

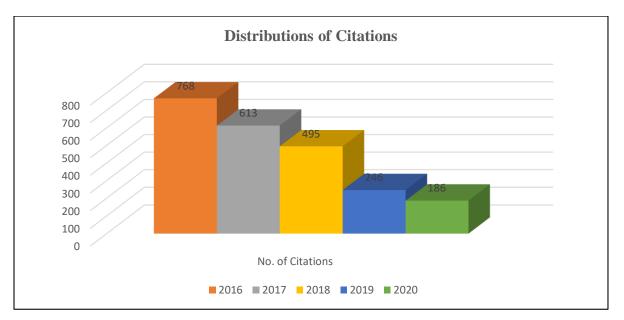
Table No. 4 Authorship Pattern



Distributions of Citations:

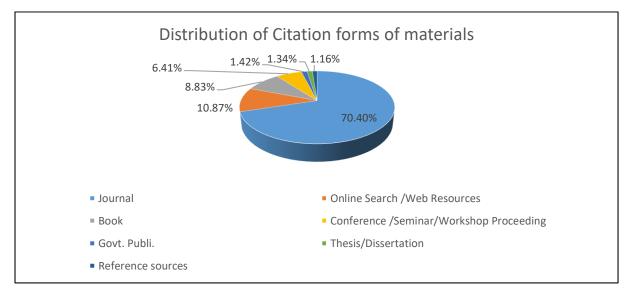
Table No. 3 shows the volume wise distribution of articles, the corresponding total number of citations and the average number of citations per articles. It is found that there is a total of 2308 citations distributed over 5 Volumes and 20 issues carrying a total of 244 articles. It is found that the rate of citations of articles has witnessed a decreasing trend. The lowest number of average citations per articles is found in the years 2020. (Nearly 8-citation per article) and the highest number of average citations per articles is reported in the year 2016 (12 citation per articles).

Year of	Volume	No. of	No. of	Average Citations Per	Percentage%		
Publication	No.	Articles	Citations	Contributions	Reference	Percentage	
2016	5	63	768	12	768	33.27	
2017	6	72	613	9	613	26.55	
2018	7	56	495	8	495	21.44	
2019	8	30	246	8	246	10.65	
2020	9	23	186	8	186	8.05	
Total No.	5	244	2308	9	2308	100	



Distribution of Citation forms of materials (Bibliographic form):

Bibliographical Forms	2016	2017	2018	2019	2020	Total	Percentage
Journal	486	445	386	172	136	1625	70.40 %
Online Search /Web Resources	67	76	43	33	32	251	10.87 %
Book	72	66	39	21	6	204	8.83 %
Conference /Seminar/Workshop Proceeding	51	54	22	15	6	148	6.41 %
Govt. Publi.	15	9	0	3	6	33	1.42 %
Thesis/Dissertation	13	12	3	0	3	31	1.34 %
Reference sources	15	7	2	2	1	27	1.16 %
Total	719	669	495	246	179	2308	100

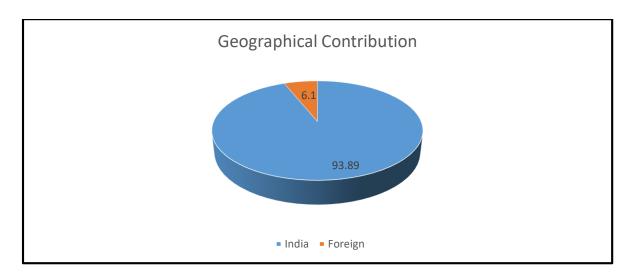


Geographical contribution of article (Indian and Foreign):

The table No. 7 above shows the geographical contribution of articles to the Journal of Advances in Library and Information Science during 2016 to 2020. The table shows evident that there is a total of 442 author's contribution in global level. In this study the share of contribution of India 415 author's contributions 93.89 % is found to be at the top.

Table No. 7 Geographical contribution of article (Indian and Foreign)

Geographical contribution	2016	2017	2018	2019	2020	Total	%
India	87	134	102	50	44	415	93.89
Foreign	10	2	5	8	2	27	6.10
Total	97	136	107	58	46	442	100



Geographical Distributing contribution (State wise):

Table No. 8 shows the state wise distribution of contributions in the 5 volume, 20 issue in five years published of the journal. The analysis shows that Tamil Nadu Scored 60.72 % with 252 number of contribution and ranked first. Among the other states Karnataka scored 18.79% with 78 contributions, Maharashtra scored 6.26 % with 26 contributors ranked second and third respectively. Between the score 0.48 % to 1.92 % with 55 contribution , Telangana 8 (1.92 %), A.P. & Uttar Pradesh 7(1.68%), Mizoram & Puducherry 6 (1.44%) , Kerala 5 (1.20 %) , West Bengal 4 (0.98%), Odisha & Delhi 3 (0.72), Arunachal Pradesh, Chhattisgarh & Punjab 2 (0.48). The lowest number i.e. 1(0.24 %) has been contributed by authors from Jharkhand, Himachal Pradesh, Tripura & Jammu and Kashmir .each.

