



LIBRARY AND INFORMATION SCIENCE RESEARCH IN GAUHATI UNIVERSITY (1996- 2021): A BRIEF ANALYSIS

Dr. Maya Moyee Narzary
Librarian

Upendra Nath Brahma College, Kajalgaon, India

Abstract

Research is the way of finding new knowledge, knowing the unknown or unearthing of fact, and an authentic base of formulation of theories, principles and law. Research in Library and Information Science must have the practicality and validity as it is a professional subject. Thus, research in the field really helps to find the existing problems, solution to the problems, and to assess the future prospects through the systematic and scientific approaches to the research. In this particular paper the author is endeavoured to study the research contribution of Department of Library and Information Science (DLISC), Gauhati University which is the oldest state university of North East India established in 1948 and the Department of Library and Information Science came into existence in the year 1966.

Keywords: Gauhati University, Department of Library and Information Science, Research, Theses

1. Introduction

Research is a way of thinking and an approach which leads to revelation of new knowledge. In a academic setup, Research activities are one of the core activities of Universities. It is kind of contribution or supplementary to the existing universe of knowledge. Many instances are evident that some of the universities are sought after by the aspirants to get admitted because of the excellence in the research activities, its endorsement and support in a specific area. In the present scenario, research plays a vital role in institutions reputation, ranking, funding, endorsement/support from the government as well as from the other funding agencies which helps in collaboration with other institutions, and bodies which gives encouragement and exposure to the researchers. Thus, Bibliometric parameters are of great significance which needs to be considered.

2. Objective

The study is confined to the following motive:

- ✓ To study the contribution of Library and Information Science Doctoral Theses of Gauhati University.
- ✓ To identify the most productive/prolific guide.
- ✓ To identify the different area of Doctoral Theses.

- ✓ To identify the trend of research.

3. Methodology

“The UGC Notification (Minimum Standards & Procedure for Award of M.Phil. / Ph.D Degree, Regulation, 2009 Amendment made on 2016) dated 5th May 2016 mandates submission of electronic version of theses and dissertations by the researchers in universities.” (<https://shodhganga.inflibnet.ac.in/>). Thus, the paper is accomplished base on the retrieved data from Sodhganga, repository of theses, maintained by INFLIBNET centre, Ahmedabad, related to the number of theses submitted by Gauhati University as on 18.07.22. It is observed that, first theses was completed in the year 1996 and till 18.07.22 last theses submitted was in the year 2021. Hence, 1996-2021 has been taken as the base year for the study. Data are analysed and conclusion are put forward based on the analysis, insight gained through the retrieved data and survey of different literatures.

4. Literature Review

Many literatures have been searched out for the purpose and much work has been done related to scholarly contributions in different span of time. Jhamb, Garvita and Samim, Abdus (<https://core.ac.uk/>) studied the theses contribution of top ten central universities of India to Sodhganga. In study it was found that Aligarh Muslim University (33.7%) is the most prolific followed by Jawaharlal Nehru University (25.5%). It is also reflected faculty of sciences has the maximum contributions. Singh, Jayendra Kumar (<https://www.researchgate.net/publication/344026304>) also conducted a study LIS theses contribution base on the data available from University News (1993-1997). According to the author, much work is done in public library/special library/academic library as compare to reference services, manuscripts, etc. And compare to science discipline, LIS research is not satisfactory. Pandita, Ramesh, etal (<https://www.emerald.com/insight/content/doi/10.1108/CC-02-2021-0005/full/html>) have taken Scopus as the data source (2011-2020) and through analysis it was found that India was placed in 5th position (4.59%) in regard to contribution of LIS research and USA stand 1st with 33.03% of contribution in the discipline. Moreover, University of Delhi and University of Kashmir have the active contribution than the other universities. Patra, Swapan Kumar (<https://arxiv.org/ftp/arxiv/papers/2107/2107.13238.pdf>) asserts that Web of Science and Scopus has limited in LIS coverage, so the author has taken the publications under consideration from Library, Information Science & Technology Abstracts (LISTA) and used scientometrics and Social Network Analysis (SNA) tools for analysis. Kumar observed that need of strengthening the LIS research and collaboration with international institutes.

