

A Study on the Growth and Development of ETD Repositories in the University Libraries of Assam.

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Abstract

The paper discusses in brief the initiatives taken by the University libraries in Assam for creating digital archives and examines how ETDs are of great significance to students, researchers as well as faculty members. It highlights how the ETDs in the University Libraries of Assam are yet to develop in the truest sense of them. The paper also examines in this regard the issues and challenges regarding the setting up of ETD Repositories. Finally some suggestions are highlighted for overcoming such challenges.

Keywords: ETDs, IR, IPR, PhD theses, Shodhganga

1. Introduction

Before the arrival of Information and Communication Technology (ICT), the research outputs of institutions were underutilized because of the issues relating to its accessibility. The developments in ICT have now broken these restrictions and research outputs have become globally available for its effective application in the related areas. Institutional Repositories (IR) are digital collection of the outputs created within a university. An IR is a digital archive consisting of accessible collections of scholarly work that represents the intellectual capital of an institution. It is the means for an institution to manage the digital scholarship, maximize access to research output for the society. An increasing number of universities are accepting and encouraging the submission of theses and dissertation in electronic format.

According to the UGC Regulation “Minimum standards & procedure for award of M.Phil./Ph.D. degree, 1st June 2009” it has become mandatory for all universities in India to have the electronic version of all the doctoral theses be submitted within thirty days of the announcement of the award of PhD Degree to the INFLIBNET. The repository Shodhganga was

set-up in January 2010 for uploading of electronic version of theses by research scholars. Under the act it has been mandatory for the university to set up Institutional Repository which would host all theses and dissertation that want enable anyone to access, browse and view the theses.

The International Federation of Library Association (IFLA) is committed to ensure that libraries should be partnered with faculty and research managers to set up open access repositories and to help faculty and student deposit their research outputs (IFLA 2011).

At the same time it must also be mentioned that the Universities are also benefits from ETD repositories, as Moxley (2001) points out:

“Theses and Dissertations reflect an institutions ability to lead students and support original work. As digital libraries of ETDs become more commonplace, students and faculty will make judgments regarding the quality of a university by reviewing its digital library.”

Moxeley (2001) states that, “In future, a university’s quality will be linked to its digital library of the theses and dissertations. UNESCO (2001) envisions that the benefits of ETDs have on students will reflect on universities and on entire societies, countries and regions. Therefore, it is important to note thatthe significance of the ETDs screech out from student to University to society and to the world.

ETDs are often stored and made accessible by universities, as a means of disseminating research outputs to a society.

Till date, very few universities have developed the Institutional Repository and signed MOU with INFLIBNET center and some are yet at the preliminary stage. Among the 18 university libraries in Assam, some have just begun academic activities while some are specific universities which do not conduct research programmes.

2. Objectives

The objectives of the study are

- i. To study the growth and development of ETDs in the university libraries in Assam.
- ii. An evaluation of University Libraries of Assam towards the contribution of ETDs to Shodhganga.

3. Scope and Limitations

This study provides context to the growth, development and management of E Theses repositories in the university library of Assam. It is an evaluative study of University libraries of Assam towards the contribution of ETDs in Shodhganga@inlibnetCentre. In Assam the creation of ETD repositories at university level is in preliminary stage. Out of 18 universities only 5 have contributed in ETD, remaining have not contributed possibly because of the fact that they are newly established and have just introduced research programme.

4. Benefits of ETDs

Publishing of ETDs makes the results known nationally and internationally. Thus, ETDs become a vehicle which can identify and connect national and international research groups with common research interests and open possibilities for strong collaboration.

Also the university ranking system has developed various metrics which are used as a standard for international university rankings and visibility. In this sense quality and quantity of the research output coming from ETDs becomes an important metric determining the university ranking.

5. Methodology

Data have been collected by e-mail and by the means of telephonic conversation with the librarians from different universities of Assam about maintaining their Institutional Repository. The data collected from respective universities were compiled and analyzed. To serve the purpose of this paper the data were collected from INFLIBNET web site shodhganga@inlibnet Centre (<http://www.inlibnet.ac.in>). Till September 2016, there were more than 99995 theses deposited in the Repository from 261 Universities. Out of these, the present study is conducted on 5 university libraries of Assam. Among 18 universities of Assam, 5 University have

contributed in Shodhganga, and more 2 universities have signed MOU with INFLIBNET Centre but not yet contributed to ETD. Finally made a content analysis of the collected data and data were analyzed and presented in simple tabulation and diagrams.

6. Review of Literature

Various sources have been reviewed and we present the same here.

