CHOICE BASED CREDIT SYSTEM IN LIBRARY AND INFORMATION SCIENCE IN MIZORAM UNIVERSITY: A CASE STUDY

A dissertation submitted in partial fulfillment of the requirement for the Degree of Master of Philosophy in Library and Information Science

Submitted by
VANLALHRUAII SAILO
MZU Registration No. 825 of 2007-08
M.Phil Registration No. MZU/M.Phil./214 of 22.05.2015

Supervisor
Dr. Lalngaizuali
Assistant Professor

School of Economics, Management & Information Science
Department of Library and Information Science
Mizoram University, Tanhril, Aizawl
2016

DECLARATION

I hereby declare that the dissertation entitled, "Choice Based Credit System in
Library and Information Science in Mizoram University: A Case Study"
submitted by me has not previously formed the basis for the award of any Degree or
Diploma or other similar title of this or to any other University or examining body.

Date: (VANLALHRUAII SAILO)

Aizawl, Mizoram



Department of Library and Information Science Tanhril, Aizawl, 796009, Mizoram Phone- 0389-2331608

Dr.Lalngaizuali Asst. Professor

CERTIFICATE

This is to certify that the dissertation entitled "CHOICE BASED CREDIT SYSTEM IN LIBRARY AND INFORMATION SCIENCE IN MIZORAM UNIVERSITY: A CASE STUDY" submitted by Ms. Vanlahruaii Sailo for the award of the degree of Master of Philosophy in Library and Information Science is carried out under my guidance and incorporates the student's bonafide research. This is the candidate's original work and is worthy of examination.

Aizawl, Mizoram

(**Dr. LALNGAIZUALI**)
Supervisor

Acknowledgement

First of all, I would like to express my sincere thanks to our Almighty God for giving me an opportunity and strength to complete my dissertation work.

I would also like to express my deep sense of gratitude and heartfelt thanks to my supervisor Dr. Lalngaizuali, Asst. Professor, Department of Library and Information Science, Mizoram, University for her intellectual, understanding, untiring help and invaluable qualitative suggestions which enable me to have successful completion of this dissertation work .Also, my sincere gratitude to Prof, R.N.Mishra for his valuable guidance, advice and inspiration. I would also like to record my deep sense of appreciation to Prof. R.K.Ngurtinkhuma, Head of Department and other faculty members for their continuous support to complete the work in time.

Last but not the least, I would like to express my gratitude to my parents who have supported me and given me everything right from the start.

Date: (VANLALHRUAII SAILO)

Place: Aizawl, Mizoram.

TABLE OF CONTENTS

	Page No
Declaration	i
Certificate	ii
Acknowledgement	iii
Table of Contents	iv-vi
List of Tables	vii
List of Graphs	viii
List of Appendices	ix
Abbreviations and Acronyms	x-xi
CHAPTER 1: INTRODUCTION	1-15
1.1.Introduction	1-2
1.2.Significance and Scope of Study	2-3
1.3.Review of Literature	3-10
1.4. Research Gap	10
1.5.Statement of the Problem	10-11
1.6.Objectives of the Study	11
1.7.Research Methodology	11
1.8.Chapterization	12
CHAPTER 2: CHOICE BASED CREDIT SYSTEM: AN OVERV	YIEW 16-31
2.1. Introduction	16
2.2. Meaning of Choice Based Credit System (CBCS)	17
2.3. Objective of CBCS	17-18
2.4. Advantages of CBCS	18-19
2.5. Significance of Grading in CBCS	19
2.6. UGC Guidelines on Adoption of CBCS	20-27
2.6.1. Applicability of the Grading System	21
2.6.2. Semester System and Choice Based Credit System	21
2.6.3. Types of Courses	21-22
2.6.4. Examination and Assessment	22-24
2.6.5. Computation of SGPA and CGPA	25-27

2.6.6. Format for Transcript	27
2.6.7. Conversion of Grades into Percentage	27
2.7. Conclusion	27-28
CHAPTER 3: IMPLEMENTATION OF CBCS IN MLIS (MZU)	32-50
3.1. Introduction of CBCS in Mizoram University	32-33
3.2. Mizoram University Regulation Governing Post-Graduate Programm	nes under the
Choice Based Credit System (CBCS) and Continuous Assessment Gra	ding Pattern
(CAGP)	33-40
3.2.1. Preamble	33
3.2.2. Title and Commencement	33-34
3.2.3. Coverage	34
3.2.4. Eligibility	34
3.2.5. Credit and Contact Hours	34
3.2.6. Duration	34
3.2.7. Courses	34-35
3.2.8. Components of Course	35
3.2.9. Credits Structure for Various P.G Programmes	36-37
3.2.10. Semester Wise Break-Up of Courses and Credits	37
3.2.11. Syllabus Structure	37-38
3.2.12. Evaluation and Examination	38-40
3.2.13. Attendance	40
3.3. Introduction of CBCS in the Department of Library and Information	ion Science,
Mizoram University	40-47
3.3.1. Objectives of Courses	41
3.3.2. MLIS Programme Structure under CBCS	42
3.3.3. Admission Requirement	42
3.3.4. Examination and Scheme of Papers	42-45
3.3.5. Job Diary	45
3.3.6. Curriculum Stipulated Study Tour	45-46
3.3.7. Open Electives	46
3.3.8. Department Library	47
3.3.9. ICT Laboratory	47
3.3. Conclusion	47-48

CHAPTER 4: DATA ANALYSIS AND FINDINGS	51-70
4.1. Introduction	51
4.2. Data Analysis	51-68
4.2.1. Respondents Rate	51-52
4.2.2. Impact of CBCS on Teachers	53-54
4.2.3. Need of Training on CBCS	54-55
4.2.4. Issues Relating to Choice of Open Electives	55-56
4.2.5. Impact of CBCS on the Functioning of Department	57-58
4.2.6. Problems Relating to Successful Implementation of CBCS	58-59
4.2.7. Impact of CBCS on Quality and Flexibility of Education	59-61
4.2.8. Understanding Level of CBCS by the Students	61-62
4.2.9. Factors Influencing the Selection of Open Electives	62-63
4.2.10. Problems Faced by the Students	63-64
4.2.11. Importance of CBCS among Students	64-65
4.2.12. Selection of Soft Courses under CBCS	65-66
4.2.13. Selection of Choice of Open Electives under CBCS	66-67
4.2.14. Attendance of Students in Open Electives	67-68
4.3. Findings	68-70
CHAPTER 5: SUGGESTIONS AND CONCLUSIONS	71-74
5.1. Suggestions	71-72
5.2. Conclusions	72-74
BIBLIOGRAPHY	75-82
APPENDICES	83-140

LIST OF TABLES

Table No.	Title	Page No.
Table 2.6.4 (A.1)	Grade and Grade Points	23
Table 2.6.4 (A.2)	Grade Point Scale	23
Table 2.6.5 (A.1)	Computation of SGPA	25
Table 2.6.5 (A.2)	Computation of SGPA contd.	26
Table 2.6.5 (A.3)	Computation of SGPA contd.	26
Table 2.6.5 (B)	Illustration of Computation of CGPA	27
Table 3.2.9	Credit Structure for Various P.G Programs	37
Table 3.2.4 (A)	Course Structure for MLIS under CBCS (2012 - June 2015)	43
Table 3.2.4 (B)	Course Structure for MLIS under CBCS (from July 2015)	44-45
Table 4.2.1	Distribution of Respondents	52
Table 4.2.2	Impact of CBCS on Teachers	53
Table 4.2.3	Need of Training on CBCS	54
Table 4.2.4	Issues Relating to Choice Of Open Electives	55-56
Table 4.2.5	Impact of CBCS on the Functioning of the Department	57
Table 4.2.6	Problems Relating to Successful Implementation of CBCS	59
Table 4.2.7	Impact of CBCS on Quality and Flexibility of Education	60
Table 4.2.8	Understanding Level of CBCS by the Students	62
Table 4.2.9	Factors Influencing the Selection of Open Electives	62-63
Table 4.2.10	Problems Faced by the Students	64
Table 4.2.11	Importance of CBCS among the Students	65
Table 4.2.12	Selection of Soft Courses under CBCS	66
Table 4.2.13	Selection of Choice of Open Electives under CBCS	67
Table 4.2.14	Attendance of Students in Open Electives	68

LIST OF GRAPHS

Graph No.	Title	Page No.
Graph 4.2.1	Distribution of Respondents	52
Graph 4.2.2	Impact of CBCS on Teachers	53
Graph 4.2.3	Need of Training on CBCS	55
Graph 4.2.4	Issues Relating to Choice Of Open Electives	56
Graph 4.2.5	Impact of CBCS on the Functioning of the	58
Graph 4.2.5	Department	30
Graph 4.2.6	Problems Relating to Successful	59
	Implementation of CBCS	
Graph 4.2.7	Impact of CBCS on Quality and Flexibility	61
	of Education	
Graph 4.2.8	Understanding Level of CBCS by the	62
	Students	
Graph 4.2.9	Factors Influencing the Selection of Open	63
	Electives	
Graph 4.2.10	Problems Faced by the Students	64
Graph 4.2.11	Importance of CBCS among the Students	65
Graph 4.2.12	Selection of Soft Courses under CBCS	66
Graph 4.2.13	Selection of Choice of Open Electives under	67
	CBCS	
Graph 4.2.14	Attendance of Students in Open Electives	68

LIST OF APPENDICES

Appendix No	Title	Page No.
Appendix 1	Mizoram University MLIS Syllabus 2012 -	82-98
	June 2015	
Appendix 2	Mizoram University MLIS Syllabus from	99-118
	July 2015	
Appendix 3	List of Students enrolled to join the O.E	119-128
	Courses	119-128
Appendix 4(A)	Questionnaire for Teachers	129-138
Appendix 4(B)	Questionnaire for Students	139-142

List of Abbreviations

AACR IIR – Anglo-American Cataloguing Rules Second Revised Edition

AIU – Association of Indian Universities

AICTE – All India Council for Technical Education

B.Tech – Bachelor of Technology

BCI – Bar Council of India

BLIS – Bachelor of Library and Information Science

BOS – Board of Studies

CAGP – Continuous Assessment and Grading Pattern

CATS – Credit Accumulation and Transfer System

CBCS – Choice Based Credit System

CC – Colon Classification

CGPA – Cumulative Grade Point Average

CMS – Content Management Software(s)

CSST – Curriculum Stipulated Study Tour

DDC – Dewey Decimal Classification

ECTS – European Credit Transfer System

HEI – Higher Education Institutions

HOD – Head of Department

HRD – Human Resource Development

ICT – Information and Communication Technology

IFLA – International Federation of Library Associations and

Institutions

IIT – Indian Institute of Technology

IQAC – Internal Quality Assurance Cell

LCD – Liquid-Crystal Display

LCSH – Library of Congress Subject Headings

LIS – Library and Information Science

M.Phil – Master of Philosophy

M.Sc – Master of Science

MA – Master of Arts

MBA – Master of Business Administration

MCI – Medical Council of India

MLIS – Master of Library and Information Science

MHRD – Ministry of Human Resource Development

MSW – Master of Social Work

MZU – Mizoram University

NAAC – National Assessment and Accreditation Council

NCTE – National Council for Teacher Education

NEP – New Education Policy

NKC – National Knowledge Commission

OE – Open Elective

PG – Post Graduate

Ph.D – Doctor of Philosophy

QA – Quality Assurance

RUSA – Rashtriya Uchatar Shiksha Abhiyan

SAARC – South Asian Association for Regional Cooperation

SGPA – Semester Grade Point Average

SLSH – Sears List of Subject Headings

TANSCHE – Tamil Nadu State Council for Higher Education

UG – Under Graduate

UGC – University Grants Commission

UK – United Kingdom

US – United States

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

Higher education has played an important role to India's emergence in the global knowledge economy. But it is still believed that a crisis is undergoing the Indian higher education system. This crisis has been termed as 'quiet crisis' by the National Knowledge Commission (NKC). Globalisation has forced the nation to exploit new opportunities including in the areas of higher education which require a proper and proactive policy of internationalization of higher education so as to support the process of creation and distribution of knowledge in Indian universities. This will further help in nation building through application of knowledge and skills to cope with the expectation of the 21st century teaching and learning (Rath & Samantaray, 2014). As per recommendations of National Knowledge Commission and UGC as well as Association of Indian Universities, the central universities, state universities and other institutions of higher education need to carry out academic reforms. The 11th five year plan of India proposed various measures for academic reforms in higher education. It recognised the need to introduce the academic reform in the university and college education system. The National Knowledge Commission in its report to the nation in 2008-2009 on higher education and Yashpal Committee Report in 2009 recommended revamping of higher education through academic and administrative reforms. Keeping in view the challenges of the changed times and make the higher education in Indian universities compatible with the universities in developed nations, the UGC (11th Plan, March 2009) and later on the Association of Indian Universities (AIU) stressed on the following recommendations:

- 1. Semester System
- 2. Choice Based Credit System
- 3. Curriculum Development
- 4. Examination Reforms
- 5. Administrative Reforms. (Roy, Khanam & Devi, 2013)

Thus, the academic reforms need to be carried out in the arena of admission procedures in various courses, a uniform academic calendar switch over from annual to semester system, acceptance of grade and credit system, introduction of Choice Based Credit System and semester system, examination reforms including continuous internal assessment and grading system, teachers' assessment and other related reforms.

All the above recommendations for reforms have been reviewed in by representatives of various universities in the State and considered for implementation with the aim of transforming Higher Education – a transformation where students changed from being passive recipients of knowledge to becoming active participants of the knowledge imbibing process. The education system in the State thus changes from a teacher-centric to learner-centric mode. It should aim at all-round integral development of students' personality so that they become good citizens of the new world order. (Implementation of CBCS, Government of Gujarat, 2011)

Choice Based Credit System (CBCS) offers a flexible system of learning and permits students to:

- Learn at their own pace
- Choose electives from a wide range of courses
- Undergo additional courses
- Adopt an interdisciplinary approach in learning
- Inter College/University transfer of Credits
- Complete a part of programme in the parent institute and get enrolled in other institutions for specialised courses.
- Enhance skill/employability by taking up project work, entrepreneurship and vocational training
- Carry on and transfer their credit
- Make best use of the expertise of available faculty.

1.2 SIGNIFICANCE AND SCOPE OF THE STUDY

Choice based credit system is a flexible system of learning that permits students to learn at their own pace, permits them to choose electives from wide range of elective courses offered by the university departments. It also helps them to adopt an inter-disciplinary approach in learning and make best use of the expertise of available faculties. Choice based credit system (CBCS) has several unique features such as enhanced learning opportunities, ability to meet students' scholastic needs and aspirations, inter institution transferability of students, part completion of an academic programme in the institution of enrolment and part completion in a specialised (and recognised) institutions, improvement in educational quality and excellence, flexibility for

working students to complete programme over an extended time and standardization and comparability of educational programme across the country.

The scope of the present study is limited to the MLIS-CBCS Based –Two Years Integrated programme of the Department of Library and Information Science of Mizoram University implemented with effect from August 2012 to July, 2015. It focus on the implementation of CBCS and its significance regarding its benefits and learning outcome among the three batches of PG students of the Department of Library and Information Science in Mizoram University.

1.3 REVIEW OF LITERATURE

The scholar made an extensive survey of available literature in the specific area of study so as to get abreast with the information. As CBCS is introduced recently, there is a need for reviewing the research publications in order to know the status of CBCS and its importance. The scholar has mentioned below the literature consulted for the study which have been collected from different articles and websites.

Phukan, R.S. (2015, June 24) in his article 'What is CBCS or choice based credit system? How does it work?' states it is too early to say whether CBCS will be successful or not. The UGC has always initiated measures to bring efficiency and excellence in the Higher Education System of India. The basic motive is to expand academic quality in all aspects, right from the curriculum to the learning-teaching process to examination and evaluation systems. However, so far multiple methods are followed by different universities across the country towards examination, evaluation and grading system. Considering this diversity, the implementation of the choice based credit system seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system.

Dhawan, J. (2015, September 5) in his paper 'What is a choice based credit system (CBCS)? What are its advantages?' states that the current higher education curriculum does not impart the necessary skills that would make the students employable adequately. There is a lack of Interdisciplinary approach as well as there is a very little scope for value based courses to be taught. In addition the students don't learn to think and analyze on their own and the system is not effective enough in meeting/empowering students to think on matters/issues independently.

So, the 11th five year plan of India as well as the National Knowledge Commission has recommended revamping of higher education through academic and administrative reforms. The UGC in its 11th plan has emphasized on such reforms and this was followed by the recommendations made on similar lines by the Association of Indian Universities (AIU). CBCS facilitates student's mobility, helps self learning, offers more flexibility, records students' workload realistically and respects student's autonomy.

Mishra, A. (2015, October 30) express an idea in his article 'Choice based credit system needs systemic changes' that Choice Based Credit System (CBCS) was implemented in order to make great changes in Indian higher education institutions; there was also strong resistance from groups of academics and students, especially from the University of Delhi, one of the India's largest and leading universities. It seems that there is teacher shortage, lack of flexibility and guidance, no clarity on student mobility and lack of adequate infrastructures in the implementation of CBCS. Unless these shortages are not restored, a credit system designed to offer choice and flexibility to students may not succeed especially in Indian universities struggling with challenges of huge teacher vacancies, inadequate infrastructure, crippling bureaucracy and enormous student numbers.

Ralhan, A. (2015, March 10) in his article, 'Why Delhi University's choice based credit system is a bad idea' mentioned that students of Delhi University will again be taken as subjects for an experiment after the hurried imposition of the semester system and the Four Year Undergraduate Program in recent years. This time, the plans are to form a new education policy. UGC has come up with a program called Choice Based Credit System. CBCS flaunts that the scheme is in the interest of students, but this ultimately seems to comply only with the market oriented world, where a large section of half-educated students will be used for small sector jobs. The idea of this program is not something new in itself. So far, no clear guidelines have been given as to what kind of a syllabus CBCS will propose. Honours degrees and programs should not be treated as vocational courses. It is perhaps an attempt to lure them not to go through a rigorous academic plan but only to seek "efficiency". The question to be asked is, how are the students going to form their own syllabi? And what is this concept of transferring from one college to another and from one discipline to another? Even if the system gets implemented, such guidelines do not seem to contribute fruitfully to the academic nature of a university. The focus does not seem to be on one's academic and personal growth, rather it's a well thought out

strategy to attack the potential and radical growth of the students who can question the structural, cultural, social, and economic hegemony of a society. When the different progressive fronts are fighting for issues like better infrastructure, permanent jobs for teachers and increase in number of seats for students – the fact that gets highlighted is that while the basic facilities have not been procured, the authorities like MHRD and UGC are being ignorant on their part. After the announcement of the UGC guidelines, it appears that Delhi University will again be seen struggling against the UGC and the MHRD's aristocratic behaviour. How much time and energy it will take to undo this mess is still uncertain, but the various progressive fronts have already strongly started opposing the proposed idea of CBCS.

Sharma, Shiksha (2015, May) mentioned in her paper 'Choice Based Credit System: Standard of education will suffer, says teachers' mentioned that a group of academicians from Delhi's Central Universities expressed their opposition against the 'thoughtlessness' behind the Choice Based Credit System (CBCS) and the opacity and reckless speed with which it is being pursued. The new system (CBCS) proposes a common syllabus for central universities, a common entrance test, faculty and credit transfer. Romila Thapar, renowned historian mentioned this common syllabus for 51 universities is not only a mammoth task, but also largely unnecessary. God universities will have to lower standards in order to conform to a common standard of teaching the same syllabus. Instead of giving a green signal to the UGC's ambitious plan of implementing CBCS from the coming academic session, the group proposed an alternate way of achieving seamless national wide mobility of students.

Derepak, K.R. (2015, December) described in his paper 'Choice Based Credit System: the Path Ahead' that the University Grants Commission has brought out guidelines for the introduction of the choice based credit system (CBCS) in higher educational institutions for graduate, postgraduate, diploma and certificate programs. The expressive stated purposes of the introduction of the scheme are mainly to provide opportunity for students to have a choice of courses or subjects. This would mean that the program would emphasize more on students earning the prescribed number of credits to qualify rather than being herded to come out successfully within the normal stipulated time for the degree. The scheme is also expected to provide mobility to students within the country, and, eventually, even internationally, as the credits earned at one institution can be expected to be transferred freely. While there can be no argument against the imperative to have portability in education at college and university-level

and also providing opportunity to students to choose, it is a fact that only a small percentage of the institutions in the country are in a position to bring in these changes in letter and spirit.

Kelkar, Alka S.; & Ravishankar, Lakshmi (2014) in their paper 'Choice Based Credit System: boon or bane?' analyses the teachers' opinions, problems faced and recommended suggestions for better implementation of the CBCS. The authors described the evaluation of the implementation of credit system among the faculty members from colleges affiliated to Mumbai University. The study revealed that most of the respondents agreed that the objectives are achieved, CBCS emphasized on evaluation of the students only and increased the workload of teachers while it did not help the performance of students. The author suggested that improvement of infrastructure and teaching aid, reduced teacher student ratio and promoting self-study.

In their paper, 'Internationalization of library and information science education: adopting choice based credit system (CBCS) in Indian universities with special reference to library and information science in Mizoram University', Rath, Pravakar; & Moorttimatee, Samantaray (2014) discussed the introduction of choice based credit system in library and information science keeping in view the international trends and developments with regards to its recognition, credit transfer and quality assurance. It further discusses the credits, courses and components of Master's course in Library and Information Science based on Choice Based Credit System and introduced in Mizoram University, located in the north-eastern parts of India. The authors also conclude that the effective implementation of the course depends on proper counselling to the students opting for soft courses and open electives and monitoring at regular interval.