5. Brief Glance of the Universities with DLISc in North East India

The table given below only reflects the State and Central Universities and private universities are excluded:

Table 1: list of DLISc in North East India

| Sl No | Name of the University | Year of Establishment | | Total Theses | Number of Theses in LIS |
|-------|-----------------------------------|-----------------------|--------------|--------------|-------------------------|
| | | University | Dept. Of LIS | | |
| 1. | Gauhati University (GU) | 1948 | 1966 | 6007 | 61(36%) |
| 2. | North East Hill University (NEHU) | 1973 | 1985 | 2426 | 41(24%) |
| 3. | Manipur University (MU) | 1980 | 1980 | 1220 | 29(17%) |
| 4. | Assam University (AU) | 1994 | 2009 | 1899 | 10(6%) |
| 5. | Mizoram University (MZU) | 2001 | 2002 | 637 | 28(17%) |

The table shows that the Gauhati University is the oldest university of N.E region established in 1948 a year later after the independence. And Mizoram University is the youngest established on 2001. It is evident from the data that after 18 years of establishment of Gauhati University, Department of Library and Information Science came into existence. Likewise, in Assam University and NEHU it took 15 years and 12 years respectively. It's a good sign that in Manipur University, Department of Library and Information Science established along with the establishment of the university, whereas in Mizoram University it came into existence after a year.

So far contribution of research is concern, Gauhati University being the oldest among the other, has maximum number of production of 61, followed by NEHU and Manipur University with 41 and 29 theses in their credit respectively. Mizoram University is proliferating in the field with 28 research contributions. For better perception, contribution in percentage is shown using pie chart:

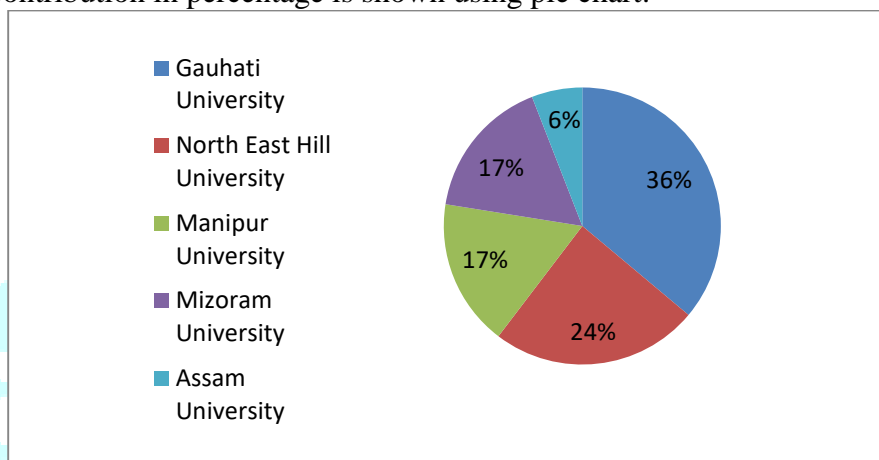


Figure1: percentage of research contribution

Gauhati University has 45 Departments and contributed 6007 theses inclusive of all Departments as on 18.07.22:

Table 2: departments of Gauhati University

| Sl.No | Department | No. Of Theses | Sl. No. | Department | No. Of Theses |
|-------|-------------------------------|---------------|---------|--|---------------|
| 1. | Anthropology | 178 | 24. | Geography | 175 |
| 2. | Applied Sciences | 14 | 25. | Geological Science | 98 |
| 3. | Arabic | 49 | 26. | Hindi | 65 |
| 4. | Assamese | 400 | 27. | History | 163 |
| 5. | Bengali | 74 | 28. | Information Technology | 10 |
| 6. | Bioengineering and Technology | 45 | 29. | Instrumentation and USIC | 70 |
| 7. | Biotechnology | 226 | 30. | Law | 111 |
| 8. | Bodo | 19 | 31. | Library and Information Science | 61 |
| 9. | Botany | 449 | 32. | Linguistics | 36 |
| 10. | Business Administration | 36 | 33. | Mathematics | 253 |
| 11. | Chemistry | 401 | 34. | Medicine | 52 |
| 12. | Commerce | 225 | 35. | Modern Indian Languages | 236 |
| 13. | Communication and Journalism | 45 | 36. | Persian | 23 |
| 14. | Computer Science | 35 | 37. | Philosophy | 127 |