6.1 International Scenario

Lypincott and Lynch (2010) surveyed about ETDs in the graduate education programmes and addressed key issues related to the development and use of ETDs. They have also documented about the concerns by faculty and students about public access to ETDs. They suggested libraries can play a broader role in graduate education by arranging for the IR services, which will enhance student dissertation experiences.

Copeland and Penman (2014) described how ETD support for Research and Development in an academic setting. ETD Repositories have become bearers of the torch of discovery in researcher's mission for knowledge. ETD lead us to a new picture of the Institutional Repositories and its

Different from tradition.

6.1. National Scenario

The first major initiative towards ETD in India came in the form of University of Mysore's Vidyaniidhi Project which was sponsored by National Information System for Science and Technology (NISSAT). Urs and Raghavan (2001) explained how the project emerged as a national effort to create, motivate and provide network access to digital library of Indian theses.

Massive research work has been conducted by Vijayakumar, Murthy and Khan (2004, 2005, 2006) on various aspects of ETDs like software, copyright and IPR issues, contribution of

INFLIBNET and UGC towards popularization of ETDs, barriers, experienced by librarians in Indian Universities towards deposition of these and Dissertation in electronic format.

UGC, India (2009) provides guidelines for submission of electronic version of theses and dissertations by the researchers in Universities with an aim to facilitate open access to Indian theses and dissertations to the academic community throughout the world.

‘Shodhganga’ and ‘Shodhgangotri’ project started by INFLIBNET Centre, in spite of being very important and useful ones the upcoming and present researchers are still lagging behind compared to their international counterparts.

Bhat and Mudhol (2014) conducts a survey of Indian ETD Repository Shodhganga, to study on the “Importance of Electronic Thesis and Dissertation on the Internet’ and claimed that the electronic publications act as a substitute for the print publications.

Gayan (2014) studies about the development and status of the ETDs in India and found that there is importance of ETDs in India and found that there is importance of ETDs in Technology driven era and especially in a developing country like India. The study also revealed that most of the Indian ETD repositories have adopted open source software DSpace for building up the repositories.

Gayabyab (2015) review on ETDs and compared developed and developing countries. She found that while the ETDs mushroomed swiftly in developed countries, in developing countries the institutions are isolated and still at the initial stage.

ETDs are known to be rich and unique source of information for research work. ETDs are a relatively new mode of research and scholarly communication.

(Khaparde and Ambedkar, 2014) have clearly described the importance of ETDs for research work and what scholars get from ETDs cannot be found in any other source of information.

7. Issues and Challenges to setting up ETD Repository

The following major issues are being faced in University libraries:

- **Lack of Expertise:** Proper expertise is required so that the ETDs would be uploaded in the repositories and access can be provided to same by creating appropriate metadata.
- **Copyright and Intellectual Property Right:** Copyright protection and Intellectual Property Right is a major issues of concern regarding ETDs. With the advent of ICT for the publication of theses and dissertations there are a wide range of copyright and licensing issues that need to be taken into consideration. Universities or national bodies like UGC should be framed comply IPR.
- **Lack of Management Support/academic staff:** The management are not interested, faculty are not that enthusiastic to upload the theses in ETD repositories because of the UN awareness about the benefit of the same.
- **Lack of Fund/ Infrastructure:** It was found that lack of funding and infrastructure are the two main concerns for developing and maintaining ETD Repositories.
- **Access and Security Concerns:** No planning and strategy has been developed by the concerned university libraries to take the problems of access and also security concerns. Long term preservation should be adopted in order to achieve the goal of ETDs.

8. Data analyzed and Interpretation

Till 17th September, 2016 a total Thesis No. 99995 in Shodhganga out of which total Assam's University contribution are-

8.1. Universities of Assam contributed to Shodhganga: (as on 17.09.2016)

| Name of the University | No. of Thesis | % of total |
|----------------------------|---------------|------------|
| Gauhati University (GU) | 3114 | 3.10% |
| Assam University (AU) | 986 | 0.98% |
| Dibrugarh University (DU) | 18 | 0.02% |
| Tezpur University (TU) | 428 | 0.42% |
| Assam Don Bosco University | 8 | 0.01% |

Table: 1 Universities of Assam contributed to Shodhganga: (as on 17.09.2016)