Vaidyan, V.K (2014) in his article 'A critical analysis of credit-semester in India' described about the evolution of course credit system and its accountability, that is, it measures progress of students and teaching staff. It also describes the implementation of Course-Credit system in India along with 4-point grading system, Grade to mark conversion and 100-point grading system. The author also express that the action plan proposed by UGC outlines the need to consider and adopt semester system, choice based credit system, and flexibility in curriculum development and examination reforms in terms of adopting continuous evaluation pattern

reducing the weightage on the semester-end examination so that students enjoy a de-stressed learning environment all through.

Dutta, Indrajeet; & Dutta, Neeti, (2013) in their article 'Choice based credit system: an academic reform in higher education' states that, in the 11th five year plan, UGC initiated academic and examination reforms across the country called Choice Based Credit System (CBCS). CBCS promotes curricular flexibility and students' mobility along with a choice of learning some skills as required by our knowledge societies. In his letter to Prime Minister, Sam Pitroda, Chairman of NKC has said, "We propose a transition to a course credit system where degrees are granted on the basis of completing a requisite number of credits from different courses, which provides students with choices". The CBCS is not a new system especially for many centuries as many of the foreign universities have designed their courses on CBCS pattern and are practising it for more than four decades. Presently many of our higher education institutions are offering programme based on credit based system but they offer very little choices to students. As education sector has been globalised and government has reacted in response to this globalisation, therefore it tries to bring foreign Educational Bill wherein opening of off-campuses of foreign universities in India become a reality but in these universities there is so much curricular flexibility to offer to the students, therefore, there is an urgent need that our universities also introduce the Choice Based Credit System.

Pathania, Kulwant Singh; & Pathak, Anuradha (2013), discussed in their paper 'Choice based credit system: the need of the hour' that the blend of quality enhancement to stand in competitive market, and flexibility to meet the students' requirement is the need of the hour. It also express that one needs to find a system that matches students' scholastic needs as well as their personal aspirations. India needs multi-dimensional and broad-based quality education to maintain its leadership in the 21st century. Therefore, India should show the concern over the quality in education as the education in India is not competitive in terms of the quantity and quality with other countries.

Katoch, Kuldeep Singh; & Katoch, Suman Kumari (2013) discussed in their paper 'Choice based credit system and semesterization in Himachal Pradesh: the road ahead' that the universities have to perform multiple roles, like creating new knowledge, acquiring new capabilities and producing an intelligent human resource pool through challenging teaching,

research and extension activities so as to balance both the need and the demand. The authors of this article describe about the challenges of expansion, equity and excellence of higher education in Himachal Pradesh and academic reforms in Himachal Pradesh. They also highlighted the lacking in the present system and advantages, challenges and suggestions of CBCS.

Roy, Nil Ratan; Khanam, Umme Khadiza; & Devi, Tribeni (2013), in their paper 'Attitude towards choice based credit system of pg level students in higher education: a study on Assam University' discussed that the 11th plan (Eleventh Five Year Plan 2007-2012 of Planning Commission, Government of India) recognized the need to introduce the academic reform in the university and college education system. The academic reform necessarily includes changes in admission procedures in various courses. Modification in assessment and examination methods, switch over from annual to semester system, acceptance of grade and semester system, CBCS, teachers' assessment, and other related reforms in Assam University, the CBCS has been started in its PG level courses across the discipline since 2010. As this is the reformed structure of education system, so still this system has not been materialized in full form. This study is an attempt to know the level of attitude of PG level Arts and Science students towards CBCS. The study reveals that Science background students and Boys students are having higher level positive attitudes towards CBCS in comparison to Arts and Girls students.

In his paper 'Fostering a liberal credit system', Singh, Dheeraj (2010) states that Indian schools, colleges and universities traditionally follow a definite "pass" or "fail" system. Sometimes, students are followed to move on to the next class, or semester, on the condition that they sit for all papers that they fail to clear. But the University Grants Commission has been pushing Indian universities to adopt a more liberal system. One was to initiate a "choice-based credit system" – in conjunction with the semester and grading systems. This has the potential to improve the Indian higher education system. So far, universities appear reluctant to embrace the reforms. Perhaps, this willingness to reform the traditional system of learning could be attributed to a lack of understanding.

Rajendran, M. (2010) published an article 'Curriculum-cum-quality assurance: a major ingredient for assessment and accreditation in higher education' which concerned about the curriculum development that this is an essential ingredient to strengthen the quality of education for which, attention should be focused on socially relevant curriculum, innovative and

interdisciplinary areas, periodically restructuring the curriculum equivalent to international standards, ICT components in the content of the curriculum, diversity with employable potential, stress on soft skills development, basic science and vocational based curriculum etc. For this development, the Choice Based Credit System is widely encouraged by many institutions and the philosophy of the system is to create knowledgeable individual to understand his own curriculum and discipline meaningfully from the perspective and insight of other inter-disciplinary and multi-disciplinary cultures, which would, in turn, bring a lot of changes, innovation and improvement in the realm of higher education.

Hatekar, Neeraj (2009) proposed in his article 'Changing higher education scenario in India' that postgraduate teaching and research in state universities will have to be taken over by the central government to ensure the survival of this important part of the higher education system. It also states that the higher education scene in the country is set to experience a dramatic change but the ability of the state universities to cope with this change is extremely doubtful. The success of the new central universities and the proposed national universities will come about at the cost of the state universities, which cater to the majority of students in the country.

Baradol, A.K. (2009, August) presented a paper 'Bologna Process of Library and Information Science Education in SAARC Countries: A proposal', at the World Library and Information Congress: 75th IFLA General Conference and Council, Milan, Italy, which provides a brief description of Library and Information Science (LIS) education in SAARC countries. It deals briefly the similarities, differences and common problems of LIS education in SAARC countries and European countries where Bologna Process has been accepted. It covers the structure of the LIS education programmes and explains the quality of LIS education. The paper briefly mentions about the efforts done for restructuring of LIS education through seminars and conferences. The efforts of Indian University Grants Commission (UGC) regarding the introduction of Choice Based Credit System (CBCS) have been highlighted. It proposes to introduce Bologna Process of LIS education among SAARC countries. It discusses the introduction of qualifications framework of three cycles' viz., bachelor, master and doctorate. The acceptance of curricular framework has been suggested. Paper recommends the creation of awareness about the Bologna Process of LIS education.

Jeyasingh, G. Stanley (2005)in his article 'Choice based credit system' describes about Choice based credit system (CBCS), or a cafeteria like system as it is a solution for transformation from the traditional teacher oriented education to a student-centred education. It also emphasized making responsibility for their own education in this way; students can benefit the most from all the available resources. Academic commissions and committees such as UGC, TANSCHE and NAAC also recommend CBCS for higher education.

1.4 RESEARH GAP

On the analysis of the above literature review, it has been observed that there are sufficient numbers of research conducted on higher education system of learning with emphasis given to CBCS covering LIS education as well as different universities. But no other studies have been conducted on the implementation of CBCS in Mizoram University with special reference to the department of library and information science. This research gap motivated the scholar to undertake the implementation of choice based credit system in library and information science in Mizoram University.

1.5 STATEMENT OF THE PROBLEM

A comprehensive study on Choice Based Credit System (CBCS) has not yet been undertaken so far by any research scholar in library and information science. CBCS was adopted from the year 2012 in Mizoram University. After scanning the different syllabus under CBCS, the scholar felt it necessary to undertake the present research problem in CBCS adopted under Department of Library and Information Science, MZU. A draft regulation was placed before the CBCS (PG) Committee in its meeting held on 31.03.2015. The Committee has approved the Regulations for PG programmes in Mizoram University which was implemented from July 2015. The study focus on the assessment and adoption of CBCS. So, such a study which is the need of the hour is very much required and thus prompted the scholar to take up the present research problem.

1.6 OBJECTIVES OF THE STUDY

The objectives of the present study are:

- 1) To present the importance of CBCS by the university in general and the department of Library and Information Science in particular.
- 2) To understand the types of core, soft and elective courses offered by the

Department.

- 3) To assess the mobility of students across the departments in OE courses.
- 4) To obtain feedback from students and teachers about the benefit and learning outcome of implementing CBCS in MLIS.

1.7 RESEARCH METHODOLOGY

The following methodologies were adopted by the research scholar for data collection, analysis and interpretation with regard to CBCS implementation, adoption etc. Out of the total number of 62 students and 8 faculty members of the department of library and information science, a total number of 62 students and 8 faculties were selected as sample size which comes to 70. The scholar distributes a total number of 70 questionnaires to ascertain information relevant to the study. A detailed study on the implementation, adoption and the problems faced by the teachers and students regarding CBCS were made.

i) **Questionnaire Method**

The scholar designed a structured questionnaire which was circulated to all the Faculty (8) and three batch students of the department under study to elicit data which helped the scholar in getting information for improvement and suggestions of CBCS. The three batches here includes the students of 2012-2014(17 students), 2013-2015(23 students) and 2014-2016 (22 students)who pursued Master of Library and Information Science, Mizoram University. Hence, the total population comprises of 70, which includes 8 faculty and 62 students. Out of the 70 questionnaires circulated, 70 questionnaires were received, which constitutes 100% of the sample size.

ii) Interview Method

The personal interview method was also applied to supplement the questionnaire method both to the three batches students and faculty members to obtain their feedback with regard to learning outcome, benefit and obtain suggestions for improvement.

1.8 CHAPTERIZATION

Chapter 1 deals with introduction of Choice Based Credit System and development of higher education in India. The introduction discusses different committee reports like NKC (2008), Yashpal Committee report and UGC guidelines on adoption of Choice Based Credit System. It further discusses the statement of the problem, objectives, scope of the study, methodology, review of literature and different chapters covered in the topic.

Chapter 2 explains the meaning of CBCS, Objectives and Advantages of CBCS. It also include the significant of grading in CBCS, UGC guidelines on adoption of CBCS, applicability of the grading system, types of courses, examination and assessment, computation of SGPA and CGPA, format for transcripts and conversion of grade points into percentage.

Chapter 3 deals with the implementation of CBCS in Mizoram University, Department of Library and Information Science (MZU). It cover the syllabus which includes Objectives of courses, programme structure of MLIS under Choice Based Credit System, admission requirement, examination and scheme of papers, Job diary, Curriculum Stipulated Study Tour (CSST) and Open Electives offered by the department under study.

Chapter 4 analyzes the data received from the respondents which are the three batches of MLIS Students from 2012-2015 and faculty members of the department. Data collected are scientifically analyzed and interpreted to draw suitable conclusions.

Chapter 5 derives conclusion from the Chapter 4 and made suggestions so as to improve the Choice Based Credit System in the Department of Library and Information Science as well as the university as a whole.

Choice Based Credit System is a new system of learning which was recently started by the UGC in the higher education system. UGC guidelines on adoption of CBCS, meaning, objectives, examination and grading system is explained in the next chapter entitled "Choice Based Credit System: An Overview"

REFERENCES

Agarwal, Pawan (2009). Indian higher education: envisioning the future. New Delhi: Sage Publishers, pp.357-401.

Bordoloi, Riyimoni (2013). Challenges concerning higher education in India. *University News*, *51*(46) 34-38.

Chaturvedi, S, & Gupta, PV. (2009). Quality of higher education: a new paradigm, *University News*, 47(40), 5-15.

Dhawan, Rani (2013). Higher Education: Quality assurance and quality enhancement. *University News*, 51(13) 1-5.

- Dutta, Indrajeet, &Dutta, Neeti, (2013). Choice based credit system: an academic reform in higher education. *University News*; 51(8): 6-13.
- Ganesan, D. Raja (2009). Need for professionalizing student evaluation in higher education, *University News*, 47(45), 88-92.
- Jampala, R.C. (2012). Issues of quality education in higher education in India, *Academe*, *Vol. XV*.No.1, pp.63-66.
- Jeelani, S. (2012). Examination reforms in higher education institutions. *University News*, 50(12), 1-4.
- Jeyasingh, G. Stanley. (2005, April 12). Choice based credit system. *The Hindu*, Open page.
- Kalam, A.P.J. (2012). University a partner in economic development. *University News*, 50(52), New Delhi.
- Katoch, Kuldeep Singh; &Katoch, SumanKumari (2013). Choice based credit system and semesterization in Himachal Pradesh: the road ahead. *University News*, *51*(40): 13-17.
- Kelkar, Alka S, &Ravishankar, Lakshmy Choice Based Credit System: boon or bane?. *CurrentScience*, 107(8), 1229-1230.
- Lakhera, M.M. (2009). Great opportunities to face great challenges, *University News*, 47(45), 118-123.
- Lemaitre, Maria Jose (2004). Development of external quality assurance schemes: an answer to the challenges of higher education. Quality in Higher Education, *10*(2)
- Maheshwari, Amrita (2012). Crucial role and relevance of higher education research, *University News*, *50*(51), p.11-17.
- Mehta, Goverdhan (2012). Education does not end with degrees, *University News*, 50(51), p23-26.
- Pathania, Anita (2012). Quality in higher education perspectives from stakeholders, *Academe*, Vol. XV. No. 1, pp. 25-29.
- Pathania, Kulwant Singh; &Pathak, Anuradha (2013). Choice based credit system: the need of the hour. *University News*, 51(8): 1-3.

- Raghavan, Hema (2014). Cause, change and effect: a look at Delhi university reforms. *University News*, 52(24), 3-5.
- Rajendran, M. (2010). Curriculum-cum-quality assurance: a major ingredient for assessment and accreditation in higher education. *University News*, 48(04): 4-9.
- Rao, P.H. Sethumadhava (2014). Problems of higher education in India. *University News*, 52(31), 3-4.
- Rath, Pravakar; &Moorttimatee, Samantaray (2014). Internationalization of library and information science education: adopting choice based credit system (CBCS) in Indian universities with special reference to library and information science in Mizoram University. *Library Herald*, 52(1) 57-66.
- Reddy, D.N. & Kishore, K. Lal (2009). Special issue on evaluation system: revamping higher education: need of the hour. *University News*, 47(45), 69-70.
- Saharish, B. (2009). Special issue on evaluation system: implementing UGC –mandated reforms in higher education. *University News*, 47(45), 39-40.
- Shetty, Vishwith (2013). Higher education in India: challenges and issues amidst globalization. *University News*, *51*(37) 17-20.
- Singh, Dheeraj (2010). Fostering a liberal credit system, *Edutech*, May, pp. 8-9.
- Teicher, U. (2004). The changing debate on internationalization of higher education. *Higher Education*, Vol. 48, pp. 5-26.
- UGC (2011). Higher education in India: strategies and schemes during XI Plan (2007-2012) for universities and colleges, *University Grants Commission*, January 2011, p. 76.
- Upadhaya, Sugeeta (2007). Wastage in Indian higher education. *Economic and Political Weekly*, 1(12), New Delhi.
- Vaidyan, V.K (2014). A critical analysis of credit-semester in India. *University News*, 52(24) 6-10.

WEB REFERENCES

- Baradol, A.K. (2009, August). *Bologna Process of Library and Information Science Education in SAARC Countries: A proposal.* Paper presented at the World Library and Information Congress: 75th IFLA General Conference and Council, Milan, Italy. Available at http://www.ifla.org/annual-conference/ifla75/index.htm retrieved on 4th March 1015.
- Draft RashtriyaUchatarShikshaAbhiyan (RUSA)-UGC published on the web on 21.1.2013: http://www.ugc.ac.in/pdfnews/5867549_rusa.pdf
- Georgy U. (2008) The Bachelor as on Academic Degree-Apprenticeship versus study Degree? Retrieved on June 3, 2015 from www.ifla.org.sq/IV/ifla74/papers/136-Georgy-en.pdf
- Hatekar, Neeraj (2009). Changing higher education scenario in India. *Economic and Political Weekly*, *XLIV*(38): 22-23. Available at http://www.jstor.org/page/info/about/policies/terms.jsp retrieved on 4th March 1015.
- Roy, Nil Ratan; Khanam, UmmeKhadiza; & Devi, Tribeni (2013). Attitude towards choice based credit system of pg level students in higher education: a study on Assam University. *Scholarly Research Journal for Interdisciplinary Studies.Vol. 1.* 1198-1208. Available at www.srjis.com retrieved on 4th March 2015.

CHAPTER 2 CHOICE BASED CREDIT SYSTEM: AN OVERVIEW

2.1. INTRODUCTION

The Ministry of Human Resource Development (HRD), Govt. of India, has already initiated the process of developing New Education Policy (NEP) in our country to bring out reforms in Indian education system. University Grants Commission (UGC) participates more actively in developing National Education Policy, its execution and promotion of higher education in our country. The UGC has already initiated several steps to bring equity, efficiency and academic excellence in National Higher Education System. The important ones include innovation and improvement in course curricula, introduction of paradigm shift in learning and teaching pedagogy, examination and education system.

The education plays enormously significant role in building of a nation. There are quite a large number of educational institutions, engaged in imparting education in our country. Majority of them have entered recently into semester system to match with international education pattern. However, our present education system produces young minds lacking knowledge, confidence, values and skills. It could be because of complete lack of relationship between education, employment and skill development in conventional education system. The present alarming situation necessitates transformation and/or redesigning of education system, not only by introducing innovations but developing 'learner centric approach' in the entire education delivery mechanism and globally followed evaluation system as well.

Majority of Indian higher education institutions have been following marks or percentage based evaluation system, which obstructs the flexibility for the students to study the subjects/ courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests and aims can choose inter-disciplinary, intra-disciplinary and skill based courses. This can only be possible when choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also exploring additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate us bench mark our courses with best international academic practices.

2.2. MEANING OF CHOICE BASED CREDIT SYSTEM (CBCS)

Choice Base implies that the learner has the choice to select the subjects that he/she would like to learn within the prescribed time period and the program parameters. For example, a learner who wants to major in Library Science wishes to study Economics may be permitted to do so under the Choice Based System. A Credit is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit shall mean one contact hour of teaching for theory or two hours for laboratory/ practical course per week in a semester of 18 weeks. Two tutorial hours for a course shall amount to one credit. One credit shall be assigned to one week of field training program/ curriculum stipulated study tour (CSST) where students spend the entire duration in the field along with the faculty member(s). Up to two credits shall be assigned to one month of internship undergone Company/Organization/Institutions approved by the Head of the Department.A Credit System is a systematic way of describing an educational program by attaching credits to its components. The definition of Credits in higher education systems may be based on different parameters, such as student workload, learning outcomes, entrepreneurship skills, contact hours, innovation and creativity talents, etc. Credit Point refers to the 'Workload' of a learner. It is an index of the number of learning hours deemed for learning of a certain segment. It is the product of grade point and number of credit of a course. These learning hours broadly classified into hours spent on attending actual lectures/tutorials/laboratory works/seminar etc. and notional hours spent on reading, reflecting, discussing, attending counselling sessions, watching specially prepared videos, writing assignments, preparing for examinations, etc.

Thus, CBCS is a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses, acquire more than the required credits, and adopt an interdisciplinary approach to learning. It is a transformation from the traditional teacher-centered education to a student-centered education. CBCS provides greater flexibility with multiple exits, multiple pathways and vertical mobility.

2.3. OBJECTIVE OF CBCS

The main objectives of CBCS are:

- To provide broad based education;
- To provide students with greater flexibility in choice of courses;

- To provide students multi-disciplinary curriculum;
- To adopt an interdisciplinary approach in learning which enables integration of concepts, theories, techniques, and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline;
- To enable students to choose courses at basic/advanced level/inter-disciplinary;
- To enable students to choose electives from a wide range of courses;
- Complete a part of program in the parent institute and get enrolled in another institution for specialized courses;
- To enable students to acquire job oriented skills by taking up project work, entrepreneurship and vocational training;
- To enable students to progress at their own pace;
- Make best use of the expertise of available faculty;
- To enable highly motivated students to undergo additional courses and acquire more than required number of credits;
- Promotes students' mobility
- Collaboration with industry and foreign partners to foster innovations. This will go a long way in capacity building of students; and
- To Bridge the gap between professional and social exposure to provide a holistic education. This will greatly improves the employability of students. (Rao, D.H;2015)

2.4.ADVANTAGES OF CBCS

- > Shift in focus from the teacher-centric to student-centric education since the workload estimated is based on the investment of time in learning, not in teaching.
- ➤ Helps self-paced learning. Learners may undertake as many credits as they can cope with without having to repeat all the courses in a given semester if they fail in one or more courses. Alternatively, they can choose other courses and continue their studies. (Student may undertake as many credits as they can cope with without repeating all courses in a given semester if they fail in one or more courses).

- ➤ CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and aptitude) and more flexibility for students.
- ➤ CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, if a learner is studying Library Science, he/she can also simultaneously take a course in Economics, Biotechnology with Biochemistry or Environmental Science etc.
- ➤ Facilitates Learner Mobility. CBCS offers flexibility for students allowing them to choose inter-disciplinary courses, change majors, programs, etc. to study at different times and different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred.
- Respects 'Learner Autonomy'. Allows learners to choose according to their own learning needs, interests and aptitudes.
- ➤ Helps to record course work and to document learner workload realistically since all activities are taken into account -not only the time learners spend in lectures or seminars but also the time they need for individual learning and the preparation of examinations etc.
- ➤ CBCS is beneficial for achieving more transparency and compatibility between different educational structures, and
- ➤ Helps to round off valuation errors. (Rao, D.H, 2015)

2.5. SIGNIFICANCE OF GRADING IN CBCS

- ✓ Advantages of moving away from numerical marking to grading.
- ✓ Grading provides a more realistic assessment of the learner.
- ✓ Stigma of 'fail' is minimized in grading.
- ✓ Grading enables the use of both 'absolute' and 'relative' grading depending upon the context.
- ✓ Relative grading provides possibilities of placing students in comparable categories regardless of their relative achievements in different subjects, and

The grading system is considered 'better' and 'desirable' because this will facilitate student mobility across institutions within the country and across other countries, and also enable potential employers to assess the performance of students. (Rao, D.H, 2015)

2.6.UGC GUIDELINES ON ADOPTION OF CBCS

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of the country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching,-learning process, examination and evaluation systems, besides governance and other matters.