| | | | | | |
|------|--|-----|-----|-------------------|-----|
| | and Application | | | | |
| 15. | Economics | 204 | 38. | Physics | 341 |
| 16. | Education | 288 | 39. | Political Science | 194 |
| 17.. | Electronics and communication Technology | 39 | 40. | Psychology | 56 |
| 18. | Engineering | 70 | 41. | Sanskrit | 166 |
| 19. | English | 174 | 42. | Sociology | 8 |
| 20. | English Language Teaching | 10 | 43. | Statistics | 99 |
| 21. | Environmental Science | 59 | 44. | Women Studies | 20 |
| 22. | Folklore | 198 | 45. | Zoology | 390 |
| 23. | Foreign Languages | 15 | | | |

From the table given above, it is self evident that the Department of Botany has the maximum number of 449 doctoral theses in their credit while the Department of Sociology 8 completed theses in their credit. Department of Library and Information Science which is the study area of present paper holds submitted 61 theses.

Other than theses, Gauhati University has contributed scholarly research papers also. Based on the Scopus database, Borah, Kakali. (<https://www.researchgate.net/publication/351955366>) has done bibliometric study of scholarly contribution of some of the universities of Assam and found that Tezpur University has the highest contribution of 3847 papers followed by Gauhati University with 3317 publications.

Table 3:contribution of research papers

| University | Publication (2011-2020) |
|----------------------|-------------------------|
| Assam University | 2260 |
| Bodoland University | 157 |
| Cotton University | 429 |
| Dibrugarh University | 1568 |
| Gauhati University | 3317 |
| Tezpur University | 3847 |

Source: <https://www.researchgate.net/publication/351955366>

Gauhati University, being a premier state university of Assam, has an excellence in academic and since its inception, nurturing the scholar and scholastic ventures.

6. Research Contribution of Gauhati University

Since 1996, research activity of GU has initiated. In other words, after 30 years of its existence research contribution has begun. Gauhati University has encouraging and conducive academic environment with well equipped library services and adequate infrastructure. The data related to year wise research activity is tabulated below for lucid comprehension:

Table 4: list of theses and respective supervisors

| Sl.no | Year of completion | No. Of theses Submitted | Present ation in % | Maximum Theses Guided by |
|-------|--------------------|-------------------------|--------------------|--|
| 1. | 2021 | 1 | 1.6% | Dr. Dhrubajit Das -1 |
| 2. | 2020 | 2 | 3.2% | Dr. Sanjay Kr. Singh-1, Dr. Dipen Deka-1 |
| 3. | 2019 | 2 | 3.2% | Dr. Sanjay Kr. Singh-1, Dr. Tilak Hazarika-1 |
| 4. | 2018 | 4 | 6.6% | Dr. Narendra Lahkar-2, Dr. Sanjay Kr. Singh-2 |
| 5. | 2017 | 9 | 14.7% | Dr. Rajani Kanta Barman-3, Dr. Sanjay Kr. Singh-3, Dr. Narendra Nath Sharma-2, Dr. Narendra Lahkar-1 |
| 6. | 2016 | 8 | 13.1% | Dr. Narendra Nath Sharma-3, Dr. Rajani Kanta Barman-2, Dr. Narendra Lahkar-2, Dr. Sanjay Kr. Singh-1 |
| 7. | 2015 | 3 | 4.9% | Dr. Narendra Nath Sharma-1, Dr. Narendra Lahkar-1, Dr. Sanjay Kr. Singh-1 |
| 8. | 2014 | 3 | 4.9% | Dr. Narendra Nath Sharma-1, Dr. Rajani Kanta Barman-1, Dr. Narendra Lahkar-1 |
| 9. | 2013 | 6 | 9.8% | Dr. Narendra Nath Sharma-2, Dr. Alaka Buragohain-2, Dr. Narendra Lahkar-2 |
| 10. | 2012 | 2 | 3.2% | Dr. Narendra Nath Sharma-1, Dr. Narendra Lahkar-1 |
| 11. | 2011 | 4 | 6.6% | Dr. Rajani Kanta Barman-2, Dr. Narendra Lahkar-1, Dr. Alaka Buragohain-1 |
| 12. | 2010 | 1 | 1.6% | Dr. Narendra Lahkar-1 |
| 13. | 2009 | 1 | 1.6% | Dr. Alaka Buragohain-1 |
| 14. | 2008 | 4 | 6.6% | Dr. Narendra Lahkar-2, Dr. Narendra Nath Sharma-1, Dr. Rajani Kanta Barman-1 |
| 15. | 2007 | 3 | 4.9% | Dr. Narendra Lahkar-1, Dr. Narendra Nath Sharma-1, Dr. Alaka Buragohain-1 |
| 16. | 2006 | 3 | 4.9% | Dr. Narendra Lahkar-1, Dr. Alaka Buragohain-1, Dr. Narendra Nath Sharma-1 |
| 17. | 2005 | 1 | 1.6% | Dr. Narendra Lahkar-1 |
| 18. | 2004 | 1 | 1.6% | Dr. Narendra Nath Sharma-1 |
| 19. | 2003 | 1 | 1.6% | Dr. Alaka Buragohain-1 |
| 20. | 1997 | 1 | 1.6% | Dr. Alaka Buragohain-1 |
| 21. | 1996 | 1 | 1.6% | Dr. Narendra Nath Sharma-1 |
| | | Total=61 | | |