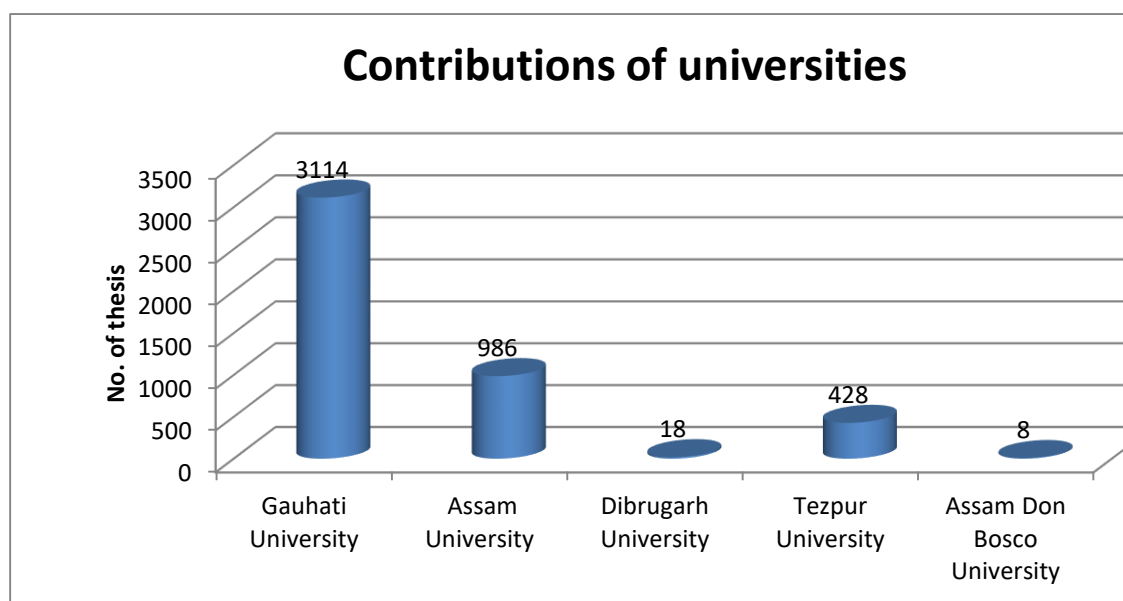


Figure-1: Contribution of Universities

On analysis of the data from table 1. It has been found that out of the 18 University libraries in Assam only 5 are in an active stage, Where Gauhati University is in the highest rank. It shows the total number of theses submitted and the percentage to the total number of theses in ETD Database. We found that the GU 3114 (3.10%) has contributed the largest number of theses in Shodhganga among the university libraries and this has been followed by AU 986 (0.98%), TU 428 (0.42%) and DU 18 (0.02%). It is worth mentioning that the Gauhati University occupies the 9th rank among the universities of India.

8.2. Subject wise ETD Contribution of GU, TU, DU, and AU

Here, the data collected are grouped into subject wise. We have considered the four universities- GU, TU, DU and AU for the further analysis. The Assam Don Bosco University is omitted here as its total contribution is too less i.e. only 8.

| S. No | DEPARTMENTS | GU | TU | DU | AU |
|-------|----------------------------|-------------|------------|-----------|------------|
| 1 | Faculty of Arts | 1278 | 24 | 4 | 567 |
| 2 | Faculty of Science | 1498 | 215 | 13 | 257 |
| 3 | Faculty of Technology | 135 | 124 | 0 | 45 |
| 4 | Faculty of Commerce | 127 | 0 | 1 | 34 |
| 5 | Faculty of Law | 38 | 0 | 0 | 0 |
| 6 | Faculty of Management | 15 | 37 | 0 | 17 |
| 7 | Faculty of Fine Arts | 1 | 26 | 0 | 66 |
| 8 | Faculty of Engineering | 15 | 2 | 0 | 0 |
| 9 | Faculty of Medical science | 7 | 0 | 0 | 0 |
| | Total | 3114 | 428 | 18 | 986 |

