2. LITERATURE REVIEW

In the present investigation researcher has planned to take support of a variety of the reading materials. Such as Ph.D. thesis, M.Phil dissertation, Research reports, projects, books, articles, journals, e-publications, websites and internet etc.

Afun JVK., Mochiah M.B., Owasu-AM-and Braimah Haruna (2011). Did study is commonest method traditional storage pests management among small scale maize formers in Ghana is the use botanicals. Earlier studies on the use of polant extract showed that some minimized inset pests damage to acceptable levels.

Alireza Jallifar & Razieh Dabb, (2012). The study have pointed to the existence of various citations across this academic writing type. The study revealed significant differences between MA students tendencies to use integral and non-integral types of citation with the greater tendency to use the former. The study also examined stance manifested in verb controlling citations and underlined the importance of evidential marking in academic writing and discussed pedagogical implications of the research.

Banateppanvar K. and Biradar B.U., (2013). A Reviewing the study on citation pattern of sources documents reveals that journal citations have been quoted more in number, which shows not only their importance in communicating scholarly literature but also dependency of researchers on journals for their research work. A The study is an original research work with citation analysis of doctoral theses in Botany. It highlights the information materials available and used by researchers. Of the Botany department for their research work and those which need to be added for a healthy collection.

Banateppanvar and Biradar. (2013). This is paper is to describe the citation study as an emerged field for university libraries. The study employed field for university libraries. The study employed descriptive research design. The study reveals that journals are the most preferred sources of information used by the researchers in the field of
biotechnology accounting for 78.72% of total citations although citations from books, proceedings, these, reports, and patents are also found.

**Bhat and Sampathkumar (2008)** Did study the analysis focused on the extent to which scholars are using web-based sources in scholarly electronic journals. Citation analysis of research articles from scholarly electronic journals published in 2000-2006.

**Bellis Nicala De (2009)** The study is the perspective of science studies it’s quite reasonable to assume that the jigsaw puzzles big picture is unknown scientists, who are used to seeing and handing only a few pieces at a time and that a suitable method of analysis can help to carry the game through.

**Bidhan Ch. Biswas and Amit Roy (2007)** The study has been conducted with 358 original contributions published in the journal Economic Botany during 1994-2003. Contributions by single author and small teams comprising two or three authors account for about 80% of the papers. Among the citations, books accounted for 59%, and articles 41%. E citations started appearing from 1998 are still negligible in number. Charts, diagrams, photos and tables included in the articles total 396, 427, 859 and 925 respectively. The length of maximum number of articles (38%) ranges from six to 10 pages. Articles occupying 11 to 15 pages rank next accounting for 31%. The highest number of articles totaling 217 (60.61%) has emanated from academic institutions such as universities. The articles originate from 45 countries. The first four countries are responsible for 51.7%, the first ten countries for 67.8%, and the first 15 countries for 78.6% of the articles.

**Bornman Lutz, Mutz Rudiger, Neuhaus Christoph, Daniel Hans-Dieter (2008)** Did study of the As the citations are meant to show that a publication has made use of the contents of other publications, citation counts the number of citations are used in research evaluation as an indicator of the impact of the research. Citation rates are seen as an objective quantitative indicator for scientific success and are held to be a valuable complement to qualitative methods for research evaluation, such as per review.
Buttlar L. (1999) did a 61 LIS dissertations and found some interesting publication patterns. About 80% of the citations were of single authors. He also found that journals, articles were cited more than books, proceedings, theses and other print resources. The most cited journals were college and research libraries and journal of the American Society for Information Science.

Chandler, H.E. (1991) The concept of citation indexing relies on three principles. Firstly, all knowledge from whatever discipline is always dependent on or related to tenets already accepted and established outlines the principles, uses and limitations of citation indexing. Explanations, with examples, are given of the four parts of the citation indexes published by the institute for scientific Information: the source, Index, Citation Index, permute Index, and corporate Index.

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

Ghaleb Rahaboh & Ahmed Al- marshad (2013) The study integral noun-phrase citation requires proficient speakers to restructure and cite a source correctly. This is citation study reveals that the nonnative English writers used the integral noun-phrase citation pattern. However, it was found that the native English writers.

Erhard Rahm (2003) We analyze citation frequencies for two main database conferences (SIGMOD, VLDB) and three database journals (TODS, VLDB Journal, Sigmod Record) over 10 years. The citation data is obtained by integrating and cleaning data from DBLP and Google Scholar. Our analysis considers different comparative metrics per publication venue, in particular the total and average number of citations as well as the impact factor which has so far only been considered for journals. We also determine the most cited papers, authors, author institutions and their countries. We analyze citation frequencies for two main database conferences (SIGMOD, VLDB) and
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**Gooden, A.M., (2001)** Did study in citation analysis of dissertations. The 30 dissertations studied generated a total of 3,704 citation 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.