It is self evident through the above table that, Gauhati University has a repository of theses since 1996 which is in the credit of Dr. Bhrigu Ram Bharali having the title “Role of Special Libraries in Assam and its Socio-economic Impact on Societies: A Study” Guided by Dr. Narendra Nath Sharma. And till date repository is enriched with many theses through Shodhganga maintained by INFLIBNET centre. 2017, is the most productive year for the DLISc Gauhati University with maximum number of research activities having, 14.7% of its total contribution followed by 2016 and 2013 with 13.1% and 9.8% respectively. However it may mention that, there is large gap of 5 years between the years 1997 to 2003 where no research activities have been seen.

7. Most Prolific Guide/Supervisor

For any kind of research, mentor or supervisor is a must. They play a vital role in carrying out the research in a right direction systematically and smoothly. The table underneath gives a glance of number of theses supervised by the esteemed faculties of DLISc. , Gauhati University:

Table 5: number of theses guided by supervisors

| Sl.No. | Name of the Supervisor | No. Of Theses Guided |
|--------|--------------------------|----------------------|
| 1. | Dr. Narendra Nath Sharma | 15 |
| 2. | Dr. Alaka Buragohain | 8 |
| 3. | Dr. Rajani Kanta Barman | 9 |
| 4. | Dr. Narendra Lahkar | 17 |
| 5. | Dr. Sanjay Kr. Singh | 9 |
| 6. | Dr. Dhruvajit Das | 1 |
| 7. | Dr. Tilak Hazarika | 1 |
| 8. | Dr. Dipen Deka | 1 |

The above table is self explanatory and it is worth mentioning that, the most productive supervisor of DLISC Gauhati University is Dr. Narendra Lahkar with highest number of 17 successful research activities under his supervision. The second productive supervisor is Dr. Narendra Nath Sharma with 15 successful research contributions. Moreover, Dr. Rajani Kanta Barman and Dr. Sanjay Kr. Singh have contributed 9 successful research products and Dr. Alaka Buragohain, contributed 8 researches under her able supervision in the domain of Library and Information Science. Dr. Dhruvajit Das, Dr. Tilak Hazarika and Dr. Dipen Deka have also contributed by supervising 1 successsful research activity each in the field. The bar chart shows the data for better observation:

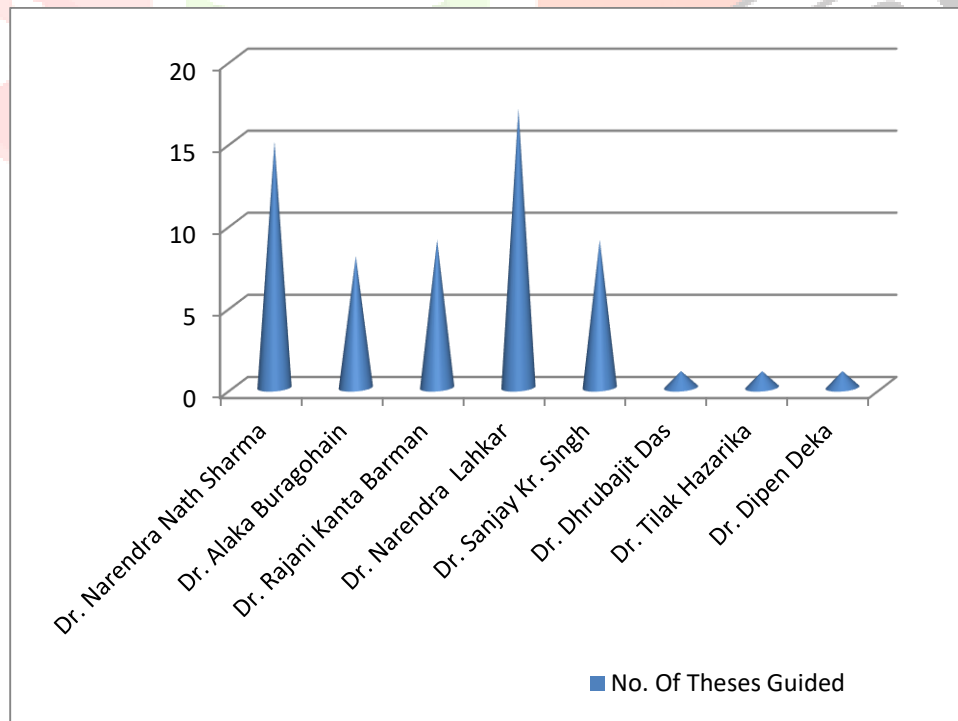


Figure 2:number of theses guided

8. Research Area of Doctoral Theses

Different areas have been undertaken for research in different slot of time. Therefore, the various areas taken up for research are given below:

Table 6: list of research areas

| Sl. No. | Year | Research Topic |
|---------|------|---|
| 1. | 2021 | 1.Usage of ICT in the college libraries of Assam: A study |
| 2. | 2020 | 1.Use of ICT in the libraries of medical institutions in north east India: An analytical study 2. Ontology on traditional dances of Assam for the semantic web with special reference to the dances of Rabha community |
| 3. | 2019 | 1.Citation analysis of doctoral theses of selected disciplines submitted to Tripura university: A Bibliometric study 2.Research contributions of the Universities of Assam through the prism of web of science : A scientometric study |
| 4. | 2018 | 1.Problems and prospects of networking in public library system in Assam: A study 2.Preservation of library documents in digital environment with reference to college libraries of Assam: An empirical study 3.Perception and satisfaction level of open access journals in university libraries of Assam: A study 4.Management of e resources in the health science libraries Of Assam: An analytical study |
| 5. | 2017 | 1.Motivating library and information science LIS professionals in engineering college and institute libraries of Assam for qualitative development 2.Impact of INFLIBNET in the modernization of university libraries in India with special reference to North Eastern region 3.Use of library software packages in the libraries of institutes of higher learning in Assam with reference to serial control module: An evaluative study 4.Growth and development of university libraries of Assam in the context of Ranganathans fifth law of library science in it environment 5.The effectiveness of continuing education programme for LIS professionals a study of university libraries of north east India 6.The factors of competency development among the working library professionals of the university libraries of North East India :Challenges and realities 7.Strategic capacity planning for hybrid library environment 8.Impact of information technology on the collection development in university libraries of Assam: A study 9.Prospects of consortia based resource sharing among the agricultural university of north east India with special reference to central agricultural university Imphal |
| 6. | 2016 | 1. College library effectiveness study with special reference to the Tinsukia and Dibrugarh district 2. Evaluation of university library websites of west Bengal: A study from librarians perspectives 3. Challenges and realities of children libraries of Assam: An analytical study 4. Prospects of using open source library management software in college and university libraries of Assam 5. Job analysis of library professionals in science and technology institutes of Assam: An evaluative study 6. Management of Indian institutional repositories: An evaluative study 7. Job satisfaction of university library professionals in Assam: A critical |