Table: 2 Subject wise ETD Contribution

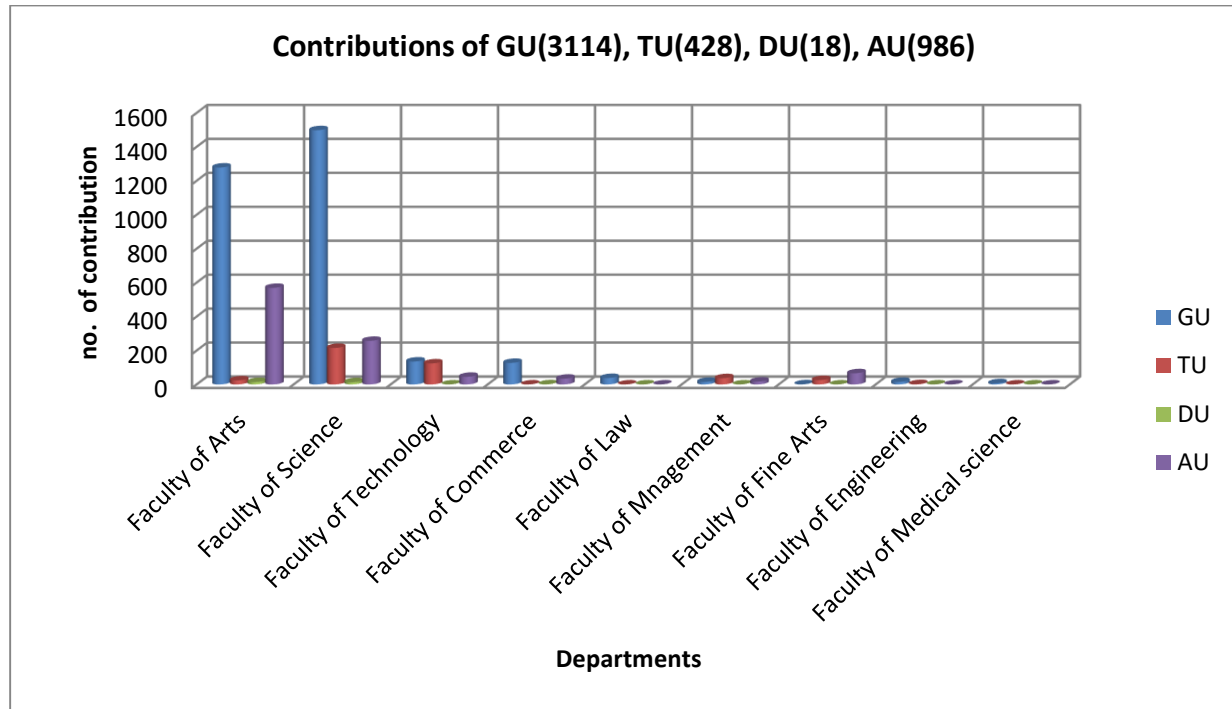


Figure-2: Contributions of GU(3114), TU(428), DU(18), AU(986)

In table 2 and Fig. 2: Collected data are groped in nine broad areas. It shows in detail of subjectwise contribution in Shodhganga’s database from university libraries of Assam. Some university has zero submission in the particular subject areas like Medical Science, Law, Technology, Engineering and Management.

Later, we tried to make a comparison of the nine broad areas of subjects from the four universities so that their development can be brought out more distinctly.

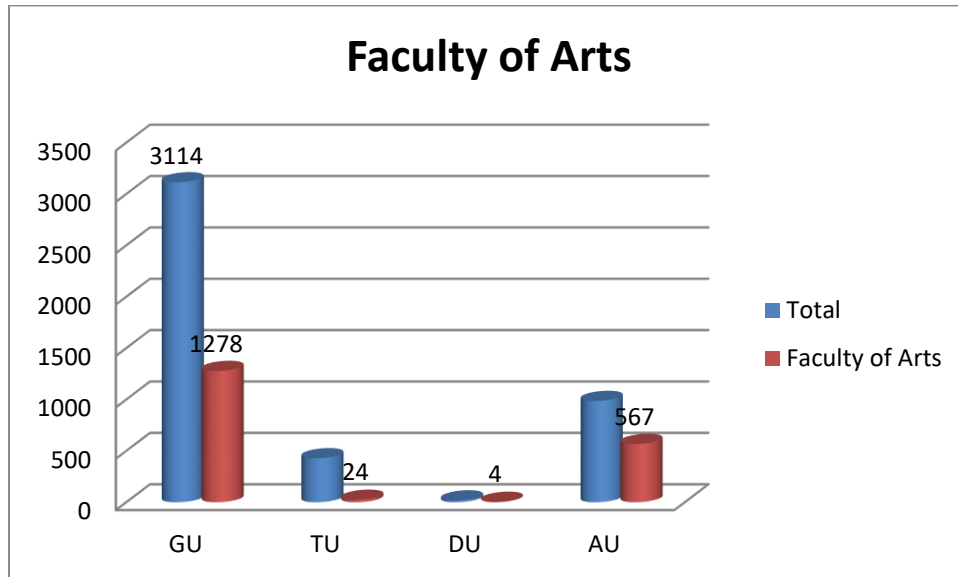


Figure-3: Contributions of GU, TU, DU, AU

From Figure 3 it is found that the GU (1278) has contributed the highest theses in the faculty of arts, followed by AU(567), TU(24), DU(4).