**Hart Richard, (2011)** Did a study on the collaboration and article quality in the literature of academic librarianship. He utilized citation counts of 543 articles from college and research libraries and the journal of academic librarianship over a ten year period.

**Heldu Hema., Aryachand, Kaushik Arundhati et.al (1999)** This a study is aims to assist the library collection development in order to the needs of scientists and research scholars. The study period 1998-2010 and used the reference lists of dissertations submitted by the doctoral students of the molecular biology and biotechnology sciences. The findings of the study showed that citation analysis is a valid and practical method to provide reasonably accurate information on the use of molecular biology and biotechnology literature by doctoral students.

**Henk&moed (2005)** They constituted a tool to identify on a permant basis, the most important journals in the scientific communication system, and to highlight candidates to be included or dropped in view of the need to establish a cost effective citation Index.

**Jadhav Vandana, Khaparde and Shelke Santosh (2011)** Did citation analysis of University News Journal. The articles published in the journal from January 2004 to December 2008 in which 5 volumes and 261 issues were covered.
Jan R., (2009) In her work done citation analysis of library trends from 1994-2007 comprises 593 articles and each article published during that period were examined and highest number (52) of articles were published in 2004. The journal contained 15662 references 13783 were P-citations and 1879 were e-citations.

Kalbande D.T., (2012) The study of citation analysis of theses on Economics shows that most cited document from links and remaining citations were from reports, Journals, Government publication, theses and others. The chronological distribution of cited documents, to find out the authorship pattern of cited document. Citation analysis have been carried out to find the type of cited document,

Kristin Hofmand and LiseDocette, (2012) In reviewing the methodologies of citation analysis studies we found that the amount of detail provided by researcher varied widely. However, common themes among the methodologies can provide guidance for researchers who are planning to conduct citation analysis studies, in areas that range from defining the scope of the study to retrieving and analyzing citations. In each of these areas, there are many factors to consider and researchers should think carefully about the choices that will best meet the objectives of their study. If there are published studies that will be used for comparison, researchers should consider using an approach that is consistent with those studies.

Leiding Reba,( 2005) Conducted a study on the James Madison University Library collection needs and found that the proportion of journal citations in relation to books has increased slightly over the period of 1993-2002. Though her intention was to examine the pattern of use of electronic journals, it could not be accomplished as there was no indication in the citations whether a jo

Laura Newton Miller (2011) The researcher conducted a content analysis and literature review of papers written from 2000-2010 that focused on university biology students, faculty, and their papers. Scholarly articles were divided into the library research domains. The largest number of papers was from the Education domain, followed
closely by Collections. Only two papers were categorized as Reference/Enquiries, and no papers were found in Management and Professional Issues. This research will enable science librarians to better understand what has already been written about biology subjects in a university setting. Gaps in the literature can help other librarians who are interested in pursuing more research with biology subjects.

Mandal Tapankumar & Chkrobarti Biplab (2013)\textsuperscript{25} For the webometric study it can be said that although webometric study have some limitations it is very useful in link analysis as well as to find out the overall web ranking of the institutes which is having their own so main.

Megnigbeto, e., (2006)\textsuperscript{26} This studied the citations of dissertations of library and information science undergraduate students and found that the number of citations to Internet resources was very low.

Moed, H.F.,( 2005)\textsuperscript{27} Citation analysis in research evaluation is a valuable book for those interested in research evaluation. The book is intended for decision makers in research, for the scientists who are affected by evaluations and the decisions based on them and for information specialists who generate impact data

M.H. MacRoberts and B.R. MacRoberts (2010)\textsuperscript{37} To determine influences on the production of a scientific article, the content of the article must be studied. We examined articles in biogeography and found that most of the influence is not cited, specific types of articles that are influential are cited while other types of that also are influential are not cited, and work that is “uncited” and “seldom cited” is used extensively. As a result, evaluative citation analysis should take uncited work into account.

Nabe J. and Imre A.,( 2008)\textsuperscript{28} The study aims to test the common assumption that scientists favor current research to such an extent that journal back files can be de-emphasized in academic library collection. Results demonstrate otherwise. The
study is reproducible for any institution, and can help to evaluate the value of electronic journal back files and the need to maintain print back files.

**Nayak J.B. (2013)** The study is botanical insecticides are generally safer, readily biodegradable non-toxic but active against the insect pest and lack totality to higher animals and they do not leave any phototoxic residues in the environment and active against insect pest.

**Rahman Md. Ziqur and Bhattacharya Udayan (2012)** Did a 75 doctoral theses in Botany, a North Bengal University. Darjeeling during 1987 to 2007 has been carried out to trace the development of scientific research. The study indicates authorship trend was towards team work rather than a work in isolation. Single author contributions, even though shown a decreasing tendency, are still on stage. Chronological variation in the various characteristics of the cited literature was also examined. It is observed that most of the publications cited are articles in journals; the number of references to other kinds of documents such as books/monographs, patents, conference proceedings, reports and other theses is small and reference like official publications, press articles and internet documents are rare.