The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching-learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the Cumulative Grade Point Average (CGPA) based on the performance of students in the examinations, the UGC has formulated guidelines for CBCS.

2.6.1. Applicability of the Grading System

The UGC Guidelines should be applied to all Under Graduate and Post Graduate level degree, Diploma and Certificate Programmes under the credit system awarded by the Central, State and Deemed to be universities in India.

2.6.2. Semester System and Choice Based Credit System

The Indian Higher Education Institutions have been moving from the conventional annual system to semester system. Currently many of the institutions have already introduced the choice based credit system. The semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning. It is desirable that the HEIs move to CBCS and implement the grading system.

2.6.3. Types of Courses

Courses in a program may be of three kinds: **Core, Soft, Elective and Foundation Courses.** (The MLIS syllabus was revised in 2015 by the Department Board of Studies in which the Soft Course was terminated and was replaced by the Foundation Course).

Core Course: There may be a Core Course in every semester in which subject may be a Theory, Practical, Field based or Project Work based subject in the Course Structure. This is the course which is to be compulsorily studied by a student as a core-requirement to complete the requirement of a program in a said discipline of study. Sometimes it is also referred to as Hard Core Course.

Soft Course (Allied Core): A Core Course may be a Soft Core if there is a choice or an option for the students to choose from a pool of courses/set of courses from the main discipline/subject of study (also termed major) or from sister/related discipline/subjects which supports the main discipline/subject. A Soft Core Course may be a Theory, Practical, Field based or Project Work which is optional for the students to register. Students can exercise their choice

among a set of Soft Core courses from the list of Soft Core courses specified for each program of study.

Elective Course: Generally Elective Course is a course which can be chosen from a pool of papers and which may be very specific or specialized or advanced or supportive to the discipline/subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate proficiency/skill is called an elective course. Elective Courses may be offered by the main discipline or subject of study.

An elective may be 'Generic Elective' focusing on those courses which add generic proficiency to the students. An elective may be 'Discipline centric' or may be chosen generally from an unrelated discipline/subject with an intention to seek exposure. It may be called an 'Open Elective.'

Foundation Course: The Foundation Courses may be of two kinds-Compulsory Foundation and Elective Foundation. 'Compulsory Foundation' courses are the courses based upon the content that leads to Knowledge enhancement. They are mandatory for all disciplines. 'Elective Foundation' courses are value-based and are aimed at man-making education.

2.6.4. Examination and Assessment

The HEIs are currently following various methods for examination and assessment suitable for the courses and programs as approved by their respective statutory bodies. In assessing the performance of the students in examinations, the usual approach is to award marks based on the examinations conducted at various stages (session, mid-term, end-semester etc.,) in a semester. Some of the HEIs convert these marks to letter grades based on absolute or relative grading system and award the grades. There is a marked variation across the colleges and universities in the number of grades, grade points, letter grades used, which creates difficulties in comparing students across the institutions. The UGC recommends the following system to be implemented in awarding the grades and CGPA under the credit based semester system.

a. Letter Grades and Grade Points

i) Two methods -relative grading or absolute grading— have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students of the course and the grades are awarded based on a cut-off marks or percentage. Under the absolute grading, the marks are converted to grades based on

pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.

ii) The UGC recommends a 10-point grading system with the following letter grades as given below:

Table 2.6.4 (A.1): Grade and Grade Points

Letter Grade	Grade Point
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Above Average)	6
C (Average)	5
P (Pass)	4
F (Fail)	0
Ab (Absent)	0

Discretion is left to the universities.

Table 2.6.4 (A.2): Grade Point Scale

Level	Grade	Grade Points	Score (Marks) Range (%)
Outstanding	О	10	≥90
Excellent	A+	09	<90 ≥80
Very God	A	08	<80 ≥70
Good	B+	07	<70 ≥60
Above Average	В	06	<60 ≥50
Average	С	05	<50 ≥45
Poor	P	04	<45 ≥ 40
Fail	F	00	<40

iii) A student obtaining Grade F shall be considered failed and will be required to reappear in the examination.

- iv) For non credit courses 'Satisfactory' or 'Unsatisfactory' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.
- v) The universities can decide on the grade or percentage of marks required to pass in a course and also the CGPA required to qualify for a degree taking into consideration the recommendations of the statutory professional councils such as AICTE, MCI, BCI, NCTE etc..
- vi) The statutory requirement for eligibility to enter as assistant professor in colleges and universities in the disciplines of arts, science, commerce etc., is a minimum average mark of 50% and 55% in relevant postgraduate degree respectively for reserved and general category. Hence, it is recommended that the cut-off marks for grade B shall not be less than 50% and for grade B+, it should not be less than 55% under the absolute grading system. Similarly cut-off marks shall be fixed for grade B and B+ based on the recommendations of the statutory bodies (AICTE, NCTE etc.,) of the relevant disciplines.

b. Fairness in Assessment

Assessment is an integral part of system of education as it is instrumental in identifying and certifying the academic standards accomplished by a students and projecting them far and wide as an objective and impartial indicator of a student's performance. Thus, it becomes bounden duty of a University to ensure that it is carried out in fair manner. In this regard, UGC recommends the following system of checks and balances which would enable Universities effectively and fairly carry out the process of assessment and examination.

- i) In case of at least 50% of core courses offered in different program across the disciplines, the assessment of the theoretical component towards the end of the semester should be undertaken by external examiners from outside the university conducting examination, who may be appointed by the competent authority. In such courses, the question papers will be set as well as assessed by external examiners.
- ii) In case of the assessment of practical component of such core courses, the team of examiners should be constituted on 50 50 % basis, i.e. half of the examiners in the team should be invited from outside the university conducting examination.

iii) In case of the assessment of project reports/ thesis/ dissertation etc. the work should be undertaken by internals as well as external examiners.

2.6.5 Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

a. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

SGPA (Si) =
$$\sum (C_i \times G_i) / \sum C_i$$

Where C_i is the number of credits of the ith course and G_i is the grade point scored by the student in the ith course.

Table 2.6.5 (A.1): Computation of SGPA

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit × Grade Point)
Course 1	4	A	8	4×8 = 32
Course 2	4	С	5	4×5 = 20
Course 3	4	В	7	4×7 = 28
Course 4	3	О	10	3×10 = 30
Course 5	3	P	4	3×4 = 12
Course 6	3	С	5	3×5 = 15
Course 7	2	A	8	2×8 = 16
Course 8	2	С	5	2×5 = 10
	25			163

Thus, SGPA = 163/25 = 6.52

Table 2.6.5 (A.2) Computation of SGPA contd..

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit × Grade Point)
Course 1	4	A	8	4×8 = 32
Course 2	4	С	5	4×5 = 20
Course 3	4	В	6	4×7 = 24
Course 4	3	О	10	3×10 = 30
Course 5	3	F	0	3×0 = 00
Course 6	3	С	5	3×5 = 15
Course 7	2	A	9	$2 \times 8 = 18$
Course 8	2	С	5	2×5 = 10
	25			149

Thus, **SGPA= 149 /25= 5.96**

Table 2.6.5. (A.3) Computation of SGPA contd..

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit × Grade Point)
Course 5	3	P	4	3×4 = 12
				Ci (First Attempt) 149 +
	25			Ci (subsequent attempt)
				12 = 161

Thus, SGPA = 161/25 = 6.44

b. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.,

$$\textbf{CGPA} = \sum (Ci \times Si) / \sum C_i$$

Where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

Table 2.6.5 (B) Illustration of Computation of CGPA

CGPA after Final Semester

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
Total							
Credit:25	Credit:25	Credit:27	Credit 27	Credit:24	Credit:24	Credit:24	Credit:24
SGPA: 7	SGPA:						
	8.5	9.2	6.86	8.18	7.73	8.68	9.2

Thus, $\mathbf{CGPA} = 25 \times 7 + 25 \times 8.5 + 27 \times 9.2 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 24 \times 9.4 = 25 \times 7 + 25 \times 8.5 + 27 \times 9.2 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 24 \times 9.4 = 25 \times 7 + 25 \times 8.5 + 27 \times 9.2 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 24 \times 9.4 = 25 \times 7 + 25 \times 8.5 + 27 \times 9.2 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 24 \times 9.4 = 25 \times 7 + 25 \times 8.5 + 27 \times 9.2 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 24 \times 9.4 = 25 \times 7 + 25 \times 8.5 + 25 \times 9.2 + 27 \times 9.$

8.18

c. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

2.6.6 Format for Transcripts

Transcript (Format): Based on the above recommendations on Letter grades, grade points and SGPA and CGPA, the HEIs may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters.

2.6.7 Conversion of Grades into Percentage

Conversion formula for the conversion of GPA into Percentage is

[CGPA Earned - 0.75] x 10= Percentage of marks scored.

Illustration:

[CGPA Earned: 8.18 - 0.75]x 10 = 74.3%

2.7 CONCLUSION

The University Grants Commission has come up with the Choice Based Credit System program in which the students have a choice to choose from the prescribed courses of various disciplines and they can learn at their own pace and the entire assessment is graded-based on a credit system. The basic idea is to look into the needs of the students, to change the system of education from teacher centric to student centric so as to keep up-to-date with development of higher education in India and broad. CBCS aims to redefine the curriculum keeping pace with the liberalization and globalization in education. With its interdisciplinary ideas, CBCS allows students an easy mode of mobility to various educational institutions spread across the world along with the facility of credit earned by the students.

Though it cannot be said the implementation of CBCS will be successful or not, the basic motive is to expand academic quality in all aspects, curriculum development, teaching-learning process, examinations and evaluation system. Taking into account, the implementation of the Choice Based Credit System seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system. The next chapter entitled "Implementation of Choice Based Credit System in MLIS (Mizoram University)" explain in detail the implementation of CBCS in Mizoram University in general and Department of Library and Information Science in particular including the syllabus which is given in appendices.

REFERENCES

- Bharathidasan University Regulations on Choice Based Credit System (CBCS) for UG Programmes. Tiruchirappalli, 2005-2006.
- O. No.F.1-2/2008 (XI Plan) From Chairman UGC on Examination Reforms dated Jan 31, 2008: Annexure-II, Action Plan for Academic and Administrative Reforms.
- Guskey, T. R., & Bailey, J. M. (2001). *Developing grading and reporting systems for student learning*. Thousand Oaks CA: Corwin.
- Kasetwar, Ramesh B. (2009). Special issue on evaluation system: evaluation system in India: a stocktaking of prevalent practice and alternative strategies. *University News*, 47(45), 13-14
- Kumar, Arya (2013). Managing change in higher educational systems, *University News*, 50(53), 27-29.
- Lewis, Lanora G.(1961). The credit system in colleges and universities, *New Dimensions in Higher Education* (US Department of Health Education and Welfare, Bulletin no. 9).
- Mishra, J. K., Abidi, Naseem& Sharma, Rahul Sharma (2008). Working paper on Indian higher education: Global challenges and local issues. Nioda: Jaypee Business School.
- Murthy, S.S. (2013). Some Issues concerning new central universities: towards making them world class. *University News*, 51(40) 3-6.
- N. Reddy & Lal Kishore (2009), Special issue on evaluation system: revamping higher education: need of the hour, *University News*, 47(45), 69-70.

- NAAC (2006). Revised guidelines for the creation Internal Quality Assurance Cell (IQAC) in Accredited Institutions. Bangalore.
- National Knowledge Commission, Report to the nation 2006. New Delhi: National Knowledge Commission, 2007
- Pathania, Kulwant Singh, & Pathak, Anuradha (2013). Choice based credit system: the need of the hour. *University News*, 51(8), 1-3.
- Power, K.B. (2009). Special issue on evaluation system: evaluation system in higher education, *University News*, 47(45), p3.
- Rajendran, M (2010). Curriculum-cum-quality assurance: a major ingredient for assessment and accreditation in higher education. *University News*, 48(04): 4-9.
- Ramesh, B. Kasetwar (2009). Special issue on evaluation system: evaluation system in India: a stocktaking of prevalent practice and alternative strategies. *University News*, 47(45), p13-14.
- Rao, P. Purna Chandra (2009). Special issue on evaluation system: student evaluation for quality education. *University News*, 47(45), 92.
- Scott, P. (1998). Massification, internationalization and globalization, in P. Scott (ed.). *The globalization of Higher Education*, Buckingham: Open University Press, pp. 108-129.
- Shetty, S. Ramananda (2009). Special issue on evaluation system: evaluation system in higher education, *University News*, 47(45), 19-20.
- Shivkumar, Vaidyanathan (2013). Quality in Indian higher education: problems and prospects. *University News*, *51*(38) 3-6.
- Singh, ShambhuNath (2013). Globalization of education. *University News*, 51(11) 1-7.
- Swamy, RajuNarayana (2014). Higher education in India: an overview, *University News*, 52(26), 3-6.
- UGC (2012) Report on 12th Five Year Plan on Inclusive and qualitative expansion of higher education, New Delhi: Author.
- UGC (2012). Report on Higher Education in India at a Glance, New Delhi: Author.

UGC frames guidelines for choice-based credit system (2014). *India Education Review*, 15 December.

UGC guidelines on adoption of Choice Based Credit System. *UGC*, BahadurshshZafarMarg, New Delhi-110 002.

Valimaa, J. (2004) Nationalisation, localization and globalization in Finnish higher education. *Higher Education*, Vol. 48, pp. 27-54.

WEB REFERENCES

Choice Based Credit System: Handbook of Course, University of Mysore. Available at http://www.uni-mysore.ac.in/choice-based-credit-system retrieved at 30th May, 2015.

http://www.nith.ac.in/UG_RP_new.pdf

http://www.uni-mysore.ac.in/assets/Downloads-2015/January/CBCS-HANDBOOK-2012-13-Batch.pdf

http://www.bdu.ac.in/regulations/cbcsugreg.pdf

http://www.nith.ac.in/UG_RP_new.pdf

http://www.uni-mysore.ac.in/assets/Downloads-2015/January/CBCS-Handbook-2012-13-Batch.pdf

http://www.hindu.com/edu/2008/06/09/stories/2008060950201400.htm

http://www.indianexpress.com/news/state-varsities-may-offer-choicebased-credit/514359/

http://www.uniapply.in/news/item/10579-credit-systems-in-higher-education

http://www.ifla.org/annual-conference/ifla75/index.htm

http://vtu.ac.in/

UGC frames guidelines for choice-based credit system (2014). *India Education Review*, 15 December . Author: admin. Retrieved on 6th October, 2015 from http://C:\Users\LENOVO\Desktop\CBCS\ChoiceBasedCreditSystem(CBCS)forUniversities

National Knowledge Commission (NKC) (2006) Retrieved on January 1, 2015 from http://www.knowledgecommission.gov.in/recommendations/higher1asp

- National Assessment and Accreditation Council (NAAC) (2009).Manuals for self-study for universities criteria for assessment. Retrieved on February 20, 2015 from http://www.naacindia.org/crityeria.asp
- Qualifications and Curriculum Authority (2009), Retrieved on March 11, 2015 from http://qua.org.uk/qca_5967.aspx
- Scottish Credit and Qualification Framework (2009) Retrieved on March 11, 2015 from http://www.scqf.org.uk/
- South Asian Association for Regional Co-operation (SAARC) (2009) Retrieved on February 22, 2015 from http://www.saarc-sec.org/projects.php
- Virkus S. Collaboration in LIS education in Europe: Challenges and opportunities, Retrieved on June 30, 2015 from http://www.ifla.org.sg/IV/ifla73/papers/134-virkus-en.pdf
- Wikieducator (2009), Retrieved on July 6, 2015 from www.wikieducator.org/Indis/NationalQualificationsFramework
- Yashpal (2009) Report of the Committee to Advise on 'Renovation and Rejuvenation of Higher Education' Submitted to the Ministry of Human Resource Development, Government of India Retrieved on July 1, 2015 from http://www.hindu.com/nic/yashpalcommitteereport.pdf

CHAPTER 3 IMPLEMENTATION OF CHOICE BASED CREDIT SYSTEM (CBCS) IN MLIS (MZU)

3.1. INTRODUCTION OF CBCS IN MIZORAM UNIVERSITY

Mizoram University was established by an Act of Parliament (No. 8 of 2000) and it started functioning with effect from July 2001. The University is located at Aizawl, the capital city of Mizoram and spread over two campuses of 1000 acres main campus on the outskirts of the city (PG Campus) and 750 acres campus in the city (UG Campus). The objectives of the University as enshrined in the Act reads 'to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may seem fit, to make provisions for integrated courses in humanities, natural and physical sciences, social sciences, forestry and other allied disciplines in the educational programmes in the University; to take appropriate measures for promoting innovations in teaching learning process, inter-disciplinary studies and research; to educate and train manpower in the development of the State of Mizoram; and to pay special attention to the improvement of the social and economic conditions and welfare of the people of the State, their intellectual, academic and cultural development'.

The University is presently offering B.Tech., M.A., M.Sc., M.Com., MLIS., M.S.W., M.B.A., M.Phil and Ph.D. programmes in 33 disciplines under 8 School of Studies. System for evaluation of students' performance in various examinations has been changed to grading system and all courses are converted to switch over to the Choice Based Credit System since 2012 which was further revised and implemented from the academic session of July 2015. Till date the University has a total strength of 214 teachers and 352 non-teaching & technical staff. Currently more than 1000 PG students & research scholars are enrolled in the University. All the classrooms are equipped with latest audio-visual teaching aids and the university is planning virtual classrooms for engineering courses that will be linked to IIT Bombay. Continuous internal assessment of student is conducted for 40% of marks in each paper and end-semester examination is conducted for the remaining 60% of marks. 80% of attendance is mandatory for all students for appearing in the examination. University has a well laid down academic calendar ensuring minimum 90 days teaching per Semester.

The Mizoram University has made a regulation called Mizoram University Regulation Governing Post-Graduate Programmes under the Choice Based Credit System (CBCS) and Continuous Assessment and Grading Pattern (CAGP). CBCS has been offered in all the Post-Graduate programmes in the Mizoram University Campus from the Academic Year 2012-2013.

The CBCS and CAGP are applicable to all full-time Post Graduate (PG) programs of study approved by the Academic Council. It shall be also applicable to any other program of study approved by the Academic Council that has been prescribed to follow the CBCS pattern. The teaching and evaluation shall be on semester pattern. Eligibility, qualifications and admission procedure for each program of study shall be as per Mizoram University Ordinances.

The Choice Based Credit System (CBCS) enables the student to obtain a degree by accumulating required number of credits prescribed for that degree. The number of credits earned by a student reflects the knowledge or skill acquired by him/ her. Each course is assigned with a fixed number of credits based on the contents to be learned. A student also has choice in selecting the prescribed courses (core, elective or minor or soft skill courses) out of those offered by various departments. The grade points earned for each course reflects the student's proficiency in that course. The Choice Based Credit System enables the student to earn credits across departments and provides flexibility in duration to complete a program of study.(Rath & Moorttimatee, 2014).

3.2 MIZORAM UNIVERSITY REGULATION GOVERNING POST-GRADUATE PROGRAMMES UNDER THE CHOICE BASED CREDIT SYSTEM (CBCS) AND CONTINUOUS ASSESSMENT GRADING PATTERN (CAGP)

3.2.1 Preamble

The Choice Based Credit System (CBCS) enables the student to obtain a degree by accumulating required number of credits prescribed for that degree. The number of credits earned by a student reflects the knowledge or skill acquired by him/her. Each course is assigned by a fixed number of credits based on the contents to be learned. A student also has a choice in selecting courses out of those offered by various departments. The grade points earned for each course reflects the student's proficiency in that course. The CBCS enables the student to earn credits across departments and provides flexibility in duration to complete a program of study.

3.2.2 Title and Commencement

This regulation shall be called Mizoram University Regulation Governing Post-Graduate programmes under the Choice Based Credit System (CBCS) and Continuous Assessment Grading Pattern (CAGP). CBCS shall be offered in all the Post-Graduate programmes in the Mizoram University Campus from the Academic Year 2012-2013

3.2.3 Coverage

The CBCS and CAGP are applicable to all full-time Post Graduate (PG) programs of study approved by the Academic Council. It shall be also applicable to any other program of study approved by the Academic Council that has been prescribed to follow the CBCS pattern.

3.2.4 Eligibility

Eligibility, qualifications and admission procedure for each program of study shall be as per Mizoram University Ordinances.

3.2.5 Credits and Contact Hours

- a) One Credit shall mean one contact hour of teaching for theory or two hours for laboratory/practical course per week in a semester of 18 weeks.
- b) Two tutorial hours for a course shall amount to one credit.
- c) One credit shall be assigned to one week of field training program/curriculum stipulated stud tour (CSST) where student spent the entire duration in the field along with the faculty member(s).
- d) Up to two credits shall be assigned to one month of internship undergone in a Company/Organization/Institutions approved by the Head of the Department.

3.2.6 Duration

- 1) Courses in the CBCS shall be offered under the existing semester pattern.
- 2) There shall be four semester in each PG programme.
- 3) One academic year shall consist of two semesters each of 18 weeks. There shall be 90 days teaching in each semester.
- 4) Students will not be permitted to obtain the degree earlier than four semesters or not be allowed to take more than six semesters in a stretch from the date of admission.