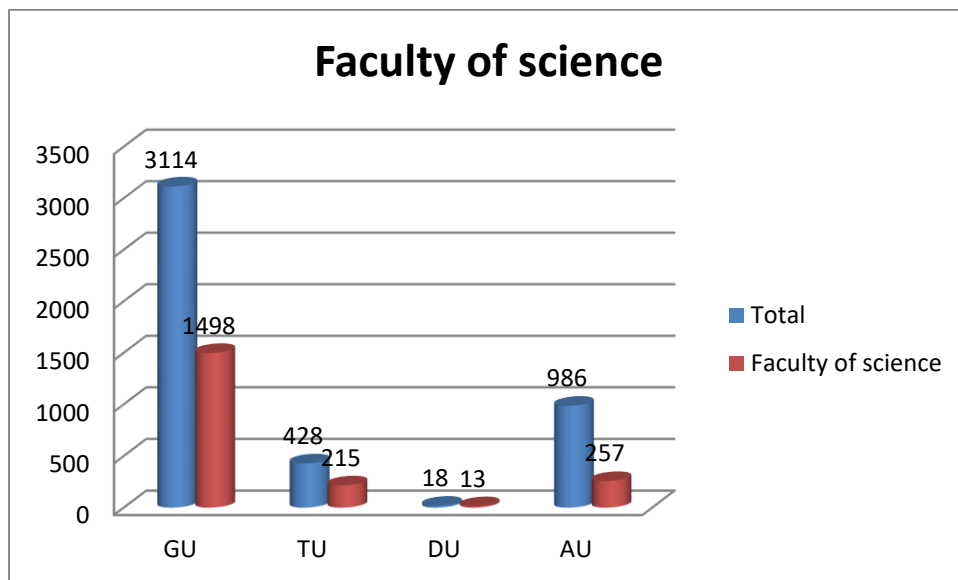


Figure-4: Faculty of Science

Figure 4 shows submission in subject area Faculty of Science, GU(1498) has contributed the highest theses in the faculty of science, which is followed by AU(257), TU(215), and DU (13).

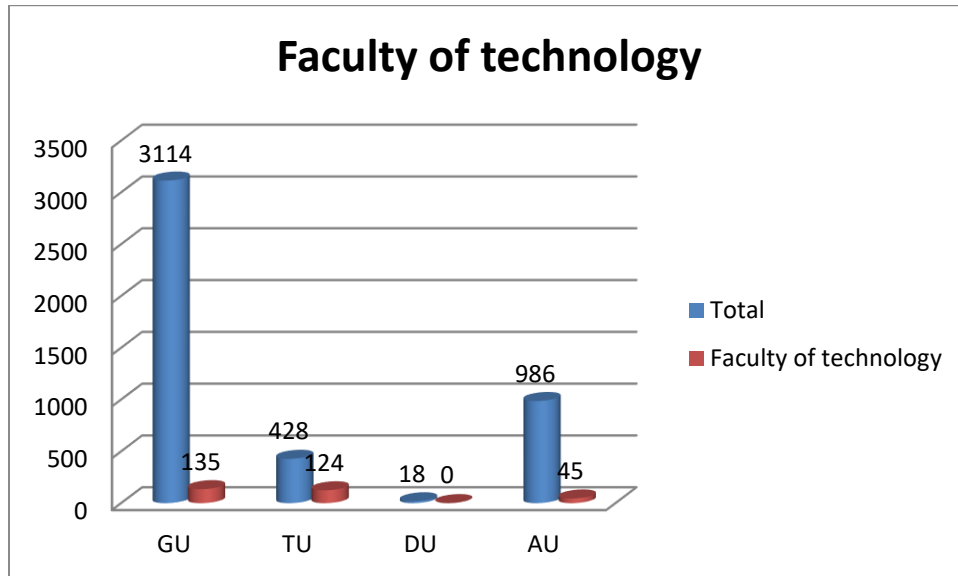


Figure-4: Faculty of Technology

Figure 5 shows that the GU(135), TU(124), AU(45) and DU have not contributed a single theses in this subject area.