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

Rank	State/UT	2016	2017	2018	2019	2020	Total	%
1	Tamil Nadu	46	79	62	34	31	252	60.72
2	Karnataka	23	20	18	8	9	78	18.79
3	Maharashtra	4	11	3	4	4	26	6.26
4	Telangana	1	2	5			8	1.92
5	A.P.	2	1	4			7	1.68
6	Uttar Pradesh		7				7	1.68
7	Mizoram	4	1		1		6	1.44
8	Puducherry	4	2				6	1.44
9	Kerala	2	1	2			5	1.20
10	West Bengal		1		3		4	0.98
11	Odisha		1	2			3	0.72
12	Delhi	1	2				3	0.72
13	Arunachal P.		2				2	0.48
14	Chhattisgarh		1	1			2	0.48
15	Punjab			2			2	0.48
16	Himachal P.		1				1	0.24
17	Jharkhand			1			1	0.24
18	Tripura		1				1	0.24
19	Jammu and K.			1			1	0.24
	Total	87	134	102	50	44	415	100

Table No. 8 Geographical Distributing contribution (State wise)

Length of Articles:

The above Table No. 9 shows that the maximum average length of article is 7 pages which is reported for the cumulative issues of 2016 to 2018 while, the maximum average page of the article is 7 pages for the year 2020. Taking all the issues from 2016 to 2020 into account, it is found that Journal of Advances in Library and Information Science has accommodated on average nearly 7 pages per articles

Table No. 9 Length of Articles

Years	Volume No	Total No. of Articles	Cumulative No. of Articles	Pages	Cumulative No. of page	Average pages per Articles	Cumulative Average No. of pages
2016	5	63	63	405	405	6.42	6.42
2017	6	72	135	449	854	6.23	6.32
2018	7	56	191	340	1194	6.07	6.25
2019	8	30	221	183	1177	6.10	5.32
2020	9	23	244	169	1546	7.34	6.33

FINDINGS:

The findings of the study are summarized as:

- The contribution of articles to each volume of Journal of Advances in Library and Information Science is constantly decreasing from year to year.
- The average citation per article is 9.
- The average number nearly 7 pages per article.
- Two authored papers are found to be the highest followed by single authored and then three- authored papers.
- In regards to state productivity, Tamilnadu topped the list.
- In regards the subjects citation; 80 (32.78 %) Others LIS Domains, followed by 39 (15.98) Scientometric studies, 31 (12.70%) E-Resources, 20 (8.19%) Bibliometric studies.
- Out of 2308 references, 98.77 % of references are authors are mostly preferred the printed material for their works.

CONCLUSION:

Journal of Advances in Library and Information Science earlier published that brought out its maiden issue in the year 2012, is identified as one of the best international peer review referred journals in the field of Library and information Science in India with a publishing history of 10 years. A careful evaluation of periodicals literature may indicate a complete picture of the discipline, the profession with which it represents and everything connected with them. The journal has been able to meet some of its expectations, despite the few observations made above, the journal has proved itself to be one of the good library and information science journal not only in India. During the study period 2017 Journal of Advances in Library and Information Science has the maximum number 72 articles published. However, Journal of Advances in Library and Information formation Science have got the maximum number of citations 719 (31.15) in the year 2016. One important finding of this study is the generally two or more-authored articles are cited more than the single-authored articles. The collaborative research is more cited and perhaps more relevant than the single authored articles

- 1. Das, A.K., & Sen, B.K. (2001). Journal of Biosciences: An analysis of citation pattern. Annals of Library and Information Studies, 48(2): 59-63. http://eprints.rclis.org/5648/1/Das Sen ALIS 01.pdf
- 2. Deshmukh, Prashant P. (2011). Citations in Annals of Library and Information Studies during 1997 to 2010: A study. Annals of Library and Information Studies Vol. 58, December 2011, pp. 355-361. http://nopr.niscair.res.in/bitstream/123456789/13485/4/ALIS%2058%284%29%20355-361.pdf
- 3. Garg, K. C. & Bebi (2014). A citation study of Annals of Library and Information Studies (ALIS) and DESIDOC Journal of Library and Information Technology (DJLIT). Annals of Library and Information **Studies** Vol. 61. September 2014. 212pp. 216.http://nopr.niscair.res.in/bitstream/123456789/29481/4/ALIS%2061%283%29%20212-216.pdf
- 4. Geeta, R. (2012). Citation Analysis In Annals Of Library And Information Studies During 2000 2011: A Study (pp. 1–88) [Dissertation]. http://14.139.186.108/jspui/handle/123456789/8908
- 5. Gooden, A.M. (2001). Citation analysis of chemistry doctoral dissertation: An Ohio State University case study. Issues in Science and Technology Librarianship, (Fall). Available: http://www.istl.org/01fall/refereed.html
- 6. Jaba Moni Das & Dipen Deka (2020). Citation Analysis of Doctoral Theses in Library and Information Science Submitted To Manipur University during 1989-2017. Library Philosophy and Practice (ejournal) 4590. https://digitalcommons.unl.edu/libphilprac/4590/
- 7. Kumar K. & Reddy (2012). Citation analysis of dissertations submitted to the department of library and information science, sri. venkateswara university, tirupati. International Journal of Digital Library Volume 2 2 Services. .Issue June-2012. 44-58. pp http://www.ijodls.in/uploads/3/6/0/3/3603729/dr. k.kumar 44-58 .pdf
- 8. Lavanya, D., Jeyachitra, S., & Santhi, J. (2017). Citation Analysis on Asia Pacific Journal of Management: 2011-2015. Journal of Advances in Library and Information Science, 6(2), 146–149. http://jalis.in/pdf/6-2/Lavanya.pdf
- 9. Ramesh Kuri & Venugopal Hajje (2014). Citation Analysis of Pearl: A Journal of Library and Information Science. Asian Journal of Multidisciplinary Studies, Volume 2, Issue 9, September 2014, pp 8-13.
- 10. Sinnarkar, S.N.(2003). Development of Institutional Database of Citations using CDS Software. Annals of Library and Information Studies Vol.50 (4). (153-155).
- 11. Swapan Kumar Patra (2014). Google Scholar-based citation analysis of Indian library and information science journals. Annals of Library and Information Studies, Vol. 61, September 2014, pp. 227-234. https://www.researchgate.net/publication/266565109 Google Scholarbased citation analysis of Indian library and information science journals