3.2.7 Courses

Each PG programme shall consists of four types of courses:

- i) Compulsory courses designated as Core Courses (CC) usually of 4 credits each.
- ii) Four elective/major specialization courses designated as Soft Courses (SC) usually of 4 credits each.
- iii) Four choice based/interdisciplinary Open Elective Courses (OE) of two credits each. OE may be chosen from within the department/school or from unrelated disciplines with an objective to seek exposure.
- iv) Project work shall usually carry 8 credits. However, up to 12 credits may be attributed if entire semester is assigned for project work. Project Work shall be a Hard-Core Course with L:T:P pattern as L=0, T=0, P=8.

3.2.8 Components of course

- 1. Every offered course shall have three components:
 - a. Lecture L
 - b. Tutorial T
 - c. Practical P

L stands for class room lecture session. T stands for tutorial session consisting of participatory discussion/desk work/brief seminar presentations by students and such other innovative methods. P stands for practical session and it consists of hands on experience/laboratory experiments/field studies/case studies etc.

- 2. A course may have either one or two or all the three components. That means a course may have only lecture component (L), or only practical component (P) or combination of any two or all the three components (L,T,P).
- 2. Credit assigned for a particular course shall be distributed among all three components i.e. L:T:P with certain pattern as below:

If a course is of four credits then the different credit distribution patterns in L:T:P format could be an one of the following:

4:0:0,	1:2:1,	1:1:2,	1:0:3,	1:3:0,	2:1:1,
2:2:0,	2:0:2,	3:1:0,	3:0:1,	0:2:2,	0:4:0,
0:0:4,	0:1:3,	0:3:1			

3. The concerned BOS will choose the convenient credit pattern for every course based on the requirement.

3.2.9 Credits Structure for various PG programmes

- 1) Total credits for any M.A., M.Sc., M.Com., M.S.W and M.B.A programme inclusive of Core, Soft and Open Elective courses and project work shall be as specified in Table 1.
- 2) The distribution of credits for various course types (CC/SC/OE/Project) shall be as specified in Table 1
- A core course cannot be substituted by any other course. Core courses shall carry usually 4 credits per course. However, as per requirement of a curriculum, a Core Course may be assigned 2 to 5 credits.
- 4) The number of Core courses in a semester and for entire PG programme shall be decided by CBCS committee of the concerned department and BOS.
- 5) Each PG programme shall essentially include at least 4 soft courses with 3 to 5 credits per course during the entire programme. However, for MBA, 8 to 10 soft courses can be offered each with 3-4 credits.
- There shall be sufficient options available to the students for selecting soft courses in each PG programme. If required, Soft courses in a programme can be grouped according to specialization of faculties, and there shall be choices available to students for selecting one or two courses from each group.
- During the first week of commencement of each semester, Department shall notify the list of available Soft courses and available seats with name of offering faculty for that semester for each course. However, in view of laboratory constraint, Soft courses may be rotated session wise.
- 8) Four Open Elective courses of 2 credits each shall be mandatory for successful completion of each PG programme. OE may be opted from within the department/school or from unrelated disciplines with an objective to seek exposure.
- 9) Open elective courses shall be offered simultaneously in 2nd and 3rd semesters of all programmes in the university. A list of OE courses, detailed course contents, name of Faculty in-charge and schedule shall be put on notice board of departments and on University website.

- 10) Each student shall exercise three options for all open electives course in the order of preference at least three weeks prior to the end of the semester proceeding the semester in which open elective courses are to be offered.
- Each student shall exercise his/her option in duplicate for open elective, one to the Head of the parent Department and another to the Head of the Department in which he/she is opting for the Open Elective Course.
- Students admitted in a PG Course shall take the choice based open elective courses offered by the Departments/Faculties, subject to stipulation as to the minimum (10 students) and maximum (50 students) ceiling strengths in each course.
- Subject to the availability of seats, the offering department shall notify the list of selected candidates before the commencement of the semester.

56*

60#

16

32

8

8

80

100

Table 3.2.9 Credit Structure for various PG programmes

PG

MBA

#If required, 2-4 credits can be assigned for internship/project/team work etc.

without

3.2.10 Semester wise break-up of courses and credits

programmes

practical components

- 1) Minimum specified criteria have to be secured by students for successful passing of each and every semester.
- 2) Concern CBCS committee and BOS shall ensure, as much as possible, equal distribution of credits each semester.

3.2.11 Syllabus Structure

Category

Ι

II

Ш

1) For all the PG programmes course structure shall prescribe for minimum eligibility of admission, semester wise list of courses, credit for each course, paper/course-wise L:T:P

^{* 8} credits can be reserved for project work, if any

- distribution of credit and marks for each course. Credits shall also be assigned for project work, seminar, viva-voce if any.
- 2) Every course must be specified as Core course (CC), Soft course (SC) and Open Electives (OE). Project work/ Seminar/field work/ internship/ training shall be treated as core course.
- 3) While core course may be basic and fundamental in nature, the soft courses shall be advanced and specialized in nature. Open elective papers should be designed with a view to provide exposure to the students in the unrelated disciplines.
- 4) Each course shall have a character code which indicates (i) Name of the Department, (ii) Concerned Semester, (iii) The nature of the Course (CC: Core Course, SC: Soft course, OE: Open Elective) and (iv) the course number.
- 5) Course structure and detailed syllabus for each PG programme shall be approved by CBCS Committee of the concerned department, BOS, School Board and Academic Council.
- New Core or Soft course proposed by a faculty member shall be first approved by CBCS Committee and BOS of the respective department and then shall be placed before the School Board and Academic Council for approval.
- 7) Core and Soft courses may be utilized into 4-6 units as per convenience of the department.

3.2.12 Evaluation and Examination

- 1) Each course shall be evaluated on the scale of 100. For all courses there shall be a continuous internal assessment carrying 40% of marks and an end semester examination carrying 60% of marks.
- 2) A semester is divided into three discrete components identified as C1, C2 and C3. The C1+C2 shall have 40% of total marks.
- The components of C1 and C2 shall be 20% of marks each. The evaluation of C1 and C2 will be based on test/assignment/seminar. C1 and C2 shall be conducted only for L+T component of each course. The consolidation of marks for C1 and C2 components shall be completed by 9th and 18th weeks of the semester respectively.

- 4) The outline for continuous assessment activities for C1 and C2 shall be proposed by the teacher concerned before the commencement of the semester and will be discussed and decided in the CBCS committee.
- 5) The end-semester examination (C3) of three hours duration for 60 of marks for each course for L+T components together and P component separately shall be conducted during $19^{th} 21^{st}$ weeks of the semester. Evaluation and compilation of marks for each course and for the entire semester shall be completed latest 22^{nd} week. Results are to be notified latest by 23^{rd} week.
- The assessment of C1 and C2 components shall be done by course in-charge. For the endsemester examination (C3), question papers for theory components shall be invited from external examiners and there shall be moderation of each paper. External examiners shall be required for conducting examinations for practical components.
- A students who does not clear a course(s) owing to securing marks less than required to pass i.e., 40% or to appear in the continuous assessment and end-semester examination, may clear the course(s) subsequently in the remaining semesters during six semester time slot available for completing the programme. In case a student by the end of the second semester has not been able to clear half of the total courses for I and II semesters, he/she shall not be eligible to move on to the third semester until he/she clears these courses. Otherwise, he/she has to seek fresh admission and pursue the programme as a fresh candidate.
- 8) The procedure to be followed for granting readmission to the students in the following cases:
 - (i) A student who did not put in the required attendance in a semester/year of a course and thus detained
 - (ii) A student who did not pass in the required number of papers and thus detained
 - (iii) A student after completing a semester/year did not continue their studies in the next immediate semester/year on personal/health grounds but desired to continue his/her studies after a short break
- 9) The examinations for all practical/field work/project work shall be done jointly by two internal examiners and an external examiner appointed by the Vice Chancellor. In case of

- non-availability of external examiner, a three member internal committee shall be appointed by the Vice Chancellor to conduct the examination.
- 10) There shall be single evaluation for all theory papers by the examiners. Evaluation shall be done by the Course-In charge immediately after the completion of examination for that course.
- 11) CBCS Committee of the Department and a nominee of Dean shall consolidate the marks obtained in C1 and C2 and end-semester examinations (C3) and shall prepare a consolidated marks statement that shall be sent to the Controller of Examinations.
- 12) A consolidated list showing grade/grade points and SGPA for a semester shall be displayed on the notice board of the concerned department.
- 13) Student shall be declared pass if he/she has obtained:
 - i. A minimum of 40% marks in C1, C2 and end-semester examination separately, and
 - ii. A minimum of 50% marks in aggregate when continuous assessment and endsemester examination marks are taken together, and
 - iii. A total of the prescribed credits.

3.2.13 Attendance

- 1) 75% of attendance shall be compulsory to all the students. A student shall not be permitted to appear in end-semester examination if he/she has attended less than 75% of the number of classes, both for regular and interdisciplinary courses, held up to the end of the semester including tests, seminars and practical etc.
- 2) The existing relaxations described in MZU ordinances shall be applicable for attendance.

3.3 INTRODUCTION OF CBCS IN THE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, MIZORAM UNIVERSITY

The Department of Library & Information Science was established during the academic session 2002-2003. Prof. A.K Sharma, Ex Vice-Chancellor formally inaugurated the Department on 20th August, 2002 at the Central Library of Mizoram University. The Department offered one year BLIS Course in 2002 followed by one year MLIS Course in 2003. It is only 2004 when two new faculty members (Professor – 1, Lecturer - 1) joined the Department and took initiatives to combine both the courses with integrated MLIS Course of two years duration offered from 2005

academic session. The same year the Department also offered Ph.D Program in Library & Information Science. Two more faculty members (Reader – 1, Lecturer - 1) joined in 2005. The Department further took initiative to start M.Phil Programme in 2007 which was the first course not only in Mizoram University but in the North East Region as well.

Right from the beginning, it was a great challenge to the Department to start an up-to-date and need based MLIS course, developing other infrastructure like Computer Lab, Department Library, Learning Resources and more teaching and non teaching staff. As on date there are eight (8) faculty members which is the total sanctioned strength for the department.

The integrated MLIS Course was further revised and implemented with effect from 2011 – 2012 academic sessions. As per UGC instructions, the Department of Library & Information Science, Mizoram University adopt Choice Based Credit System from 2012 – 13 sessions. The syllabus is given in **Appendix I**. A draft regulation was placed before the CBCS (PG) Committee in its meeting held on 31.03.2015. The Committee has approved the Regulations for PG programmes in Mizoram University which was implemented from July 2015. The syllabus is given in **Appendix II**.

3.3.1 Objectives of the Courses

The objectives of Library and Information Science courses are –

- (i) To give the students an understanding of the basic principles and fundamental laws of Library and Information Science and to enable him/her to understand and appreciate the functions and purposes of the Library in the changing social and academic environment.
- (ii) To train the students in the techniques of librarianship and managements of libraries.
- (iii) To acquaint the students with the structure and development of the Universe of Knowledge and Research Methods.
- (iv) To make the students proficient in advanced techniques of Classification, Cataloguing and Documentation, and
- (v) To develop specialized knowledge and skills in respect of organisation and
- (vi) Management of different kinds of libraries and reading materials.

3.3.2 MLIS Programme Structure Under CBCS

The Programme shall comprise four semesters leading to Master of Library and Information Science (MLIS). The MLIS Programme carries 22 credits per semester.

- 1 Lecture Hour =1 Credit
- 2 Tutorial Hour =1 Credit
- 2 Practical Hour =1 Credit

3.3.3 Admission Requirement

Candidate seeking admission to the course shall satisfy the following conditions:

a. Any Graduate from Mizoram University or Recognized University with 45% of marks.

OR

He/she must have passed an Honours Degree Examinations (3 years) on any subject from
 Mizoram University or from any other recognized University.

OR

- c. For In-service and Deputed Candidates, the minimum qualification required for admission shall be a Bachelor's Degree with 3 years of Library experience.
- **Note:** (i) He/ She must fulfil other conditions as may be laid down by the University/Admission Committee from time to time.
 - (ii) 40% of the seats will be available for deputed/In-service candidates and working librarians. (In case of non-availability of eligible candidates in the inservice/deputed category, the seats will be filled up by fresh candidates).
 - (iii) Reservation of seats belonging to Schedule Castes and Schedule Tribes shall be as per policy laid down by the University.

In all cases of admission, the decision of the Admission Committee shall be final.

3.3.4 Examination and Scheme of Papers

- (i) The duration of the course shall be two academic years.
- (ii) The course shall be full time course.
- (iii) The course shall be divided into four semesters and there shall be an examination at the end of each semester.

Table 3.3.4 (A) Course Structure for MLIS under CBCS (2012-June 2015)

First Semester: 22 Credits (Core Course = 22 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/1/CC/01	Foundation of Library & Information Science	4	100
LIS/1/CC/02	Basics of Information and Communication Technology	4	100
LIS/1/CC/03	Organization of Knowledge I – Classification Theory	4	100
LIS/1/CC/04	Organization of Knowledge II – Cataloguing Theory	4	100
LIS/1/CC/05	Library Classification Practice	4	100
LIS/1/CC/06	Library Cataloguing Practice	4	100

Second Semester: 22 Credits (Core Course = 10 Credits; Soft Course = 8 Credits; Open Electives = 4 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/2/CC/07	Management of Library & Information Centres	5	100
LIS/2/CC/08	Information Source & Services – Theory & Practice	5	100
LIS/2/SC/09A	Academic Library System	4	100
LIS/2/SC/09B	Public Library System	4	100
LIS/2/SC/10A	Preservation & Conservation of Library Materials	4	100
LIS/2/SC/10B	Information Resource Development	7	100
LIS/2/OE/11	Open Electives – Technical Writing	2	100
LIS/2/OE/12	Open Electives – E-Resources	2	100

Third Semester: 22 Credits (Core Course = 10 Credits; Soft Course = 8 Credits; Open Electives = 4 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/3/CC/13	ICT Application in Library Services	5	100
LIS/3/CC/14	ICT Practice	5	100
LIS/3/SC/15A	Information Products & Services	4	100
LIS/3/SC/15B	Knowledge Management	7	100
LIS/3/SC/16A	Internet & Its Applications	4	100
LIS/3/SC/16B	Information Literacy	4	100
LIS/3/OE/17	Open Electives – Community Information Service	2	100
LIS/3/OE/18	Open Electives – Intellectual Property Rights & Copyright	2	100

Fourth Semester: 22 Credits (Core Course = 22 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/4/CC/19	Information Systems & Networks	4	100
LIS/4/CC/20	Information Retrieval	5	100
LIS/4/CC/21	Research Methodology	4	100
LIS/4/CC/22	Content Management & Digital Library – Theory & Practice	5	100
LIS/4/CC/23	CSST – Tour Diary	2	100
LIS/4/CC/24	Job Diary	2	100

The complete syllabus is given in Appendix I

Table 3.3.4 (B) Course Structure for MLIS under CBCS (from July 2015)

First Semester (Foundation Course=4; Core Courses=18; Total: 22 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/1/FC/01	Foundation of Librarianship	2	100
LIS/1/FC/02	Foundation of Information Science	2	100
LIS/1/CC/03	Basics of Information & Communication Technology	4	100
LIS/1/CC/04	Organization of Knowledge – Classification Theory	4	100
LIS/1/CC/05	Organization of Knowledge – Classification Practice	3	100
LIS/1/CC/06	Organization of Knowledge – Cataloguing Theory	4	100
LIS/1/CC/07	Organization of Knowledge – Cataloguing Practice	3	100

Second Semester (Foundation Course=4; Core Courses=16; Open Electives=2; Total: 22 Credits)

Course Code	Name of Course	Total Credits	Marks
LIS/2/FC/8	Introduction to Information Sources	2	100
LIS/2/FC/9	Introduction to Information Services	2	100
LIS/2/CC/10	Management of Library & Information Centres	5	100
LIS/2/CC/11	Personality Development & Communication Skill	4	100
LIS/2/CC/12	Information Sources & Services – Practice	4	100
LIS/2/CC/13	ICT Practical	3	100
LIS/2/OE/14	E-Resources	2	100

Third Semester (*Core Courses=12*; *Specialization Courses=8*; *Open Electives=2*. *Total=22 Credits*)

Course Code	Name of Course Total Credi		Marks
LIS/3/CC/15	Information Retrieval	4	100
LIS/3/CC/16	ICT Applications in Libraries – Theory	3	100
LIS/3/CC/17	ICT Applications in Libraries – Practice	3	100
LIS/3/CC/18	Curriculum Stipulated Study Tour – Tour Report	2	100
LIS/3/SC/19A	Academic Library System	4	100
LIS/3/SC/19B	Public Library System	4	
LIS/3/SC/20A	Preservation & Conservation of Library Materials	4	100
LIS/3/SC/20B	Information Resource Development	4	100
LIS/3/OE/21	Community Information Service	2	100

Fourth Semester (*Core Courses=14*: *Specialization Courses=8*. *Total=22 Credits*)

Course Code	Name of Course	Total Credits	Marks
LIS/4/CC/22	Information Systems & Networks	4	100
LIS/4/CC/23	Research Methodology	4	100
LIS/4/CC/24	Content Management & Digital Library- Theory	2	100
LIS/4/CC/25	Content Management & Digital Library- Practice	2	100

LIS/4/CC/26	Job Diary (Library Practical Work)	2	100
LIS/4/SC/27A	Intellectual Property Rights & Copyright	2	100
LIS/4/SC/27B	Knowledge Management	4	100
LIS/4/SC/28A	Internet & Its Applications	4	100
LIS/4/SC/28B	Information Literacy	4	100

The complete syllabus is given in **Appendix II.**

3.3.5 Job Diary

A student admitted to the course shall have to work in the Mizoram University Library for the Fourth Semester to gain practical and clinical experience under the guidance of a teacher. A diary will be maintained by the students in the forms as prescribed by the Department for the purpose, to be signed by the concerned teacher and counter signed by the Head of the Department.

No candidates shall be deemed to have pursued a regular course of study unless he/she attend the required percentage of the lectures, tutorials, practical assignment as per Mizoram University Rules.

The pass marks required for each paper will be 50% marks. Internal assessment marks will be included in the total marks of each paper.

The total marks obtained in all Semester Examinations will determine the classification of the results for the degree of MLIS. (Master of Library & Information Science) which will be as follows:

Failed candidates will be governed by the Ordinances as applicable to other Post-Graduate students of the University.

Fees payable by students will be in accordance with the Ordinance as applicable in case of MLIS students.

3.3.6 Curriculum Stipulated Study Tour (CSST)

The Curriculum Stipulated Study Tour is a compulsory component in the syllabus. The primary aim of the CSST is to enable the students to –

- ➤ Acquaint the organization and management of established Libraries and Information Centres at a national level.
- Expose them to the automated and networked libraries on-site.

- ➤ Making them understand the services provided by these Libraries and Information Centres.
- Make a comparative and critical study among these libraries visited, and
- ➤ Get a practical exposure of the latest trends and development on Library and Information scenario.

The CSST programme is followed by Tour Report by each students and Viva Voce.

3.3.7 Open Electives

An elective course chosen generally from an unrelated discipline/ subject, with an intention to seek exposure is called an Open Elective. (Dutta & Dutta, 2013) This interdisciplinary elective is offered by the Department of Library and Information Science, Mizoram University to impart skill based instruction, thus providing opportunity for the students to gain knowledge in the area of Library and Information Sciences.

With the introduction of Mizoram University Regulations under the CBCS(2012), the Department of Library and Information Science, Mizoram University offered two kinds of Open Elective papers, which are,

- ➤ OE/1 Technical Writing, and
- ➤ OE/2 E Resources in Second Semester and
- > OE/1 Community Information Service, and
- > OE/2 Intellectual Property Rights in Third Semester.

But when the Mizoram University Regulation on CBCS was revised in June, 2015, the number of Open Electives was reduced from two to one in a semester. So that only the two papers - OE/14 - E Resources and OE/21 - Community Information Service are offered in second and third semester respectively.

There is a great demand of Open Elective offered by the Department of Library and Information Science from the students of different academic departments. These can be seen from the list of students enrolled to join the Open Elective Courses which is given in **Appendix III.**

3.3.8 Department Library

The Department established a Department Library since 2005 for Faculties, students and Research Scholars. The library is well equipped with Classification Schedules like Colon Classification (CC) 6th Ed., Sears List of Subject Headings (SLSH), Library of Congress Subject Headings (LCSH), Dewey Decimal Classification (DDC) 23rd Ed., and Cataloguing Codes like Anglo American Cataloguing Rules Rev.ed. (AACR-II) to support the practical classes in the department. The Department Library is also having user-centric reference materials, Project Reports, Job Diary and Curriculum Stipulated Study Tour Reports to support the students for preparing practical records and examination. Besides these, the Department Library is also in the process of procuring some source reference materials which will yield value for the students and scholars.

3.3.9 ICT Laboratory

The Department established a state-of-the-art ICT Laboratory which allows the MLIS students to undertake their Information and Communication Technology Practical. The ICT Laboratory is equipped with 20 (twenty) Computers with Internet facility. Since the Department has revised its syllabus with effect from July 2011, the curriculum stipulates Digital Library and Content Management Software (CMS) practical. For this purpose the Department acquired Dreamweaver Software for website designing, maintenance and development. Besides this, a hands-on-experience is provided in Library Software, Digital Library Software, and Content Management Software. The Department is also well furnished with Laptop and Digital LCD Projector for teaching and demonstration. The Department also facilitates M.Phil and Ph.D Scholars to use the ICT for Internet access, project preparation etc.