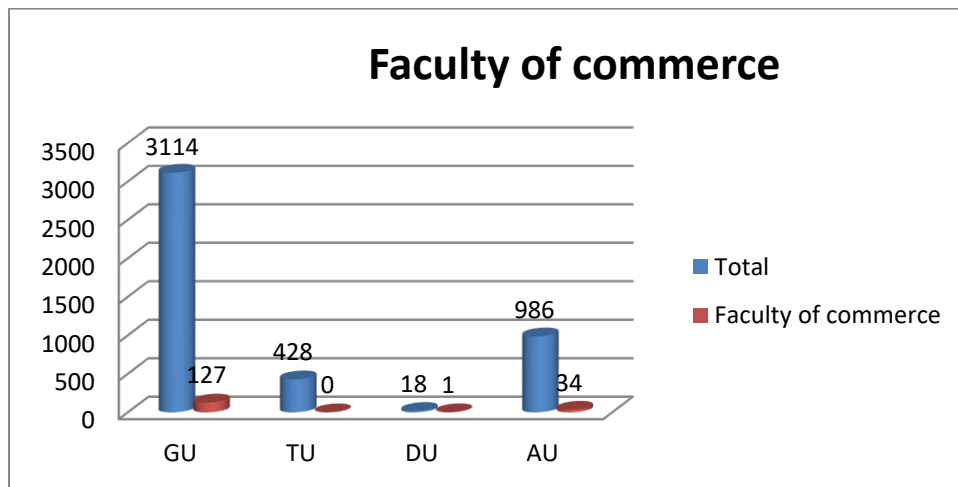


Figure-4: Faculty of Commerce

Figure 6: It is found that the GU(127) has contributed the highest theses in the faculty of Commerce, followed by AU(34), DU(1). TU have not contributed a single in this subject area.

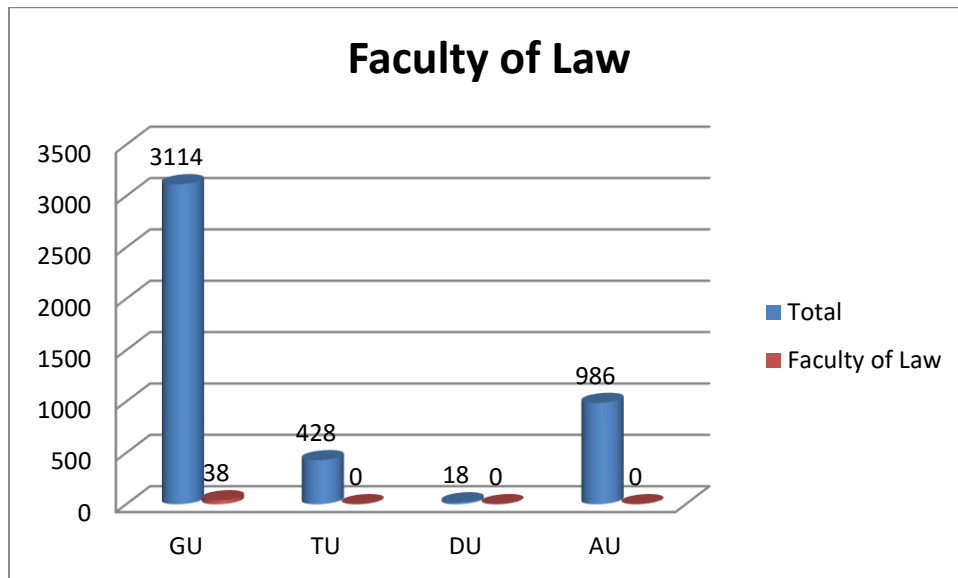


Figure-5: Faculty of Law

From Figure 7 showed that the GU(38) has contributed the highest theses in the faculty of Law. The TU, DU, AU have not contributed a single these in this subject area.

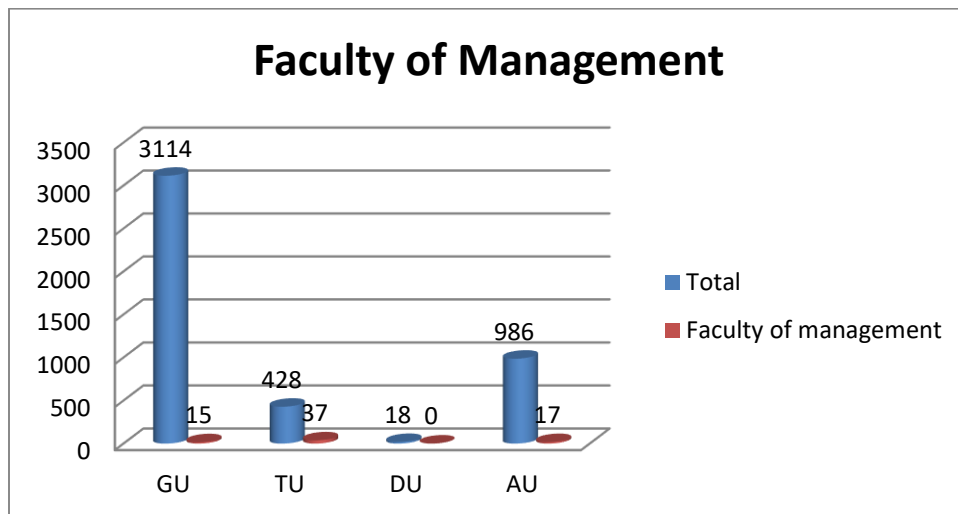


Figure-6: Faculty of Management

Figure 8, it is found that TU(37) has contributed the highest theses in the faculty of Management, followed by AU(17), GU(15). DU have not contributed a single theses in this subject area.