| | | |
|-----|------|--|
| | | analysis 8. Designing of an e learning model for supplementing LIS education programmes |
| 7. | 2015 | 1. Management of manuscript collection in Assam in digital era a practical approach using ICT tools 2. Prospects of coordinating Sarba Siksha Abhijan and rural libraries for social development in Assam with special reference to Kamrup district 3. LIS education in the universities of India a study on the course contents with reference to universities of N.E India |
| 8. | 2014 | 1. Library services in medical and paramedical colleges in Assam : Analytical study 2. Use of web based resources in engineering college libraries of Assam: An empirical study 3. Collection development in the libraries of technical institutions in Assam A study in the context of emerging ICT |
| 9. | 2013 | 1. The role of library professionals for effective use of library resources in the present context a study with reference to the university libraries of Assam 2. Documentation of information resources in Womens studies Centres of India with reference to North East India 3. A critical study of preservation techniques for Sanchi manuscripts of Assam 4. Use of online resources among research scholars in social sciences in university libraries of Assam 5. Audio visual materials and their management and preservation in television media organizations 6. Growth of research output in science and technology institutes in Assam and the role of libraries |
| 10. | 2012 | 1. The working and functioning of the Assam Legislative Assembly library and its use and impact on legislators and administrators: A critical study 2. Digital resources management with reference to Indian university libraries |
| 11. | 2011 | 1. Prospects of human resource development in the libraries of institutions of higher education in North East India with special reference to library automation: A critical study 2. A study on growth and development of literature in Naga languages 3. Information needs and information seeking behaviour of urban community and its satisfaction by the public library system 4. Citation pattern of doctoral dissertations in physics submitted to the Gauhati university Guwahati 1993 2000 |
| 12. | 2010 | 1. Buddhist Manuscripts with special reference to Arunachal Pradesh utilisation restoration and digitisation |
| 13. | 2009 | 1. Use of internet service in the university libraries of Assam: An evaluative study |
| 14. | 2008 | 1. Information seeking behaviour of degree students of general colleges of Barak valley 2. Impact of user education on academic libraries in Assam a study on strategic management of resources and services 3. Public library system in Bhutan a systematic approach for future developments 4. Search engines and their search performance in retrieving internet resources: An evaluative study |
| 15. | 2007 | 1. Retrieving information on the socioeconomic and socio-cultural conditions of north east India using different internet search engines 2. Public libraries in a multicultural society and their role in promoting social harmony a critical study with special reference to Assam 3. Prospects of application of information technology in academic libraries in |

| | | |
|-----|------|--|
| | | Assam: A study |
| 16. | 2006 | 1. Feasibility of library software packages for library automation in higher educational institutions of Assam: A critical study 2. Document description and their practices in university libraries in north east India: A study 3. Reflection of rural information in leading newspapers of Assam : A critical study |
| 17. | 2005 | 1. A study on organization and services of libraries in research and training programme in financial institutions of North East India |
| 18. | 2004 | 1. A study of public library system as community information centers in Nagaland: Realities and challenges. |
| 19. | 2003 | 1. A study of the trend of growth of agricultural literature in north eastern region from 1976 to 1996 and its impact upon higher studies in agricultural science |
| 20. | 1997 | 1. Prospect of automated cataloguing in the three university libraries of Assam based on users satisfaction under meyor catalogue codes |
| 21. | 1996 | 1. Role of special libraries in Assam and its socio economic impact on societies: A study |

From the bottom, in 1996 first research concern was confined to special libraries in Assam and its socio-economic impact on the societies. In 1997, metadata creation through automated cataloguing was focused. In 2003-2005, services of libraries in research and training programme, public library system and growth of literature in agricultural literature in N.E regions from 1976 to 1996 was studied. In 2006, the study areas are very unique. In 2007, areas are mostly on use of ICT have been reflected. In 2008, areas are very consolidating related to information seeking pattern, user education, public library system and evaluation of search engines in information retrieval. In 2009-2012, very interesting areas has been ventured pertaining to Assam Legislative Assembly library, digital resources in management in university libraries, human resource development with reference to library automation, citation pattern, Buddhists manuscript and use of internet services. In 2013-2016, the areas are very relevant and it is evident that application and use of ICT in various prospects have been studies. In 2017-2021, more or less focus area is use of ICT from library and user perspectives.