3.4 CONCLUSION

The implementation of Choice Based Credit System in the Mizoram University had a great impact especially in the Department of Library and Information Science in which the students have a choice to choose from the prescribed courses which the department offered as core, elective, foundation/soft courses and they can learn at their own pace. From these courses, the students are allowed an easy mode of mobility to opt for an interdisciplinary approach to learning. The students also have more scope to enhance their skills and more scope of taking up projects and assignments, vocational training including entrepreneurship. This system is also expected to improve the job opportunities of the students. Under CBCS, project like Curriculum

Stipulated Study Tour is very beneficial for students in which they can explore different areas of their subject of study. The ultimate objective of the implementation of CBCS in Mizoram University is to bring quality equal with international standard in which the students and pass out students not only enhance their subject knowledge and learning skills but get international acknowledgement as well. The effective implementation of the course in the department under CBCS depends on proper counselling by the teachers or academic advisers to the students opting for soft courses and open electives and monitoring at regular interval.

The impact of CBCS on the teachers and students, the issues relating to the choice of Open Electives and the factors influencing the selection of the same, the importance of CBCS and the understanding level of CBCS by the students, CBCS impact on the functioning of the department as well as the problems related to the successful implementation of CBCS are analysed and the findings are drawn in the following chapter entitled "Data Analysis and Findings".

REFERENCES

- D. O. No.F.1-2/2008 (XI Plan) From Chairman UGC on Examination Reforms dated March 2009.
- Dutta, Indrajeet, & Dutta, Neeti (2013). Choice based credit system: an academic reform in higher education. *University News*, *51*(8): 6-13.
- Ghanchi, D.A. (2009). Integrative role of evaluation in curriculum construction and transaction: need for a paradigm shift, *University News*, 47(45), 45-48.
- Guskey, T. R. (2001). Helping standards make the grade. *Educational leadership*, 59(1) 20-27.
- Handbook 2009, Distance Educatuion Council Regulations, DEC New Delhi.
- Islam, M.S., and Chowdhury, M.A.K. (2006). Library and Information Science education system in Bangladesh: An overall situation. In C. Khoo, D. Singh and A.S. Chaudhry (Eds.), Proceedings of the Asia-Pacific Conference on Library & Information Education & Practice 2006 (A-LIEP 2006), Singapore (pp. 358-363)
- Katoch, Kuldeep Singh & Katoch, SumanKumari (2013). Choice based credit system and semesterization in Himachal Pradesh: the road ahead. *University News*, 51(40): 13-17.
- Misra, H.P. (2012). Higher education: new challenges and emerging roles. *Odisha Review*.

- Mukhpadhyay, S. (2002). Enhancing the academic role of board of school education, New Delhi: NIEPA
- Mysore University (2012). Choice based credit system: handbook of courses 2012-1013 batches.
- Rath, Pravakar; & Moorttimatee, Samantaray (2014). Internationalization of library and information science education: adopting choice based credit system (CBCS) in Indian universities with special reference to library and information science in Mizoram University. *Library Herald*, 52(1) 57-66.
- UGC regulations governing the choice based credit system (CBCS) for the two years (Four Semesters) Masters Degree programmes in the Faculties of Arts, Science, Commerce and Education. Framed under section 44(1) (c) of the KSU Act 2000.
- Wanchoo, R. K. Implementation of Choice Based Credit and Grading System for UG/PG Programs: Salient Features Appt, UCIET, Punjab University, Chandigarh

WEB REFERENCES

- Bologna Process (2009) Retrieved on March 10, 2015 from http://ond.valaanderen.be/hogeronderwijs/bobogna/about/index.htm
- Bureau, F.J.P. University education to have choice based credit system. *Free Press Journal*, pp. 1-4 published on the web on 7th January 2015 02:09 amhttp://C:\Users\Lenovo\Desktop\CBCS\UniversityEducationToHaveChoiceBasedCreditSystem.pdf
- Curry, B and Temple, T. (1992) "Using Curriculum frameworks for systematic reform.

 Alexandria, VA: Association of Supervision and curriculum development.p27.retrieved on March 15, 2015 from http://www.ncrel.org/sdrs/areas/issues/content/currclum/cu3refer.htm
- Kanwal A. (2007). Issues of quality assurance (QA) in LIS higher education in 73rd International Federation of Library Associations and Institutions (IFLA) world Library and Information Congress, Durban.Retrieved on March 1, 2015 from http://www.ifla.org/IV/ifla73/index.htm.

- Lowe, M. (2006) LIS Education in Britain: an overview. Retrieved on July 3, 2015 from www.emeraldinsight.com/.../ViewContentServlet;...=/published/...ref...
- Manipal University, (2006) Retrieved on March 23, 2015 from www.manipal.edu/manipalsite/Users/Colsubpage.aspx?...

CHAPTER 4 DATA ANALYSIS AND FINDINGS

INTRODUCTION

The purpose of this research is to make an overall study of Choice Based Credit System in the department of Library and Information Science, Mizoram University. The scholar made an attempt to get the feedback from the faculty and students (2012-2015 batches) of the department. The total population was formed by eight (8) faculty members and sixty two (62) students of three batches from the Department of Library and Information Science, Mizoram University. Altogether, 70 questionnaires were circulated to faculty and students of the Department of Library and Information Science, Mizoram University out of which 70 responded to my questionnaire, which is 100 percent of the questionnaire circulated.

The different components included in the questionnaire for the teachers are:

- 1. Distribution of respondents.
- 2. Impact of CBCS on Teachers.
- 3. Need of Training on CBCS.
- 4. Issues relating to Choice of Open Electives.
- 5. Impact of CBCS on the functioning of Departments.
- 6. Problem relating to successful Implementation of CBCS.
- 7. Impact of CBCS on Quality and Flexibility of Education.

The different components included in the questionnaires for students are:

- 1. Understanding level of CBCS by the students.
- 2. Factors influencing the selection of Open Electives.
- 3. Problems faced by the students.
- 4. Importance of CBCS among students.
- 5. Selection of Soft Courses under CBCS.
- 6. Selection of Choice of Open Electives under CBCS.
- 7. Attendance of Students in Open Electives

4.2. DATA ANALYSIS

Data collected from the respondents are analysed and interpreted in order to present the factual findings stated below:

4.2.1 Respondents Rate

Altogether, a total number of 70 questionnaires were circulated to both the faculty and the three batch students of the Department of Library and Information Science in Mizoram University to ascertain their interest about CBCS. The break-up is given in Table 4.2.1 supplemented with the Graph- 4.2.1 for clear understanding.

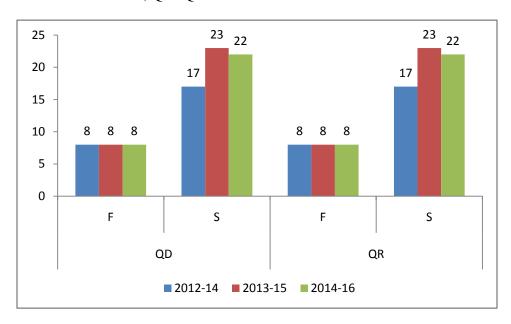
Table 4.2.1 Respondent Rate

Sl. No	Year	QD		QR		%	
		F	S	F	S	, ,	
1	2012-14	8	17	8	17	100	
2	2013-15	8	23	8	23	100	
3	2014-16	8	22	8	22	100	
	Total		70		70	100	

(Source: Research Questionnaire)

Mean for 2012-14= 12.5, 2013-15= 15.5 & 1014-16= 15

QD- Questionnaire Distributed, QR- Questionnaire Received



Graph 4.2.1: Distribution of respondents

While analysing the Table- 4.2.1 'Distribution of respondents', it is revealed that out of the 70 questionnaires circulated between the faculties and the students of Dept. of Lib. & Inf.

Science, Mizoram University all 70 questionnaires (100%) were received. Further, while calculating the mean value of the faculties and the student year wise, it comes to 12.5 for the year2012-14, 15.5 for 2013-15 & 15 for 2014-16 respectively. Further, the mean value for the faculties for all the years under study, it comes to 8 for faculties and 20.66667 for students.

This shows the interest of both the faculties and the students which by positive nature for implementation of CBCS in the department.

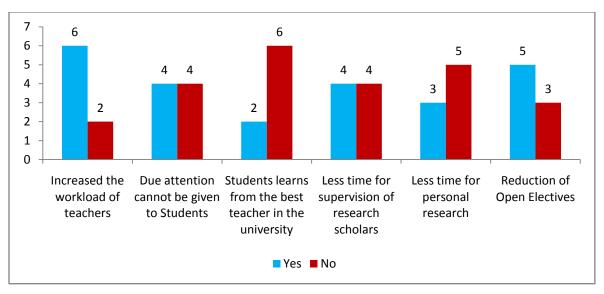
4.2.2 Impact of CBCS on Teachers

With the introduction and implementation of CBCS from July2012, there are many changes including change in the syllabus, working hours, evaluation system and the workload of the teachers. As a result, the teachers also need to learn and adjust in many areas in order to have a great impact in the department. The questionnaires circulated among the teachers were sum up in the Table- 4.2.2 to find out the impact of CBCS program.

Table 4.2.2: Impact of CBCS on Teachers

Sl. No	Impact of CBCS	Yes	No	Total
1	Increased the workload of teachers	6(75%)	2(25%)	8
2	Due attention cannot be given to Students	4(50%)	4(50%)	8
3	Students learns from the best teacher in the university	2(25%)	6(75%)	8
4	Less time for supervision of research scholars	4(50%)	4(50%)	8
5	Less time for personal research	3(37.3%)	5(62.5%)	8
6	Reduction of Open Electives	5(62.5%)	3(37.5%)	8

(Source: Research Questionnaire)



Graph 4.2.2: Impact of CBCS on Teachers

The scholar while ascertaining the views of the faculties grouped into six components with regard to the implementation of CBCS program in the Department placed in Table-4.2.2 shows that 6 (75%) of the teaching faculty in the department under study is of the opinion that CBCS increased the workload of teachers while 4 (50%) each opined that the teacher due to constraint in time due to introduction of Open Electives could neither provided proper attention to the students nor supervision of research scholars while, 4 (50%) of respondents think that too much involvement of teachers in testing and evaluation under CBCS gives them less time for supervision of research scholars. Further, 2 (25%)admitted that, CBCS program facilitate good learning from the teachers time and again while, 6(75%) are against the view. Again, 3(37.3%) faculties viewed that the introduction of CBCS gives the teachers less time for their personal research. Regarding Open Electives while, 5(62.5%) of teachers want to reduce the number of Open Electives offered by the department so as to give more time for teachers to teach their main courses in their respective departments.

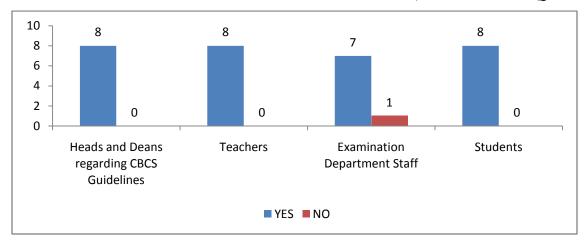
4.2.3 Need of Training on CBCS

CBCS and its guidelines need to be learned and understood by the faculties as well as the students and staff. For this, the scholar grouped the questions into four categories and data obtained is placed in Table- 4.2.3 for analysis supplemented with Graph- 4.2.3 for clear understanding.

Table 4.2.3 Need of Training on CBCS

Sl. No	Need of Training	Yes	No
1	Heads and Deans regarding CBCS Guidelines	8(100%)	0
2	Teachers	8(100%)	0
3	Examination Department Staff	7(87.5%)	1(12.5%)
4	Students	8(100%)	0

(Source: Research Questionnaire)



Graph 4.2.3: Need of Training on CBCS

From the above Table- 4.2.3 it is found that, all the 8 (100%) teachersagreed with an idea that frequent training or workshop for Heads, Deans, Teachers and Students regarding CBCS should be organised to understand the details about grading, semester, credit system, credit transfer etc. and to keep abreast with the latest development for wider benefits to the students. According to them it must be performed with through resource persons with appropriate expertise. Further, while extracting the opinion from the teachers about imparting training to the examination cell it could be found that, 7 (87.5%) faculties do favour with the system while, 1 (12.5%) expressed negative. Likewise, again while taking the opinion of all 8 teachers about imparting training to the students it could be found that, all the 8 teachers expressed their willingness. Hence, broadly it can be viewed that, training is a must for any type of induction of new system including CBCS.

4.2.4 Issues Relating to Choice of Open Electives

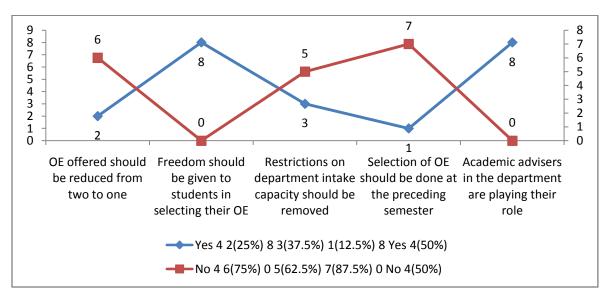
An issue relating to the choice of open electives was one of the segments of the questionnaire and the data so obtained from the teachers under coverage has been placed below

in Table- 4.2.4 supported with Graph- 4.2.4 for better understanding. The question has been split into six sub-headings as shown in the table below.

Table- 4.2.4: Issues Relating to Choice of Open Electives

Sl. No	Related Issues of Open Electives (OE)	Yes	No
1	Long list of OE creates confusion among students	4(50%)	4(50%)
2	OE offered should be reduced from two to one	2(25%)	6(75%)
	Freedom should be given to students in selecting		
3	their OE	8(100%)	0
	Restrictions on department intake capacity should		
4	be removed	3(37.5%)	5(62.5%)
	Selection of OE should be done at the preceding		
5	semester	1(12.5%)	7(87.5%)
	Academic advisers in the department are playing		
6	their role	8(100%)	0

(Source: Research Questionnaire)



Graph 4.2.4: Issues Relating to Choice of Open Electives

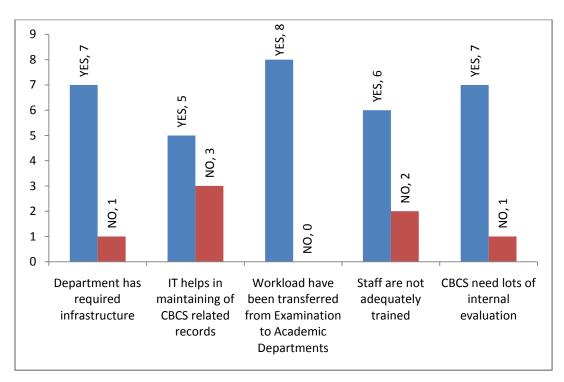
Table- 4.2.4 on analysis revealed that, 4 (50%) of teachers are admitted with the idea that a long list of Open Electives creates confusion among students in the selection of their desired Open Electives while, another 4 (50%) teachers did not support the idea. OE offered should be reduced from two to one, a component of the question on analysis found that, while only 4 (25%)respondents of teachers agreed to the idea, the other 6 (75%) teachers contended with the idea so as get more time by the teachers to teach their main courses in their respective departments and engagement in research work. Further, while analysis the data on the issue on Freedom should be given to students in selecting their OE, all 8 teachers (100%) supported. Further, 3 (37.5%) of teachers are envisaged with an idea that imposing restrictions on departments in regards to the admission procedures of Open Electives to take beyond their intake capacity should be removed, while, other 5 (62.5%) teachers opposed to it. Again, with regard to selection of OE should be done at the preceding semester only 1 (12.5%) teacher favoured while, 7 (87.5%) teachers do away with such idea. Moreover, with regard to the academic advisers in the department are playing their role. It could be found that, all 8 (100%) teachers accepted the phenomena.

4.2.5 Impact of CBCS on the Functioning of Department

The implementation of Choice Based Credit System in the University has an impact on the functioning of departments regarding I.T support infrastructures, examination, quality of teaching, training, staff and evaluation system. The Table- 4.2.5 supplemented with Graph- 4.2.5 explains below the impact of CBCS on the functioning of the department.

Table 4.2.5 Impact of CBCS on the functioning of the Department

Sl. No	Impact of CBCS on Department	Yes	No
1	Department has required infrastructure	7(87.5%)	1(12.5%)
2	IT helps in maintaining of CBCS related records 5(62.5%)		3(37.5%)
3	Workload have been transferred from Examination to Academic Departments	8(100%)	-
4	Staff are not adequately trained	6(75%)	2(25%)
5	CBCS need lots of internal evaluation	7(87.5%)	1(12.5%)



Graph 4.2.5: Impact of CBCS on the functioning of the Department

While analysing Table- 4.2.5 it could be found that, good number of teachers i.e., 7 (87.5%)mentioned that the department have sufficient infrastructures to meet the requirements of CBCS while, 1 (12.5%) went against the notion. Likewise, 5 (62.5%) teachers agreed that without IT support, maintenance and retrieval of office records relating to CBCS are not possible, but 3 (37.5%) opined negative. The total population i.e., 8 (100%) appreciated that, with the introduction of CBCS, the workload of the examination department relating P.G examination has been transferred to academic departments which otherwise over burdened the teachers. Further, while6 (75%) teachers agreed that supporting staffs in their department are not adequately trained, 2 (25%) disagreed. Further, with regard to internal evaluation is exercised in the department under CBCS are more as viewed by 7 (87.5%) teachers, 1 (12.5%) teacher dissented. Overall it can be viewed that, there is an increasing pressure on the Dept. with the induction of CBCS program.

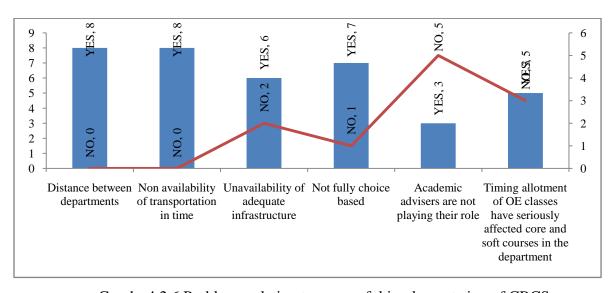
4.2.6 Problems Relating to Successful Implementation of CBCS

With the introduction of CBCS in the University, problems have incrementally increased with regard to transportation, student's mobility from one department to other, selection of Open Electives, infrastructures and the teaching learning process. The table below explains the problems relating to successful implementation of CBCS in the University.

Table 4.2.6: Problems relating to successful implementation of CBCS

Sl. No	Related problems for successful implementation of CBCS	Yes	No
1	Distance between departments	8(100%)	-
2	Non availability of transportation in time	8(100%)	-
3	Unavailability of adequate infrastructure	6(75%)	2(25%)
3	Not fully choice based	7(87.5%)	1(12.5%)
5	Academic advisers are not playing their role	3(37.5%)	5(62.5%)
6	Timing allotment of OE classes have seriously affected core and soft courses in the department	5(62.5%)	3(37.5%)

(Source: Research Questionnaire)



Graph- 4.2.6 Problems relating to successful implementation of CBCS

From the Table 4.2.6 it could be found on analysis that, 8(100%) teachers opined that students faced problems in attending Open Elective Classes due to the long distance between departments; and due to the non-availability of buses in time after O.E classes, large number of students missed their classes in their parental departments. 7 (87.5%) teachers agreed that the

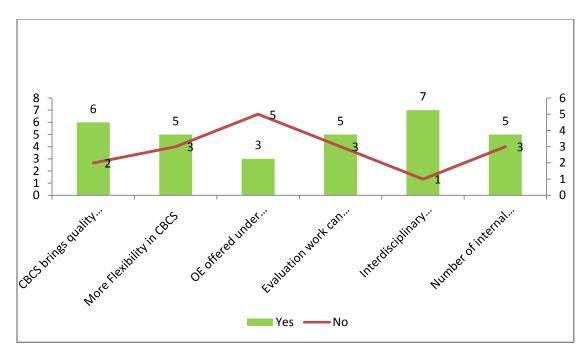
CBCS introduced by Mizoram University is not fully choice based as it imposes many restrictions on the students in selecting their Open Electives, although another 1 (12.5%) disagreed. 3 (75%) teachers viewed that the University does not have the required infrastructures for the successful implementation of CBCS while 1 (12.50%) teacher did not agree. Further, very less number of teachers i.e., 3 (37.5%) opined that, Academic advisers are not playing their role while 5 (62.5%) did not support the idea. Moreover, 5 (62.5%) of the teachers expressed that timing allotted for OE classes have seriously affected core and soft courses in the department as assigning of first two periods on two days in five days week to Open Electives has seriously affected the teaching programs while, 3(37.5%) teachers opposed to this. Hence, there is a mixed opinion on various issues on Problems relating to successful implementation of CBCS.

4.2.7 Impact of CBCS on Quality and Flexibility of Education

With the introduction of Choice Based Credit System, the University experienced a great impact on the quality and flexibility of education. The following table explains the impact of CBCS, with its interdisciplinary approach, on the quality and flexibility of education.