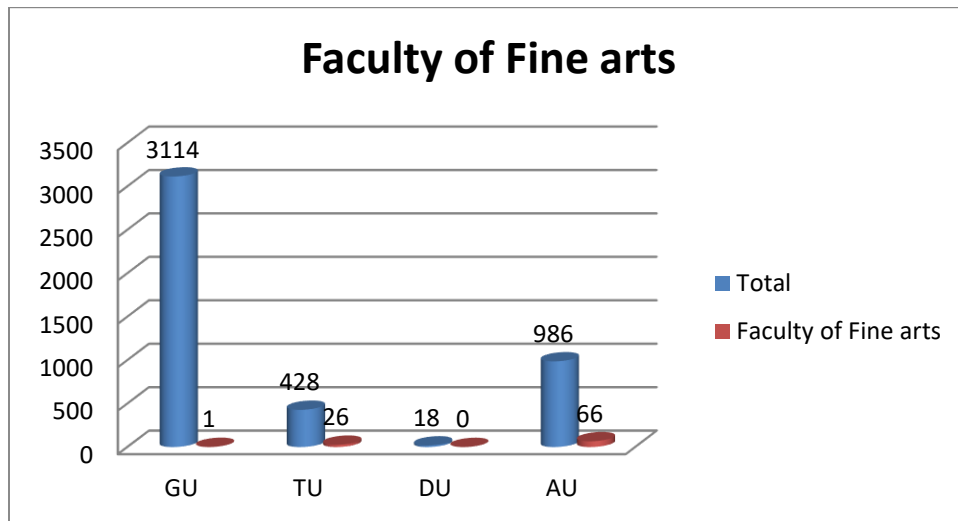


Figure-7: Faculty of Fine Arts

Figure 9: It is found that AU(66) has contributed the highest theses in the faculty of Fine arts, which is followed by TU(26), GU(1). The DU have not contributed a single theses in this subject area.

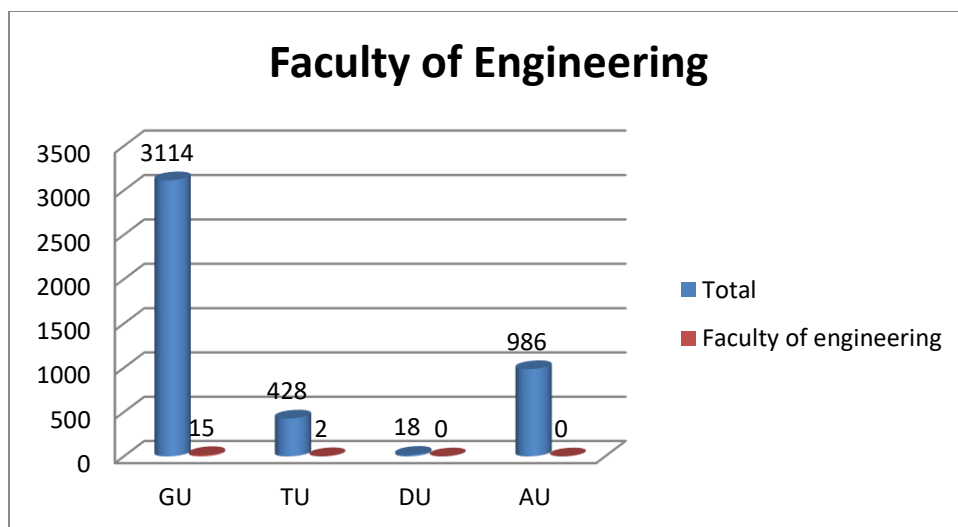


Figure-8: Faculty of Engineering

Figure.10 Shows submission in subject area that is Faculty of Engineering, highest contributor is made by GU(15), followed by TU(2). DU and AU have not contributed single theses in this subject area.