**Sardar sardar (2014)** The aim of this paper is to study regency, weighted recency and average weighted recency of the cited items in the articles published in the Journal of Algebra and Discrete Mathematics during the period from 2010 to 2012 by using statistical methods based on sampling. This study reveals that the average weighted recency of the citations of the articles published in 2011 are more than those of the other two years. (cf. the bar diagram is in the page 15). This indicates that the articles published in 2011 are of more recent origin than those of other two years.

**Shafi and Wahid (2005)** On citation analysis of Ph.D. Theses submitted to Kashmir university during 1980 to 2000 in Natural sciences. This study covered one hundred doctoral dissertation
Y. L. Somashekara and Mallinath Kumbar (2015)

Citation Analysis of Doctoral Theses of Zoology subject submitted to three Universities in Karnataka India.

The present paper analysis of the Zoology doctoral theses submitted to three universities in Karnataka. This study covers 6909 citations. The study indentify that journal article resource is (78%) followed Books (11%). Bangalore university zoology researcher cited 2026 highest journal articles. Evolution (147) Genetics (129) is the highest referred journals. Subject wise distribution of citations and journal citations, Ranking of Journal source, journal publication geographical distribution are determined.

Swain D.K., Chandrakantha and Rautaray Bijayalaxmi (2014)

In their study examined the pattern of publications is their study examined the pattern of publications in the Journal of Educational media and Library science from 2008 – 2012. In this study also collaborative author contribution is more compared to solo authored articles.

Thanskodi, S. (2012)

Did a study on the dissertation, Citation analysis of Doctoral Research in Botany submitted to Anamalai University. The articles published in the International Journal of Library Science. 19735 citations in the doctoral dissertations submitted between 1990-2010 in the Department of Botany, Anamalai University, India were analyzed for identifying their document types, authorship pattern, ranking of cited journals and subject wise distribution of citations. The finding reveals that nearly 69.09% citations were from journals and 14% from books. The subject wise distribution of theses reveals that Genetics Microbiology, Eco-Toxicity, Plant physiology, Remote sensing, Agriculture, Air pollution and Climate change forms more than half of the total theses submitted during this period. USA, UK and India contributes 9062 (45.91%) of total citations. The authorship pattern study reveals that the highest number of journal citations from multi authors around 74.24% percent of total journal citations.

William T. Johnson (1999)

New academic programs in environmental science prompted citation analysis of local faculty by the Texas Tech University Library (TTU). The purpose of this study is to characterize the citation patterns of the interdisciplinary
field of environmental and human health as compared with other disciplines and to apply the results to collection development. Twenty-four articles were selected from 1996 and 1997 with over 1600 citations to more than 950 listed references. The average age of citations was 10.5 years for journals and 9.4 years for books. On average, journals were cited 67% of the time while books were cited 17% of the time. Proceedings, theses, and technical reports were also cited but that data was not applied to collection development. The impact on collection development has been to identify a small number of specific books which were frequently cited but were not in the collection and to identify important subject terms with which to guide the selection of related books. Finally, 12 new subscriptions to frequently cited journals will be reviewed with faculty to determine their suitability as additions to the collection.

Wouters, Paul., (2007) The citation index is a list of the articles that, subsequent to the appearance of an original article, refer to or cite that article. It enable one to trace forward in time the same sort of interconnections with the literature that, by means.

Yahya Ibrahim Harande and Binta Faruk Ladan (2013) Citation analysis is considered as one of the appropriate and widely practiced methods for examining different forms of data, to find information on scholarly communication patterns of authors on a given literature, discipline or subject. Relatedness of journals can also be established through citation analysis. In this study, references that appeared on the articles published in the international journal of Mathematics education for the period covering 2004-2008 were examined, using citation analysis techniques. The finding reveals that, a total number of sixty six, (66) journal articles were produced during the five (5) year period of the study. The highest number of articles produced was (16) in 2008. Also the highest number of authors (43) was recorded in 2008. A total number of (3294) references were cited for the entire sixty six, (66) journal articles in the period of the study. The study confirmed that, Journal articles were found to be most cited materials with 38.5%, followed by books with 28.6%. The highest number of citation (399) appeared in volume 38 with (15) articles.
Zafrunnisha N., (2012) Did a study is concerned with the analysis of citations of doctoral theses in the psychology for the award of doctoral degrees. By Sri Venkateswara University, Tirupati, Osmania University Hyderabad and Andhra University Visakhapatnam. The scope of the these study is to major sub field of psychology viz. Basic psychology and applied psychology. Analysis of citations in similar authorship pattern, multi-authored papers and single authored papers.

Zafrunnisha N., (2012) This study is citation analysis of Ph.D. theses follows the norms of other citation analysis research that has been carried out from 1974 to observe the distribution of authorship pattern, bibliographic form, core journals, country, language, subject wise distribution of journal citation and core periodicals.