Table 4.2.7: Impact of CBCS on Quality and Flexibility of Education

Sl. No	Impact of CBCS on Education	Yes	No
1	CBCS brings quality education	6(75%)	2(25%)
2	More Flexibility in CBCS	5(62.5%)	3(37.5%)
3	OE offered under CBCS are job oriented	3(37.5%)	5(62.5%)
4	Evaluation work can be done better	5(62.5%)	3(37.5%)
5	Interdisciplinary approach leads to understanding of other disciplines	7(87.5%)	1(12.5%)
6	Number of internal assignments under C1 and	5(62.5%)	3(37.5%)
	C2 needs to be reduced		



Graph 4.2.7: Impact of CBCS on Quality and Flexibility of Education

Table- 4.2.7 on analysis it could be found that, majority of respondents 6 (75%) felt that quality education can be achieved better through Choice Based Credit System (CBCS) rather than the old system, while other2 (25%) disagree with them. Further, 5(62.5%) appreciated to the fact that there is more flexibility in Choice Based Credit System (CBCS) while3 (37.5%) depreciate it. Again, 5(62.5%) agreed that most of the Open Electives offered by their respective department under CBCS are not job oriented so they think that CBCS, which works on credits, is a better way of evaluation.7(87.5%) teachers felt that CBCS, with its interdisciplinary approach, help students to integrate their understanding of various disciplines while only 1(12.5%) is against it.5(62.5%) agree that the number of class tests/seminars/assignments etc. under C-1 and C-2 in CBCS need to be reduced while, 3 (37.5%) depreciate to it. Hence, there is a mixed opinion on Impact of CBCS on Quality and Flexibility of Education.

4.2.8 Understanding Level of CBCS by the Students

There is a difference of understanding level of Choice Based Credit System among the students and the data grouped into three components has been placed in the following Table 4.2.8 supported with Graph- 4.2.8 for clear understanding.

Table 4.2.8 Understanding Level of CBCS by the students

Sl. No	Level of understanding	No. in Support
1	Great Extent	7(11.29%)
2	Some Extent	50(80.64%)
3	Not at All	5(8.06%)

(Source: Research Questionnaire)



Graph 4.2.8: Understanding Level of CBCS by the students

After analysis of the above Table-4.2.8 it could be found that, major chunk of students which constitute 50(80.64%) are aware of the CBCS program while, 7 (11.29%) students understand the concept of CBCS to a great extent and 5 (8.06%) students don't have any idea about the concept of Choice Based Credit System (CBCS). It is the hour that, the students should be fully appraised with the CBCS program through training, orientation etc.

4.2.9 Factors Influencing the Selection of Open Electives

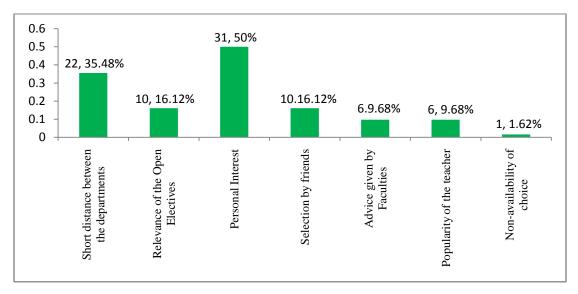
While selecting Open Electives, there can be many choices of factors which influence the students. The following table reveals the influencing factors among the students in the selection of Open Electives.

Table 4.2.9: Factors influencing the selection of Open Electives

Influencing Factors	No. of Respondents
Short distance between the departments	22 (35.48%)

Relevance of the Open Electives	10(16.12%)
Personal Interest	31(50%)
Selection by friends	10(16.12%)
Advice given by Faculties	6(9.68%)
Popularity of the teacher	6(9.68%)
Non-availability of choice	1(1.62%)

(Source: Research Questionnaire)



Graph 4.2.9: Factors influencing the selection of Open Electives

The Table- 4.2.9 on analysis deduced that, 31 (50%) which is the highest expressed their personal interest on CBCS while, 22(35.48%) viewed that, short distance of the departments influenced in the selection of Open Electives, 10(16.12%) opined that they are influenced by the relevance of the Open Electives offered and influenced by their friends respectively. Further, 6(9.68%) expressed that; they choose Open Electives as per the advice of faculties and popularity of the teacher respectively. Only 1(1.62%) student conveyed for non-availability of choice. In general it can be viewed that, there is an influence of open electives and the students go by their choice of subject.

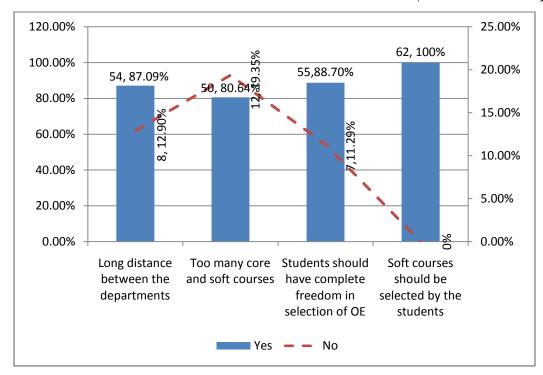
4.2.10 Problems Faced by the Students

Choice Based Credit System is beneficial for students but still many problems lies with the students due to their mobility from one place to the other. Data relating to the problems encountered by them is placed below in Table- 4.2.10 complemented with 4.2.10 for clear understanding of the issue.

Table 4.2.10: Problems faced by the students

Sl. No	Types of Problems	Yes	No
1	Long distance between the departments	54(87.09%)	8(12.90%)
2	Too many core and soft courses	50(80.64%)	12(19.35%)
3	Students should have complete freedom in selection of OE	55(88.70%)	7(11.29%)
4	Soft courses should be selected by the students	62(100%)	-
5	Non availability of transportation	38(61.29%)	24(38.70%)

(Source: Research Questionnaire)



Graph 4.2.10: Problems faced by the students

From the above Table- 4.2.10, it is revealed that, 62 (100%) of the student respondents think that soft course should be selected by the student themselves followed by 55 (88.70%) who feel that, students should have complete freedom in selection of OE, 54 (87.09)% of students who expressed that they face problem due to long distance between departments and 50(80.64%) who expressed that, there are too many core and soft courses followed by (38(61.29%) who

viewed that they face problems regarding transportation. This shows clearly that the respondents give great importance to transportation. So it is certain that, the students encounter with problems in one way or other.

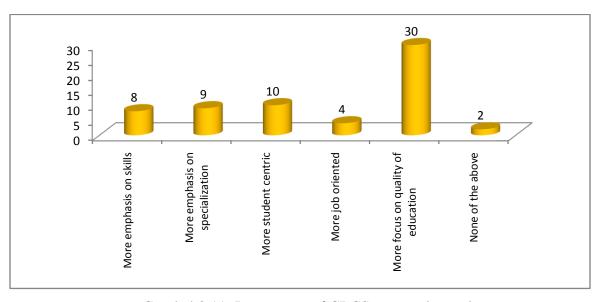
4.2.11 Importance of CBCS among Students

The introduction of CBCS has a great impact on the students which enables the students to gain more knowledge and more capabilities. The Table- 4.2.11 supported with Graph- 4.2.11 below explain the importance of CBCS among the students.

No. of Sl.No **CBCS Percentage** Respondents 1 More emphasis on skills 12.91% 9 2 More emphasis on specialization 14.51% 3 More student centric 10 16.12% 4 More job oriented 4 6.45% 5 More focus on quality of education 30 48.38% 6 None of the above 2 3.22%

.Table 4.2.11: Importance of CBCS among the students

(Source: Research Questionnaire)



Graph 4.2.11: Importance of CBCS among the students

The above Table- 4.2.11 on analysis revealed that nearly half of the students, i.e., 30(48.38%) feel that CBCS focus more on quality education followed by 10(16.12%) who

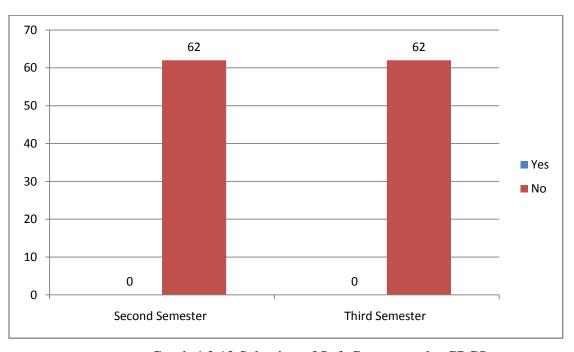
agreed that it is more student centric while 9(14.51%) students think that CBCS put more emphasis on specialization. Some of the respondents i.e., 8(12.91%) still give more importance to skill and 4 (6.45%) viewed it as job oriented. But 2 (3.22%) didn't agree any of the above statements. Hence, overall the induction of CBCS is fruitful in every respect.

4.2.12 Selection of Soft Courses under CBCS

A soft course may be a theory, practical, field based or project work which is optional for students to register. Students can exercise their choice among a set of soft courses from the list of soft courses specified for each programme of study. The Table- 4.2.12 supported with Graph-4.2.12 below explain the selection of Soft Courses by the students in a semester.

No. of Students
Selecting Soft CourseYesNoSecond Semester0 (0%)62 (100%)Third Semester0 (0%)62(100%)

Table 4.2.12 Selection of Soft Courses under CBCS



Graph 4.2.12. Selection of Soft Courses under CBCS

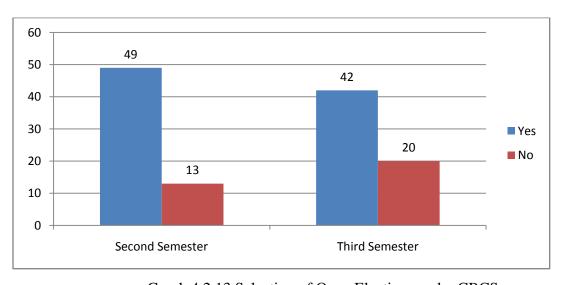
A study of data from the above Table 4.2.12 indicates that students of Library and Information Science in Mizoram University could not select Soft Course papers of their choice in Second Semester and Third Semester. It is revealed that 62(100%) students which comprise the total population of the study are learning the soft courses selected by the department.

4.2.13 Selection of Open Electives under CBCS

Generally a course which can be chosen from a pool of courses and which may be very specific or specialised or advanced or supportive to the discipline/subject of study or which provide an extended scope or which enables to exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course. Elective courses may be offered by the main discipline/subject of study or by sister/related discipline/subject of study. The Open Elective subjects have to be chosen by the students of second semester and third semester.

Table 4.2.13 Selection of Open Electives under CBCS

No. of Students Selecting O.E	Yes	No
Second Semester	49 (80%)	13 (20%)
Third Semester	42 (68%)	20 (32%)



Graph 4.2.13 Selection of Open Electives under CBCS

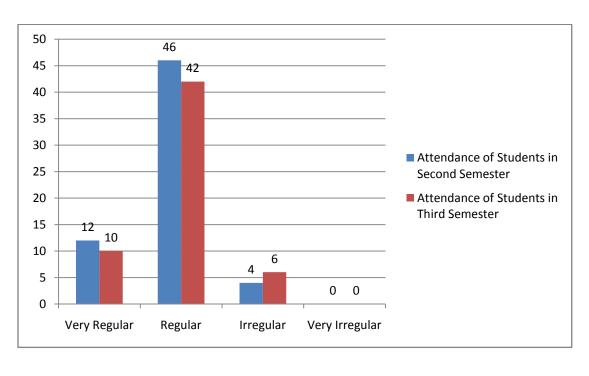
The analysis of the above Table 4.2.13 shows that majority of the students which constitutes 49(80%) in the second semester and 40(68%) in the third semester can select the open electives of their choice while the remaining students which comprise of 13(20%) students in the second semester and 20(32%) students in the third semester could not select open electives of their choice but rather allotted to them. So, it is clear that while some of the students cannot select their choice of open electives, majority of the students can select open electives of their choice.

4.2.14 Attendance of Students in Open Electives

Students attended Open Electives twice a week. This Open Electives is mandatory for the students to attend in the second and third semester. The students have to go to other departments to learn their choice of open electives which may be located far from the parent department. The attendance of the students in Open Electives is given in the following table 4.2.14.

Attendance of **Second Semester Third Semester** students Very Regular 12 (19%) 10 (16%) Regular 46 (74%) 42 (68%) Irregular 4 (6%) 6 (10%) Very Irregular 0(0%)0(0%)

Table 4.2.14 Attendance of Students in Open Electives



Graph 4.2.14 Attendance of Students in Open Electives

While analysing the above Table 4.2.14, it can be found that majority of the students which constitutes 74% in second semester and 68% in third semester are regular in attending their Open Elective classes. Some students that are 19% and 16% are very regular and few students which comprise 6% and 10% are not regular in attending their Open Elective classes. In general, it can be said that Open Elective classes are regular in Second Semesters and Third Semesters.

4.3 FINDINGS

After due analysis of the above tables from the questionnaires and interviewed with the students and faculties, following findings were deduced.

- 1. A total number of 70 questionnaires were circulated in which 70 questionnaires were received from the students and faculties of the department. This shows the interest of the faculties and students for implementation of CBCS in the department.
- 2. Introduction of CBCS has increased the work load of teachers in areas of teaching, administrative work, testing and evaluating the students which in turn reduce the time for their personal research and also gives them less time for supervision of research scholars.
- 3. Majority of the teachers opined that the number of Open Elective courses should be reduced and they agreed that complete freedom should be given to students while selecting Open Electives.
- 4. Head of Department, Deans, Teachers, Examination Staff and Students should undergo training on CBCS Rules and Regulations so that selection of Open Electives for the next semester can be done meticulously.
- 5. All of the faculties are of the opinion that freedom should be given to students while selecting the choice of Open Electives and that selection of the open electives should not be done at the preceding semester. The restrictions imposed of the department for their intake capacity should be removed so that students can have the benefit of choosing their choice of OE.
- 6. The findings also reveal that with the introduction of CBCS, workloads have also been transferred from examination to academic departments. As a result teachers as well as staff should be adequately trained.

- 7. The department has required infrastructure because IT helps in maintaining of CBCS related records. At the same time, CBCS needs lot of internal evaluation which increase the manual workload. The teachers are of the opinion that number of internal assignments under C1 and C2 needs to be reduced.
- 8. The Academic Advisers in the department are also playing their role in assisting students in selection of their Soft Courses and Open Electives.
- 9. Due to the long distance between departments, inadequate infrastructure in the University like transportation which has not been available in time, too many core and soft courses, inadequately trained teachers, and timing allotment of Open Elective classes seriously affects the selection of Open Electives, thus, imposing restrictions which make it not fully choice based.
- 10. Interdisciplinary approach leads to understanding of other disciplines and there is more flexibility in CBCS which leads to quality education as it is student centric. But at the same time, OE offered under CBCS is not job oriented.
- 11. Choice Based Credit System is a new system of learning and the findings reveal that most of the students understand Choice Based Credit System (CBCS) to some extent only and there are some students who does not understand CBCS system at all.
- 12. Majority of the students select Open Electives by their personal interest while some students select OE due to short distance between the departments. It is also found that students select OE due to the relevance of OE course offered by other departments. Students also select OE influenced by opinion or views of their classmates. They also select OE due to the advice given by the faculties and academic advisers.
- 13. The study also reveals that students encountered problems regarding long distance between the departments because of non- availability of transportation which in turn resulted in missing of classes in their parent department.
- 14. Majority of the students are also of the opinion that under CBCS, there are too many core and soft courses and that selection of the soft courses should be done by the students.
- 15. Nearly half of the students feel that CBCS focused more on quality education.
- 16. The students are also of the opinion that complete freedom should be given to them while selecting OE.
- 17. Attendances of students in Open Elective classes are regular in general.

CHAPTER 5 SUGGESTIONS AND CONCLUSIONS

5.1 SUGGESTIONS

Based on the feedback received from the respondents through the analysis of the data obtained through questionnaires and interview, the researcher developed suggestions for the improvement of Choice Based Credit System in the Department of Library and Information Science, Mizoram University. These suggestions are listed below:

- 1. Before starting the new session in the university, elaborative orientation regarding CBCS should be given to the students to understand the CBCS system.
- 2. The workload of the teachers should be reduced so that teachers can have more time for their personal research and for supervising research scholars.
- 3. Open Electives courses should be reduced for two to one in a semester.
- 4. Training should be organised by the concerned authority regarding CBCS guidelines, rule and regulations for Head of Department, Deans, Teachers, Examination department staff, staff of the department and students as well.
- 5. While selecting the Open Electives courses, due importance should be given to the students' opinion for selecting their choice of Open Electives. Besides, students should also be given chance to take Open Elective in the parental department.
- 6. Proper transportation should be arranged so that students can attend OE classes in other departments which are located far off from their parent department.
- 7. O.E Courses offered by different departments should be more job/skill development oriented.
- 8. Students should have complete freedom in selecting Soft courses of their choice. Therefore CBCS should provide more option to the students for soft course.
- 9. C-1 and C-2 evaluation criteria and no. of tests/assignments should be less in number (maximum 2) in each semester. This will reduce the burden of students and teachers and at the same time it will provide more time for the teachers in preparation for their classes.
- 10. C-1 and C-2 internal test papers should be supported by a feedback format signed by teacher and to be returned to students so that the students will know their strengths and weaknesses.
- 11. The teaching should be more inclined to audio-visual methods instead of traditional method.

5.2. CONCLUSIONS:

The UGC has formulated various regulations and guidelines from time to time to bring efficiency and excellence in the higher education systems and maintain minimum standards and quality across the Higher Educational Institutions in India. The important measures include innovation and improvements in curriculum, teaching-learning process, examinations and evaluation systems.

All the higher education institutions across the world are implementing a system of credits. Comparatively, there is the European Credit Transfer System (ECTS) in Europe's universities, the National Qualifications Framework in Australia, Pan-Canadian Protocol on the Transferability of University Credits, Credit Accumulation and Transfer System (CATS) in UK, and even the systems operating in the US, Japan, etc are based on credit system. In compliance with these global grading system, the UGC recommended academic reforms in the recent years to let the overall improvement in the higher education system in India. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system.

While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching-learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. The UGC has come up with the Choice Based Credit System (CBCS) programme in which the students have a choice to choose from the prescribed courses which are offered as core, elective, foundation or soft courses in which they can learn at their own pace and the entire assessment is graded-based on a credit system. The basic idea is to look into the needs of the students so as to keep up-to-date with development of higher education in India and abroad.

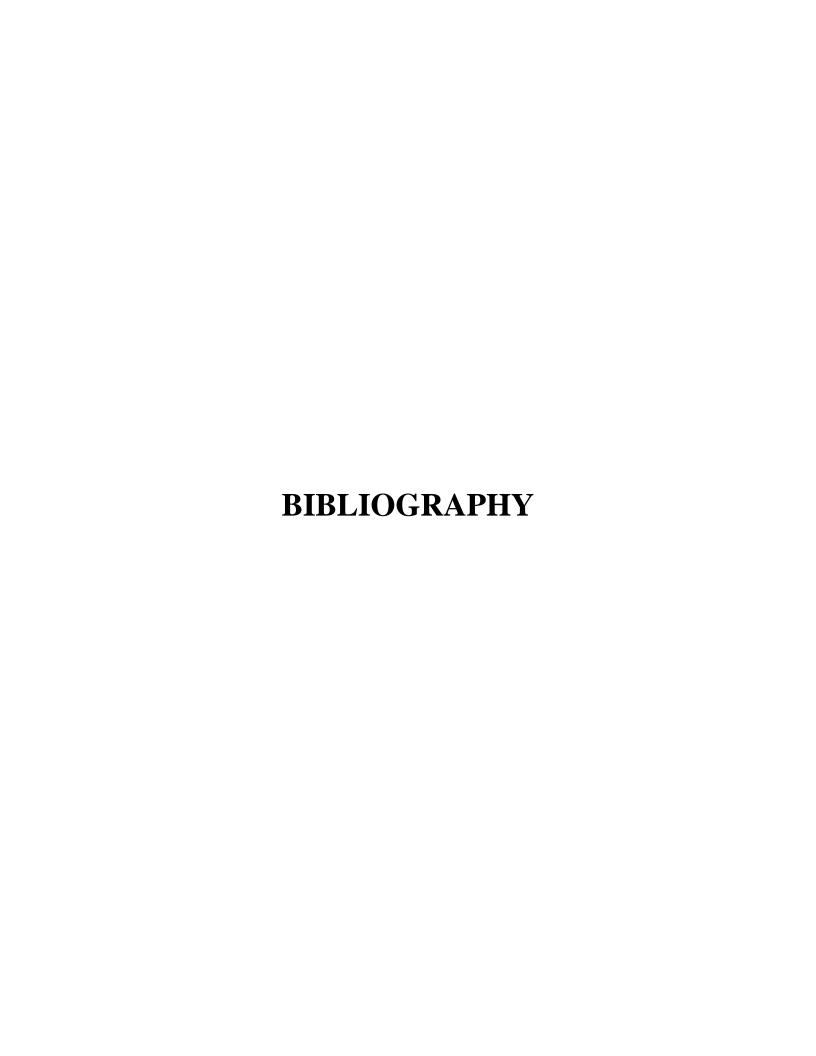
Presently the performance of students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades. To bring in the desired uniformity, in

grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated guidelines.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to access the performance of students. CBCS aims to redefine the curriculum keeping pace with the liberalisation and globalisation in education. It allows students an easy mode of mobility to various educational institutions spread across the world along with the facility of transfer of credits earned by students.

The Indian Higher Education Institutions have been moving from the conventional annual system to semester system. Currently many of the institutions have already introduced the Choice Based Credit System. The semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching.

Whether it is too early to say the implementation of CBCS in the Department of Library and Information Science, Mizoram University will be successful or not, the basic motive is to expand academic quality in all aspects, right from the curriculum to the learning-teaching process to examination and evaluation systems. However, so far multiple methods are followed by different universities across the country towards examination, evaluation and grading system, the implementation of the choice based credit system in the department seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system.