Areas chosen for the research are very relevant and unique which really conform to the contemporary issues of the then milieu. However, ICT is the prevailing interest area in different domain. Moreover, other than academic libraries; public libraries and special libraries are also taken up for the research.

It is noteworthy that, thesis submitted by Amal Kumar Mondal in 2011 entitled “Citation Pattern of Doctoral Dissertations in Physics Submitted to the Gauhati University, Guwahati (1993-2000)” under the supervision of Dr. Rajani Kanta Barman is one the bulkiest thesis with 336 pages.

9. Trend of Research

Preliminarily, the research was base on the domain of role of libraries and its impact on the society. Only one research is related to automated cataloguing system. Gradually, the research area is inclined to the use of ICT in different libraries, its related services, library software, open sources, web base resources, open access journals, search engines, internet services in the libraries, citation pattern, digital resource management, preservation techniques in digital environment, consortia, LIS education, e-learning model, etc. Overall, it is reflected that, more or less almost the research areas are very different and unique. But in the recent years, it is self evident that research areas has more touch of modern concepts.

10. Conclusion

Quality education is the lifeline of universities, where as research is the contemporary and sustainable effort to supplement the academic enthusiast to add something to the existing knowledge (discovery, creation, innovation) , enhance understanding and applicability of research outcome to solve the real life situations. Basically, research areas are directly related to the contemporary issues but it may also be mentioned that other than the contemporary issues, research can also be retrospective, descriptive and analytical to quench the thirst for knowledge. Gauhati University is the oldest among the other universities of N.E. region. It has the base and fertile ground for the exceptional research in the near future. Moreover, Gauhati University has not only contributed in research but it also encouraged the young generations of the state as well as the neighbouring states through LIS education as a professional course.

References

1. **Shodhganga: a reservoir of Indian theses.** Retrieved from: <https://shodhganga.inflibnet.ac.in> Accessed on 18.07.22
2. **The Role Of Research At Universities: Why It Matters.** Retrieved from: <https://www.forbes.com/sites/davidrosowsky/2022/03/02/the-role-of-research-at-universities-why-it-matters/?sh=43d20cad6bd5> Accessed on : 21.07.22
3. **Role of research in an academic institution is significant, here's why.** Retrieved from: <https://www.financialexpress.com/jobs/role-of-research-in-an-academic-institution-is-significant-heres-why/586210/> Accessed on 21.07.22
4. **Evaluating and improving the contributions of university research to social innovation.** Retrieved from: <https://www.emerald.com/insight/content/doi/10.1108/SEJ-10-2020-0099/full/html> Accessed on:26.07.22
5. **Research Contributions of Indian Universities in ResearchGate: An Analysis.** Retrieved from: <https://www.researchgate.net/publication/323848170> **Research Contributions of Indian Universities in ResearchGate An Analysis** Accessed on: 01.09.22
6. **Contribution of Selected Universities of Assam in Scholarly Publications During the year 2011-2020: A Bibliometric Study.** Retrieved from: <https://www.researchgate.net/publication/351955366> **Contribution of Selected Universities of Assam in Scholarly Publications During the year 2011-2020 A Bibliometric Study** Accessed on. 16.08.22
7. **Contribution to Open Access Repository by the Central Universities of India: A Case Study of Shodhganga.** Retrieved from: <https://core.ac.uk/download/pdf/188144198.pdf> Accessed on: 17.07.2022
8. **Bibliometric Analysis of PhD. Theses in LIS During 1993-1997.** Retrieved from: <https://www.researchgate.net/publication/344026304> **BIBLIOMETRIC ANALYSIS OF PH D THESSES IN LIS DURING 1993-1997** Accessed on: 17.07.22
9. **India's research contribution to world LIS literature: a study 2011–20** Retrieved from: <https://www.emerald.com/insight/content/doi/10.1108/CC-02-2021-0005/full/html> Accessed on: 20.07.22
10. **Library and Information Science Research in Indian Universities: Growth, Core Journals, Keywords and Collaboration Patterns.** Retrieved from: <https://arxiv.org/ftp/arxiv/papers/2107/2107.13238.pdf> Accessed on: 17.07.22
11. **New Trends in Library and Information Science Research in India.** Retrieved from: https://www.journalijar.com/uploads/60685d97ab6fb_IJAR-35376.pdf Accessed on: 28.08.22