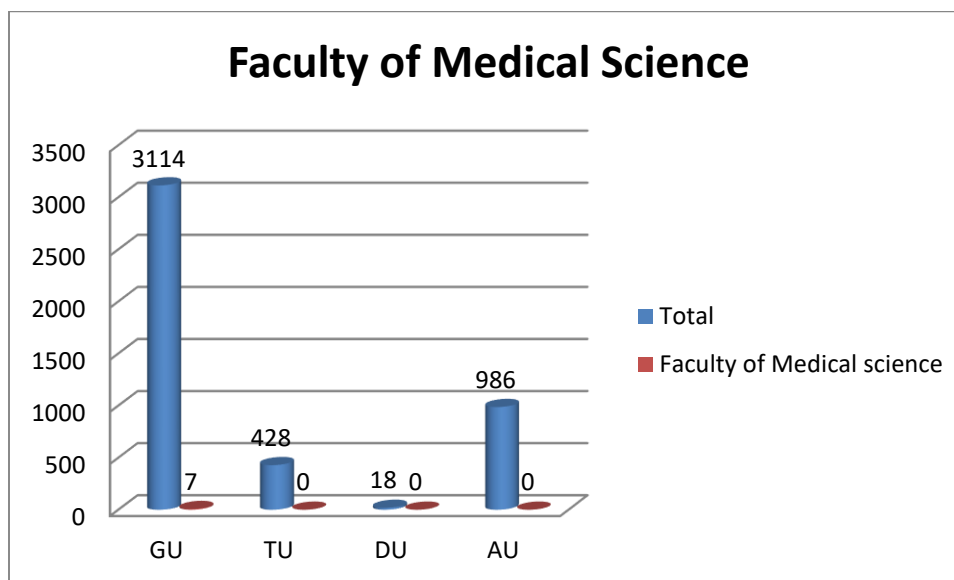


Figure-9: Faculty of Medical Sciences

Figure 11 shows submission in subject area that is faculty of Medical Science, only contributor is made by GU(7). TU, DU, AU have not contributed a single theses in this subject area.

8.3. University of Assam who has not contributed to Shodhganga (till 17 September, 2016)

| S. No. | Name of the University | Year of Establishment | Status | Remarks |
|--------|-------------------------------|-----------------------|------------------|---|
| 1. | Assam Agricultural University | 1969 | State University | |
| 2. | Boroland University | 2009 | State University | MOU signed with INFLIBNET on 08th September, 2015 |

| | | | | |
|-----|---|------|--------------------|--|
| 3. | K.K.Handiqui State Open University, Kokrajar | 2009 | State University | MOU signed with INFLIBNET on 23 rd December, 2011 |
| 4. | SrimantaSankardeva University of Health Sciences, Guwahati | 2009 | State University | |
| 5. | Assam Down Town University | 2010 | Private University | |
| 6. | National law University and Judicial Academy, Assam | 2010 | State University | |
| 7. | Assam Rajiv Gandhi University of Co-operative Management, Sivasagar | 2010 | State University | |
| 8. | Assam Science and Technology University, Guwahati | 2010 | State University | |
| 9. | Cotton College State University | 2010 | State University | |
| 10. | Kumar BhaskarVerma Sanskrit and Ancient Studies University, Nalbari | 2011 | State University | |
| 11. | Kaziranga University, Jorhat2012 | 2012 | Private University | |
| 12. | MahapurushaSrimantaSankaradevaViswavidyalaya | 2012 | Private University | |
| 13. | Assam Women's University | 2013 | State University | |

Table: 3 University of Assam not contributed to Shodhganga (till 17 September, 2016)

9. Suggestions

- i. All university must motivate their researchers and faculty member to submit their research work in the repository.
- ii. Standards and mandatory rules should be framed by the universities at local or by organizations of national importance like UGC (India) to protect copyright of outputs thereby promoting submission of research work.
- iii. User awareness programmes may be organized on benefits of open access to researchers.
- iv. Social networking sites should be used as one of the most powerful media of creating awareness about e-theses repository.
- v. The university may fix a period after which full text access should be provided to the ETD.
- vi. Withdrawal of duplicate items must be carried out under the supervision of the repository administrator and they should be removed immediately as soon as identified.

10. Conclusion

Skill development and training is finally essential to all stakeholders for ETDs creation and usage. Libraries should play a vital role in this regard. ETDs present particularly several other technical and legal issues related to digital publication. All these issues need to be carefully overcome and managed by all stakeholders, so as to achieve the best result for dissemination of the important research material. What we believe is that special care ought to be taken for these University libraries which have yet to develop ETD repositories. It is our belief that special training programme needs to be conducted in these libraries and a good amount of financial assistance has to be provided in order to ensure the growth and development of ETD repositories in the University libraries of Assam.

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