BIBLIOGRAPHY

- Agarwal, Pawan (2009). Indian higher education: envisioning the future. New Delhi: Sage Publishers, pp.357-401.
- Bharathidasan University Regulations on Choice Based Credit System (CBCS) for UG Programmes. Tiruchirappalli, 2005-2006.
- Bordoloi, Riyimoni (2013). Challenges concerning higher education in India. *University* News, 51(46) 34-38.
- Chaturvedi, S, & Gupta, PV. (2009). Quality of higher education: a new paradigm, *University News*, 47(40), 5-15.
- Dhawan, Rani (2013). Higher Education: Quality assurance and quality enhancement. *University News*, 51(13) 1-5.
- D.O. No.F.1-2/2008 (XI Plan) From Chairman UGC on Examination Reforms dated Jan 31, 2008: Annexure-II, Action Plan for Academic and Administrative Reforms
- D. O. No.F.1-2/2008 (XI Plan) From Chairman UGC on Examination Reforms dated March 2009.
- Dutta, Indrajeet, &Dutta, Neeti, (2013). Choice based credit system: an academic reform in higher education. *University News*; *51*(8): 6-13.
- Ganesan, D. Raja (2009). Need for professionalizing student evaluation in higher education, *University News*, 47(45), 88-92.
- Ghanchi, D.A. (2009). Integrative role of evaluation in curriculum construction and transaction: need for a paradigm shift, *University News*, 47(45), 45-48.
- Guskey, T. R. (2001). Helping standards make the grade. *Educational leadership*, 59(1) 20-27.
- Guskey, T. R., & Bailey, J. M. (2001). Developing grading and reporting systems for student earning. Thousand Oaks CA: Corwin.
- Handbook 2009, Distance Educatuion Council Regulations, DEC New Delhi.
- Higher education in India: strategies and schemes during XI Plan (2007-1012) for universities and colleges, *University Grants Commission*, January 2011, p. 76.

- Islam, M.S., and Chowdhury, M.A.K. (2006). Library and Information Science education system in Bangladesh: An overall situation. In C. Khoo, D. Singh and A.S. Chaudhry (Eds.), *Proceedings of the Asia-Pacific Conference on Library &Information Education & Practice* 2006 (A-LIEP 2006), Singapore (pp. 358-363)
- Jampala, R.C. (2012). Issues of quality education in higher education in India, *Academe, Vol. XV*.No.1, pp.63-66.
- Jeelani, S. (2012). Examination reforms in higher education institutions. *University News*, 50(12), 1-4.
- Jeyasingh, G. Stanley. (2005, April 12). Choice based credit system. *The Hindu*, Open page.
- Kalam, A.P.J. (2012). University a partner in economic development. *University News*, 50(52), New Delhi.
- Kasetwar, Ramesh B. (2009). Special issue on evaluation system: evaluation system in India: a stocktaking of prevalent practice and alternative strategies. *University News*, 47(45), 13-14
- Katoch, Kuldeep Singh &Katoch, SumanKumari (2013). Choice based credit system and semesterization in Himachal Pradesh: the road ahead. *University News*, 51(40): 13-17.
- Kelkar, Alka S, &Ravishankar, Lakshmy Choice Based Credit System: boon or bane?. *CurrentScience*, 107(8), 1229-1230.
- Kumar, Arya (2013). Managing change in higher educational systems, *University News*, 50(53), 27-29.
- Lakhera, M.M. (2009). Great opportunities to face great challenges, *University News*, 47(45), 118-123.
- Lemaitre, Maria Jose (2004). Development of external quality assurance schemes: an answer to the challenges of higher education. Quality in Higher Education, *10*(2)
- Lewis, Lanora G.(1961). The credit system in colleges and universities, *New Dimensions in Higher Education* (US Department of Health Education and Welfare, Bulletin no. 9).
- Maheshwari, Amrita (2012). Crucial role and relevance of higher education research, *University News*, *50*(51), p.11-17.

- Mehta, Goverdhan (2012). Education does not end with degrees, *University News*, 50(51), p23-26.
- Mishra, J. K., Abidi, Naseem& Sharma, Rahul Sharma (2008). Working paper on Indian higher education: Global challenges and local issues. Nioda: Jaypee Business School.
- Misra, H.P. (2012). Higher education: new challenges and emerging roles. *Odisha Review*.
- Mukhpadhyay, S. (2002). Enhancing the academic role of board of school education, New Delhi: NIEPA
- Murthy, S.S. (2013). Some Issues concerning new central universities: towards making them world class. *University News*, *51*(40) 3-6.
- Mysore University (2012). Choice based credit system: handbook of courses 2012-1013 batches.
- NAAC (2006).Revised guidelines for the creation Internal Quality Assurance Cell (IQAC) in Accredited Institutions. Bangalore.
- National Knowledge Commission, Report to the nation 2006. New Delhi: National Knowledge Commission, 2007
- Pathania, Anita (2012). Quality in higher education perspectives from stakeholders, *Academe*, Vol. XV. No. 1, pp. 25-29.
- Pathania, Kulwant Singh; &Pathak, Anuradha (2013). Choice based credit system: the need of the hour. *University News*, 51(8): 1-3.
- Power, K.B. (2009). Special issue on evaluation system: evaluation system in higher education, *University News*, 47(45), p3.
- Raghavan, Hema (2014). Cause, change and effect: a look at Delhi university reforms. *University News*, 52(24), 3-5.
- Rajendran, M. (2010). Curriculum-cum-quality assurance: a major ingredient for assessment and accreditation in higher education. *University News*, 48(04): 4-9.
- Ramesh, B. Kasetwar (2009). Special issue on evaluation system: evaluation system in India: a stocktaking of prevalent practice and alternative strategies. *University News*, 47(45), p13-14.

- Rao, P.H. Sethumadhava (2014). Problems of higher education in India. *University News*, 52(31), 3-4.
- Rao, P. Purna Chandra (2009). Special issue on evaluation system: student evaluation for quality education. *University News*, 47(45), 92.
- Rath, Pravakar; & Moorttimatee, Samantaray (2014). Internationalization of library and information science education: adopting choice based credit system (CBCS) in Indian universities with special reference to library and information science in Mizoram University. *Library Herald*, 52(1) 57-66.
- Reddy, D.N. & Kishore, K. Lal (2009). Special issue on evaluation system: revamping higher education: need of the hour. *University News*, 47(45), 69-70.
- Saharish, B. (2009). Special issue on evaluation system: implementing UGC –mandated reforms in higher education. *University News*, 47(45), 39-40.
- Scott, P. (1998). Massification, internationalization and globalization, in P. Scott (ed.). *The globalization of Higher Education*, Buckingham: Open University Press, pp. 108-129.
- Shetty, S. Ramananda (2009). Special issue on evaluation system: evaluation system in higher education, *University News*, 47(45), 19-20.
- Shetty, Vishwith (2013). Higher education in India: challenges and issues amidst globalization. *University News*, *51*(37) 17-20.
- Shivkumar, Vaidyanathan (2013). Quality in Indian higher education: problems and prospects. *University News*, *51*(38) 3-6.
- Singh, Dheeraj (2010). Fostering a liberal credit system, *Edutech*, May, pp. 8-9.
- Singh, ShambhuNath (2013). Globalization of education. *University News*, 51(11) 1-7.
- Swamy, RajuNarayana (2014). Higher education in India: an overview, *University News*, 52(26), 3-6.
- Teicher, U. (2004). The changing debate on internationalization of higher education. *Higher Education*, Vol. 48, pp. 5-26.

- UGC (2012) Report on 12th Five Year Plan on Inclusive and qualitative expansion of higher education, New Delhi: Author.
- UGC (2012). Report on Higher Education in India at a Glance, New Delhi: Author.
- UGC frames guidelines for choice-based credit system (2014). *India Education Review*, 15 December.
- UGC guidelines on adoption of Choice Based Credit System. *UGC*, BahadurShahZafarMarg, New Delhi-110 002.
- UGC regulations governing the choice based credit system (CBCS) for the two years (Four Semesters) Masters Degree programmes in the Faculties of Arts, Science, Commerce and Education. Framed under section 44(1) (c) of the KSU Act 2000.
- Upadhaya, Sugeeta (2007). Wastage in Indian higher education. *Economic and Political Weekly*, 1(12), New Delhi.
- Vaidyan, V.K (2014). A critical analysis of credit-semester in India. *University News*, 52(24) 6-10.
- Valimaa, J. (2004) Nationalisation, localization and globalization in Finnish higher education. *Higher Education*, Vol. 48, pp. 27-54.
- Wanchoo, R. K. Implementation of Choice Based Credit and Grading System for UG/PG Programs: Salient Features Appt, UCIET, Punjab University, Chandigarh

WEBSITES

- Baradol, A.K. (2009, August). *Bologna Process of Library and Information Science Education in SAARC Countries: A proposal*. Paper presented at the World Library and Information Congress: 75th IFLA General Conference and Council, Milan, Italy. Retrieved March 4, 2015, from http://www.ifla.org/annual-conference/ifla75/index.htm
- Bureau, F.J.P. University education to have choice based credit system. *Free Press Journal*, pp. 1-4 published on the web on 7th January 2015 02:09 am retrieved March 14 from http://C:\Users\Lenovo\Desktop\CBCS\UniversityEducationToHaveChoiceBasedCreditSystem.pdf

- Choice Based Credit System: Handbook of Course, University of Mysore.Retrieved May 30, 2015, fromhttp://www.uni-mysore.ac.in/choice-based-credit-system.
- Curry, B and Temple, T. (1992) "Using Curriculum frameworks for systematic reform.

 Alexandria, VA: Association of Supervision and curriculum development.p27. Retrieved

 March 15, 2015, from

 http://www.ncrel.org/sdrs/areas/issues/content/currclum/cu3refer.htm
- Draft rashtriyaUchatarShikshaAbhiyan (RUSA)-UGC published on the web on 21.1.2013. Retrieved May 18, 2015, from http://www.ugc.ac.in/pdfnews/5867549_rusa.pdf
- Georgy U. (2008) The Bachelor as on Academic Degree-Apprenticeship versus study Degree? Retrieved June 3, 2015, from www.ifla.org.sq/IV/ifla74/papers/136-Georgy-en.pdf
- Hatekar, Neeraj (2009). Changing higher education scenario in India. *Economic and Political Weekly*, *XLIV*(38): 22-23. Retrieved 4 March, 2015 from http://www.jstor.org/page/info/about/policies/terms.jsp

http://www.nith.ac.in/UG_RP_new.pdf

http://www.uni-mysore.ac.in/assets/Downloads-2015/January/CBCS-HANDBOOK-2012-13-Batch.pdf

http://www.bdu.ac.in/regulations/cbcsugreg.pdf

http://www.nith.ac.in/UG RP new.pdf

http://www.uni-mysore.ac.in/assets/Downloads-2015/January/CBCS-Handbook-2012-13-Batch.pdf

http://www.hindu.com/edu/2008/06/09/stories/2008060950201400.htm

http://www.indianexpress.com/news/state-varsities-may-offer-choicebased-credit/514359/

http://www.uniapply.in/news/item/10579-credit-systems-in-higher-education

http://www.ifla.org/annual-conference/ifla75/index.htm

Kanwal A. (2007). Issues of quality assurance (QA) in LIS higher education in 73rd International Federation of Library Associations and Institutions (IFLA) world Library and

- Information Congress, Durban.Retrieved March 1, 2015 from http://www.ifla.org/IV/ifla73/index.htm.
- Lowe, M. (2006) LIS Education in Britain: an overview. Retrieved July 3, 2015 from www.emeraldinsight.com/.../ViewContentServlet;...=/published/...ref...
- Manipal University, (2006) Retrieved March 23, 2015, from www.manipal.edu/manipalsite/Users/Colsubpage.aspx?...
- National Knowledge Commission (NKC) (2006) Retrieved January 1, 2015, from http://www.knowledgecommission.gov.in/recommendations/higher1asp
- National Assessment and Accreditation Council (NAAC) (2009).Manuals for self-study for universities criteria for assessment. Retrieved February 20, 2015, from http://www.naacindia.org/crityeria.asp
- Qualifications and Curriculum Authority (2009), Retrieved March 11, 2015, from http://qua.org.uk/qca_5967.aspx
- Roy, Nil Ratan; Khanam, UmmeKhadiza; & Devi, Tribeni (2013). Attitude towards choice based credit system of pg level students in higher education: a study on Assam University. *Scholarly Research Journal for Interdisciplinary Studies.Vol.1.*1198-1208. Retrieved March 4, 1015, from www.srjis.com.
- Scottish Credit and Qualification Framework (2009) Retrieved March 11, 2015, from http://www.scqf.org.uk/
- South Asian Association for Regional Co-operation (SAARC) (2009) Retrieved February 22, 2015, from http://www.saarc-sec.org/projects.php
- UGC frames guidelines for choice-based credit system (2014). *India Education Review*, 15

 December . Author: admin. Retrieved 6th October, 2015, from http://C:\Users\LENOVO\Desktop\CBCS\ChoiceBasedCreditSystem(CBCS)forUniversities
- Virkus S. Collaboration in LIS education in Europe: Challenges and opportunities, Retrieved June 30, 2015, from http://www.ifla.org.sg/IV/ifla73/papers/134-virkus-en.pdf

Wikieducator (2009), Retrieved July 6, 2015, from www.wikieducator.org/Indis/NationalQualificationsFramework

Yashpal (2009) Report of the Committee to Advise on 'Renovation and Rejuvenation of Higher Education' Submitted to the Ministry of Human Resource Development, Government of India Retrieved July 1, 2015, from http://www.hindu.com/nic/yashpalcommitteereport.pdf



MIZORAM UNIVERSITY DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE MASTER OF LIBRARY AND INFORMATION SCIENCE (MLIS) SYLLABUS

(Under Choice Based Credit System) 2012

FIRST SEMESTER

Paper Code: LIS/1/CC/01

Paper Name: FOUNDATION OF LIBRARY AND INFORMATION SCIENCE

Unit 1: Libraries- Modern Concepts, Role and Types

- Types of Libraries: Features and Functions
- Five Laws of Library Science and their Implications
- Library & Society: Its impact on Socio-economic and Educational development in the changing context
- Library Extension Services

Unit 2: **Library Development**

- Growth and Development of Libraries in India, UK and USA
- Library Legislation: Need and Features
- Library Legislation in India with special reference to Mizoram
- Press and Registration of Book Act, Delivery of Books and Newspapers Act

Unit 3: Professional Associations and Organizations

- Library and Information Profession: Ethics and standards
- Professional Associations: ILA, IASLIC, IATLIS, IFLA, ASLIB (AIM)
- Information and Documentation Organizations: UNESCO, NISCAIR, DESIDOC, NASSDOC

Unit 4: **Information and Communication**

- Data, Information and Knowledge: Conceptual Difference
- Information Transfer Cycle, Information as Resource
- Communication: Channels, Media, Models and Barriers
- Knowledge Society: Concept and Characteristics

Paper Code: LIS/1/CC/02

Paper Name: BASICS OF INFORMATION AND COMMUNICATION

TECHNOLOGY.

Unit 1: **Basics of IT**

- IT: Definition, Scope & Components (Hardware & Software)
- Generations of Computers
- Storage Devices, Input & Output Devices, Memory

Unit 2: **Operating Systems & Programming Languages**

- -Operating Systems: Function, Types
- -Study of MS-DOS, LINUX and Windows Operating Systems
- -Introduction to Programming Languages

Unit 3: **Communication Technology**

- Tele-communication: Transmission Media, ISDN, Multiplexing,
 Switching Technique
- Networking: Topology and Types of Network, Standards & Protocols
- Network Models (OSI), Networking Devices

Unit 4: **Database Management System**

- Definition, Objectives & Function
- Types of DBMS, Elements of DBMS
- Database Structure and Architecture

Paper Code: LIS/1/CC/03

Paper Name: ORGANISATION OF KNOWLEDGE I – CLASSIFICATION THEORY

Unit 1: **Knowledge Organization**

- Universe of Knowledge/Subject: Nature and Attributes
- Modes of Formation of Subjects
- Knowledge Classification and Library Classification; Static & Dynamic Theories of Classification

Unit 2: Classification Schemes

- Species of Library Classification Schemes
- Salient Features of DDC, UDC, and CC
- Mapping of Subject in DDC, UDC and CC

Unit 3: **Library Classification Theory**

- Definition, Need and Purpose of Classification

- Planes, Canons, Principles, Fundamental Categories, Postulational Approach, Facet Analysis & Sequence
- Phase Relation, Common Isolates, Devices, Mnemonics

Unit 4: **Notational Techniques and Recent Trends**

- Notation: Definition, Types, Functions, Qualities and Techniques
- Design and Development of Classification Schedules
- Recent Trends in Library Classification

Paper Code: LIS/1/CC/04

Paper Name: ORGANISATION OF KNOWLEDGE II - CATALOGUING THEORY

Unit 1: Cataloguing Principles

- Catalogue: Definition, Objectives, Functions
- Types of Catalogue and Physical Forms of Catalogue
- Principles of Cataloguing: Ranganathan's Cannon, Paris Principles
- Introduction to Catalogue Codes: CCC, AACR-IIR

Unit 2: Entry Elements, Filing Rules & Subject Headings

- Kinds of Entries and their Elements of Description
- Elements of Bibliographic Description of Non-Book Material (AACR-IIR)
- Rules for Choice and Rendering of Headings in AACR –IIR
- Subject Heading Lists: Sear's List & LCSH

Unit 3: **Standards of Bibliographic Description**

- ISBD, FRAD (Functional Requirements for Authorized Description),
 GARR (Guidelines for Authority Records and References), RDA
 (Resource Description and Access)
- Standards for Bibliographic Information Interchange and Communication-ISO 2709, Z39.50, Z39.71
- ISBN & ISSN

Unit 4: **Bibliographic Record Formats & Other Aspects**

- Bibliographic Records Format MARC 21, UNIMARC, CCF
- Cataloguing of E-Resources- Metadata Standards (Dublin Core)
- Derivatives of Cataloguing (Copy Cataloguing)

Paper Code: LIS/1/CC/05

Paper Name: LIBRARY CLASSIFICATION PRACTICE

(A) Assigning Class Numbers representing Simple, Compound, Complex Subjects

according to DDC (Latest edition) (50 marks)

(B) Viva Voce (10 marks)

Paper Code: LIS/1/CC/06

Paper Name: LIBRARY CATALOGUING PRACTICE

(A) Preparation of Main and Added Entries of Documents according to AACR IIR

(Latest edition) having the following items (50 marks)

Single Author, Joint Author and Editors

Corporate Author, Continuing Resources (Serials),

Pseudonyms Author and Anonymous Books

Non-Book Materials (Cartographic Materials & e-resources)

Assigning Subject Heading to Documents according to Sear's List of Subject

Heading (Latest edition)

(B) Viva Voce (10 marks)

SECOND SEMESTER

Paper Code: LIS/2/CC/7

Paper Name: MANAGEMENT OF LIBRARY AND INFORMATION CENTRES

Unit 1: Management: Concept and Principles

- Principles of Management: Scientific Management and their
 Applications to Libraries and Information Centres
- Elements of Management Process (POSDCORB)
- Total Quality Management, Six Sigma, MIS, DSS
- Change Management, Disaster Management, Conflict Management
- Project Management- PERT/CPM, SWOT Analysis

Unit 2: **Physical Management and Library Operations**

- Library Building: Site, Selection, Planning
- Furniture, Fittings and Equipments: Standards and Specifications
- Routines and Work Flow of Different Sections
- System Analysis and Design in Library Operations

- Collection Development and Management Acquisition, Maintenance,
 Stock Verification, Weeding out and Write-off (Policy and Procedures)
- Library Committee- Types and Functions

Unit 3: **Human Resource Development**

- Organizational Structure
- Job Description and Analysis: Job Evaluation
- Inter Personal Relations
- Recruitment Procedures
- Motivation: Group Dynamics
- Training and Development
- Performance Appraisal

Unit 4: **Financial Management**

- Resource Mobilization and Outsourcing
- Budgeting, Accounting and Auditing
- Budgetary Control
- Marketing of Library & Information Products and Services

Paper Code: LIS/2/CC/08

Paper Name: INFORMATION SOURCES & SERVICES THEORY&PRACTICE

Unit 1: **Information Sources**

- Documentary and Non-Documentary Sources (Human & Institutional Resources)
- Reference Sources: Categories, Characteristics and Usefulness
- Evaluation of Reference Sources

Unit 2: Electronic Sources of Information

- E-documents, OPAC, Web-OPAC
- Subject Gateways/Portals, Bibliographical Sources, Full text Databases,
 Bulletin Boards, Discussion Groups/Forums

Unit 3: **Information Services**

- Information Services: Definition, Need and Types
- Reference Services in Different Types of Libraries

- Information Services: Bibliographic Service, Translation Service,
 Indexing & Abstracting Services, Reprographic Service, CAS/Alerting
 Service, SDI, DDS
- Internet based Services

Unit 4: **Practical (Records & Viva-Voce)**

Records (50 marks)

- The candidates are required to submit a report on –
- Evaluation of Reference Sources
- Current Awareness List
- Bibliography

Viva-Voce (10 marks)

Paper Code: LIS/2/SC/09A

Paper Name: ACADEMIC LIBRARY SYSTEM

Unit 1: Academic Library: Functions and Services

- Role of Academic Library in Higher Education
- Academic Library Services
- Academic Library Management
- Role of UGC for Academic Library Development

Unit 2: Resource Development

- Physical Resources including ICT Infrastructure
- Human Resource Development
- Financial Resource Development

Unit 3: **Collection Development**

- Collection Development, Write-off and Weeding out policy
- Problems in Collection Development
- Role of Library Committee in Collection Development

Unit 4: Staff Development and Continuing Education

- Staffing Norms and Standards
- Continuing Education Program for Academic Libraries
- Personnel Management

Paper Code: LIS/2/SC/09B

Paper Name: PUBLIC LIBRARY SYSTEM

Unit 1: **Public Library Development**

- Public Library: Societal and National Development
- UNESCO Contribution for Public Library Development
- Administration of Public Libraries
- National Agencies for Public Library Development
- Library Legislation

Unit 2: **Public Library Services**

- Library Services: Types
- Public Library as Knowledge Centres
- Changing Dimensions of Public Library Services
- Evaluation of Public Library Services

Unit 3: **Public Library: Resource Development**

- Resource Mobilization in Public Library
- Public Library Finance
- Information Resource Development for Public Libraries
- Human Resource Development in Public Libraries

Unit 4: **Public Libraries: Trends and Development**

- ICT Application in Public Libraries
- Resource Sharing and Networking
- Changing Scenario of Public Libraries in India, UK & USA
- Web based Public Library Services

Paper Code: LIS/2/SC/10A

Paper Name: PRESERVATION & CONSERVATION OF LIBRARY MATERIALS

Unit 1: **Preservation and Conservation: Overview**

- Preservation and Conservation: Historical Development, Need and Purpose
- Preservation of Print Materials: Books, Periodicals, Pamphlets

Unit 2: Preservation of Non-Print Materials

- Palm Leaves
- Manuscripts

- Films
- Floppies and Disks

Unit 3: Hazards to Library Materials and Control Measures

- Environmental Factor (Temperature, Humidity, Water, Light, Air Pollution, Smoke, Dust, etc)
- Chemical Factors

Unit 4: **Binding**

- Types of Binding of Library Materials
- Binding Material and their Varieties
- Binding Process
- Standards for Library Binding

Paper Code: LIS/2/SC/10B

Paper Name: INFORMATION RESOURCE DEVELOPMENT

Unit 1: **Types of Information Resources**

- (Primary, Secondary & Tertiary)
- Non-Documentary
- E-Resources

Unit 2: **Book Selection Principles**

- Drury's Principle
- Dewey's Principle
- McColvin's Principle
- Ranganathan's Principle

Unit 3: **Selection Tools**

- Current List
- Bibliographies
- Library Catalogue
- Books in Print
- Publishers' Catalogue
- WebOPAC (WorldCat)
- Websites
- Directories

Unit 4: Categories of Documents

- By Physical Characteristics
- By Information Characteristics
- Books
- Periodicals
- Theses and Dissertations
- Govt. Publications

Paper Code: LIS/2/OE/11

Paper Name: TECHNICAL WRITING

Unit 1: **Communication and Linguistics**

- Communication Process
- Technical Writing: Characteristic Features
- Written Communication, Reader-Writer Relationship
- Language Communication, Readability and Text, Abbreviations in Technical Writing

Unit 2: Technical Communication and Editorial Tools

- Structure, Characteristics and Functions
- Collection, Organization and Presentation of Data including Illustrations
- Editor, Editorial Process and Editorial Tools

Paper Code: LIS/2/OE/12

Paper Name: E-Resources

Unit 1: **Types of e- Resources**

- E-books
- E-Journals
- Consortia based e-resources
- E-reports
- ETD
- Internet resources
- Open source

Unit 2: **Internet Resources**

- Science & Technology

- Humanities
- Social Science
- Evaluation of Internet Resources

THIRD SEMESTER

Paper Code: LIS/3/CC/13

Paper Name: ICT APPLICATION IN LIBRARY SERVICES

Unit 1: **Library Automation**

- Purpose, Planning and Implementation
- Library Automation Software: Types and Features
- Open Source Library Software: Koha, Greenstone &DSpace
- Automation of Housekeeping Operations: Acquisition, Circulation,
 Cataloguing, Serial Control

Unit 2: **Automated Services**

- Electronic Reference Services
- Bibliographic and Database Search Services
- CAS/SDI in Automated Environment
- Electronic Document Delivery Service
- Library 2.0

Unit 3: Library Networks and Consortia

- Objectives, scope and characteristics
- Major Library Networks: INFLIBNET, DELNET, OCLC
- Library Consortia: UGC Infonet, INDEST, CSIR E-journal Consortia

Unit 4: **Library Security Technology**

- Barcode
- RFID
- CCTV, Biometrics, Smartcard

Paper Code: LIS/3/CC/14

Paper Name: ICT PRACTICE

Unit 1: **Hands on experience of Windows Operating System** (10 marks)

Unit 2: **Hands on experience of Application Software:** (20 marks)

- Drafting Letters & Issuing Reminders (with MS-Word)

- Preparation of Accession Register (with MS-Excel)
- Preparation of Presentation (with MS-Power Point)

Unit 3: **Hands-on experience on Library Software**

(20 marks)

- Integrated Library Software: Koha/SOUL
- Digital Library Software: DSpace/Greenstone

Unit 4: **Viva-Voce**

(10 marks)

Paper Code: LIS/3/SC/15A

Paper Name: INFORMATION PRODUCTS AND SERVICES

Unit 1: **Information Institutions**

- Information Institution: Types and Functioning
- Information Centres: Types and their Organisation
- Data Centres and Referral Centres
- Information Analysis and Consolidation Centres

Unit 2: **Information Products**

- Newsletters, House Journals, Trade & Product Bulletins
- State-of-the-Art Report
- Trend Report
- Technical Digests

Unit 3: **Information Services**

- Literature Search & Bibliography Services
- Document Delivery Services
- CAS and SDI Services
- Translation Services

Unit 4: **Information Intermediaries**

- Library & Information Professionals
- Information Intermediaries
- Database Designers, Managers and Intermediaries
- Media Personnel and Intelligent Agents

Paper Code: LIS/3/SC/15B

Paper Name: KNOWLEDGE MANAGEMENT

Unit 1: **Knowledge Management**

- Concept of Knowledge Management
- Scope of Knowledge Management
- Types of Knowledge Management (Explicit Knowledge & Implicit Knowledge)

Unit 2: Knowledge Management: Creation & Tools

- Knowledge Creation, Access, Transfer and Sharing
- Knowledge Tools
- Knowledge Networks
- Decision Making

Unit 3: **Pre-requisites of Knowledge Management**

- Sharing of Expertise
- Knowledge Mapping
- Knowledge Worker
- Value Added Knowledge

Unit 4: **Benefits and Challenges of Knowledge Management**

- Benefits of Knowledge Management
- Pioneers in Knowledge Management
- KM Initiatives in Indian Organization
- Software for Knowledge Management
- Trends and Challenges in Knowledge Management

Paper Code: LIS/3/SC/16A

Paper Name: INTERNET AND ITS APPLICATIONS

Unit 1: **Internet: An Overview**

- Internet: Introduction, Historical Development and Scope of Internet
- Internet Architecture: H/W & S/W Component, Client/Server Principle,
 Routers, Internet Connection Types, ISP, Protocols, Uniform Resource
 Locator, IP Address
- Domain Name System

Unit 2: Web Languages & Web Browsers

- Web: Introduction, History and Function
- Web Languages: HTML, XML, CSS, ASP, JavaScript, PHP

- Web Browsers: Internet Explorer, Mozilla Firefox, Google Chrome

Unit 3: **Intranet & Internet Security**

- Intranet: Components, Prerequisites and Services
- Extranet: Components, Prerequisites and Services
- Internet Security: Types of Security, Firewalls, Anti-Virus, Anti-Spyware

Unit 4: **Internet Tools & Services**

- Communication Tools: Email, Telnet, Discussion Groups
- Search Tools: Gopher, Veronica, Jughead, Archie, Search Engines
- Content Enriching Services: Blogs, Wikis, Social Community Websites

Paper Code: LIS/3/SC/16B

Paper Name: INFORMATION LIITERACY

Unit 1: **Growth and Development of Information Literacy**

- Information Society and Information Literacy
- Information Literacy: Definition, Models and Standards
- Information Literacy: Strategic Plan
- Information Literacy and Lifelong Learning

Unit 2: **ICT and Media Literacy**

- Computer Literacy and E-Literacy
- Digital Literacy
- Information Literacy and Bridging the Digital Divide
- Information Literacy and Media Literacy

Unit 3: **Information Literacy and Libraries**

- School, College and University Libraries
- Public Libraries
- Special Libraries
- Information Literacy and LIS Education

Unit 4: **Policy and Advocacy**

- Information Literacy: Initiatives and Forms in USA, UK and Australia
- Policies and Guidelines: UNESCO, IFLA and ALA
- Information Literacy: Skills and Competencies
- Information Literacy: Best Practices

Paper Code: LIS/3/OE/17

Paper Name: COMMUNITY INFORMATION SERVICE

Unit 1: **Community Information: Overview**

- Community Information: Definition, Scope and Origin
- Need and sources for Community Information in Society
- Role of Libraries in Community Information
- Community Information in UK, USA and India

Unit 2: Community Information Services

- Community Information Services: Meaning, Types and Target Users
- Community Information Centres: Planning and Role of Information Services
- Community Information Services to Specific Communities
- a) Rural, Urban and Metropolitan Communities
- a) Industrial, Business Communities\
- b) Academic, Research, Institutional and R & D Communities
- c) Physically, Mentally Disadvantaged Communities
- d) Children, Old People and Illiterate

Paper Code: LIS/3/OE/18

Paper Name: INTELLECTUAL PROPERTY RIGHTS & COPYRIGHT

Unit 1: **Intellectual Property Rights**

- Concept of IPR
- Different Categories of IPR
- Enforcement of IPR
- IPR Acts and its Application in Electronic Environment

Unit 2: **Copyright**

- Meaning and Scope
- Copyright Law and Related Issue
- Rights to copyright owner
- Copyrights and Patent right
- Licensing of copyright
- Copyright Act and its Application in Electronic Environment

FOURTH SEMESTER

Paper Code: LIS/4/CC/19

Paper Name: INFORMATION SYSTEMS & NETWORKS

Unit 1: **Information Systems**

- Definition, Types and Characteristics
- Information Organizations and Systems
- Planning and Designing of Information System
- Evaluation of Information System

Unit 2: **National Information Systems**

- ENVIS
- BIS
- PIS

Unit 3: Global Information Systems

- AGRIS
- INIS
- INSPEC
- MEDLARS

Unit 4: **Networks**

- Resource Sharing and Networking Objectives and Scope
- Features and Characteristics of Library Networks
- Data Networks NICNET, ERNET, NKN

Paper Code: LIS/4/CC/20

Paper Name: INFORMATION RETRIEVAL

Unit 1: **Information Retrieval Systems**

- Definition, Types, Components of ISAR Systems
- Elements of File Organisation
- Artificial Intelligence and Expert System
- IR Models

Unit 2: Subject Representation and Indexing Languages

- Alphabetical Subject Representation
- Contributions of Cutter, Kaiser, Ranganathan, Farradane and Coates

- Characteristics of Indexing Languages
- Vocabulary Control-List of Subject Headings, Thesaurus and Thesaurofacet, Classaurus

Unit 3: **Indexing Systems and Techniques**

- Pre-Coordinate Indexing System: Chain Indexing, PRECIS, POPSI
- Post-Coordinate Indexing System: Uniterm Index System
- Title Derived Indexing System: KWIC, KWOC and KWAC
- Citation Indexing: Science Citation Index, Social Science Citation Index
- Automatic Indexing: COMPass

Unit 4: **Information Searching and Evaluation**

- Search Methods and Search Strategy, Boolean Search
- Online Search Techniques
- Information searching in different media: Print Media and Internet
- Need and Parameters of Evaluation
- Retrieval Performances: Recall and Precision Ratio

Paper Code: LIS/4/CC/21

Paper Name: RESEARCH METHODOLOGY

Unit 1: Research and Research Design

- Concept, Meaning, Need and Process of Research
- Types of Research: Fundamental and Applied
- Research Design, Types of Research Design
- Designing Research Proposal
- Literature Search Print, Non-Print and Electronic Sources

Unit 2: **Research Methods**

- Scientific Method
- Historical Method
- Descriptive Method
- Survey and Case Study Method
- Experimental Method and Delphi Method

Unit 3: **Data Analysis and Interpretation**

- Collection of Data by Questionnaire, Interview, Observation and Sampling

- Presentation of Data-Tables, Charts and Graphs
- Interpretation of Data: Frequency Distribution, Measures of Central Tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance
- Use of Statistical Packages

Unit 4: **Bibliometric Methods and Report Writing**

- Bibiometric Studies: Meaning, Scope and Parameters
- Bibliometric Laws and their Applications
- Informetrics, Scientometrics and Webometrics
- Preparation of Writing of Research and Report (Theses and Dissertation)
- Guidelines for Research Reporting

Paper Code: LIS/4/CC/22

Paper Name: CONTENT MANAGEMENT & DIGITAL LIBRARY – THEORY

AND PRACTICE

Unit 1: Content Management & Digitization

- Content Development: Concept; Content Creation & Organization
- Content Development & Maintenance using Dreamweaver
- Digitization Tools, Digitization Process, Digitization File Formats

Unit 2: **Digital Library Creation**

- Digital Library & Institutional Repository: Concepts; Digital Library Initiatives (National & International)
- Digital Library Software(s)
- Digital Library Creation using DSpace

Unit 3: Content Management & Digitization Practice

- Hands on practice of Library Website Designing using Dreamweaver
- Hands on practice of Scanner, Digital Camera & OCR
- Viva-Voce

Unit 4: **Digital Library Practice**

- Hands on practice of Digital Library creation using DSpace
- Creation of Communities & Collection, Submission Process
- Viva-voce

Paper Code: LIS/4/CC/23

Paper Name: CSST – TOUR DIARY

(1) **Tour Report** (70 marks)

(2) Viva-Voce (30 marks)

Paper Code: LIS/4/CC/24

Paper Name: JOB DIARY

(1) **Job Diary** (70 marks)

(2) Viva Voce (30 marks)

MIZORAM UNIVERSITY DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE MASTER OF LIBRARY AND INFORMATION SCIENCE (MLIS) SYLLABUS

(Under Choice Based Credit System) 2015

FIRST SEMESTER

Paper Code: LIS/1/FC/01

Paper Name: FOUNDATION OF LIBRARIANSHIP

Unit 1: Libraries- Concepts, Types, their Role and Development

- Types of Libraries: Features and Functions, Five Laws of Library Science
- Growth &Development of Libraries in UK, USA and India
- Library Extension Services
- Library Legislation, Press and Registration of Books Act, Delivery of Books and Newspapers Act

Unit 2: Professional Associations and Organizations

- Professional Ethics in Librarianship
- Professional Associations: IFLA, ILA, IASLIC, SLA
- Information and Documentation Organizations: UNESCO, NISCAIR, DESIDOC, NASSDOC

Paper Code: LIS/1/FC/02

Paper Name: FOUNDATION OF INFORMATION SCIENCE

Unit 1: **Information and Communication**

- Data, Information and Knowledge: Conceptual Difference
- Information Transfer Cycle, Information as Resource
- Communication: Channels, Media, Models and Barriers
- Information Society and National Information Policy

Unit 2: Library and Information Users'

- Information Users': Types and Characteristics
- Information Needs, Information Seeking Behaviour Models
- User Education & User Study

- Electronic/Digital Literacy

Paper Code: LIS/1/CC/03

Paper Name: BASICS OF INFORMATION AND COMMUNICATION TECHNOLOGY

Unit 1: **Basics of IT**

- IT: Definition, Scope & Components (Hardware & Software)
- Generations of Computers
- Storage Devices, Input & Output Devices, Memory

Unit 2: **Operating Systems & Programming Languages**

- Operating Systems: Types and Functions
- Study of MS-DOS, LINUX and Windows Operating Systems
- Introduction to Programming Languages

Unit 3: **Communication Technology**

- Tele-communication: Transmission Media, ISDN, Multiplexing,
 Switching Technique
- Networking: Topology and Types of Network, Standards & Protocols
- Network Models (OSI), Networking Devices

Unit 4: **Database Management System**

- Definition, Objectives & Functions
- Types and Elements of DBMS
- Database Structure and Architecture

Paper Code: LIS/1/CC/04

Paper Name: ORGANISATION OF KNOWLEDGE – CLASSIFICATION

THEORY

Unit 1: **Knowledge Organization**

- Universe of Knowledge/Subjects: Nature and Attributes
- Modes of Formation of Subjects
- Knowledge Classification and Library Classification; Static & Dynamic Theories of Classification

Unit 2: Classification Schemes

- Species of Library Classification Schemes
- Salient Features of DDC, UDC, and CC

Mapping of Subjects in DDC, UDC and CC

Unit 3: **Library Classification Theory**

- Definition, Need and Purpose of Classification
- Planes, Canons, Principles, Fundamental Categories, Postulates, Facet
 Analysis and Facet Sequence
- Phase Relation, Common Isolates, Devices, Mnemonics

Unit 4: Notational Techniques and Recent Trends

- Notation: Definition, Types, Functions, Qualities and Techniques
- Design and Development of Classification Schedules
- Recent Trends in Library Classification

Paper Code: LIS/1/CC/05

Paper Name: ORGANISATION OF KNOWLEDGE – CLASSIFICATION

PRACTICE

- (A) Assigning Class Numbers representing Simple, Compound, Complex Subjects according to DDC (Latest available edition)
- (B) Viva Voce

Paper Code: LIS/1/CC/06

Paper Name: ORGANISATION OF KNOWLEDGE - CATALOGUNG THEORY

Unit 1: Cataloguing Principles

- Catalogue: Definition, Objectives, Functions
- Types of Catalogue and Physical Forms of Catalogue
- Principles of Cataloguing: Ranganathan's Cannon, Paris Principles
- Introduction to Catalogue Codes: CCC, AACR-IIR

Unit 2: Entry Elements, Filing Rules & Subject Headings

- Kinds of Entries and their Elements of Description
- Elements of Bibliographic Description of Non-Book Material (AACR-IIR)
- Rules for Choice and Rendering of Headings in AACR –IIR
- Subject Heading Lists: Sears List & LCSH

Unit 3: **Standards of Bibliographic Description**

- ISBD, FRAD (Functional Requirements for Authorized Description),
 GARR (Guidelines for Authority Records and References), RDA
 (Resource Description and Access)
- Standards for Bibliographic Information Interchange and Communication-ISO 2709, Z39.50, Z39.71
- ISBN & ISSN

Unit 4: Bibliographic Record Formats & Other Aspects

- Bibliographic Records Format- MARC 21, UNIMARC, CCF
- Cataloguing of E-Resources- Metadata Standards (Dublin Core)
- Derivatives of Cataloguing (Copy Cataloguing)

Paper Code: LIS/1/CC/07

Paper Name: ORGANISATION OF KNOWLEDGE - CATALOGUING

PRACTICE

(A) Preparation of Main and Added Entries of Documents According to AACR – IIR

(Latest edition) having the following items:

Single Responsibility and Shared Responsibility, Mixed Responsibility Corporate Author, Continuing Resources (Serials), Pseudonyms and Anonymous works

Classics, Non-Book Materials (Cartographic Materials & e-resources)
Assigning Subject Heading to Documents according to Sears List of Subject
Heading (Latest edition)

(B) Viva Voce

SECOND SEMESTER

Paper Code: LIS/2/FC/08

Paper Name: INTRODUCTION TO INFORMATION SOURCES

Unit 1: **Information Sources**

- Documentary and Non-Documentary Sources (Human & Institutional)
- Reference Sources: Categories, Characteristics and Usefulness
- Evaluation of Reference Sources: Print and Electronic

Unit 2: Electronic Sources of Information

E-Documents, OPAC, Web-OPAC

- Subject Gateways/Portals, Bibliographical Sources, Full text Databases,
 Bulletin Boards, Discussion Groups/Forums
- Open Access Resources, List Serves, Social Networking Sites

Paper Code: LIS/2/FC/09

Paper Name: INTRODUCTION TO INFORMATION SERVICES

Unit 1: **Information Services**

- Information Services: Definition, Scope, Need and Functions
- Types of Information Services: Reference Service, Referral Service,
 Bibliographic Service, Translation Service, Indexing & Abstracting
 Services, Reprographic Service
- CAS/Alerting Service, SDI, DDS

Unit 2: Internet based Information Services

- Library 2.0: Concepts, Characteristics & Components
- Synchronous Communication & Content Delivery: Instant Messaging,
 RSS Feeds, Streaming Media, Podcasts, Vodcasts, SMS Enquiry Service
- Collaborative Publishing Tools: Blogs & Wikis
- Collaborative Service Platforms: Social Networks, Tagging, Social Bookmarking

Paper Code: LIS/2/CC/10

Paper Name: MANAGEMENT OF LIBRARY AND INFORMATION CENTRES

Unit 1: **Management: Concept and Principles**

- Principles of Scientific Management in Libraries and Information Centres
- Elements of Management Process (POSDCORB)
- Total Quality Management, Change Management, Disaster Management,
 Crisis Management, Marketing of Library & Information Services
- Project Management- PERT/CPM, SWOT Analysis, MIS, DSS
- Library Committee- Types and Functions

Unit 2: **Physical Resource Management and Library Operations**

- Library Building: Site, Selection, Planning
- Furniture, Fittings and Equipments: Standards and Specifications
- System Analysis and Design in Library Operations

- Collection Development and Management Acquisition, Maintenance,
 Stock Verification, Weeding out Policy and Procedures
- Preservation and Conservation

Unit 3: **Human Resource Management**

- Organizational Structure
- Job Description and Analysis: Job Evaluation
- Inter Personal Relations
- Recruitment Procedures
- Motivation: Group Dynamics
- Training and Development
- Performance Appraisal

Unit 4: Financial Resource Management

- Resource Mobilization and Outsourcing
- Budgeting, Accounting and Auditing
- Budgetary Control

Paper Code: LIS/2/CC/11

Paper Name: PERSONALITY DEVELPOMENT & COMMUNICATION SKILLS

Unit 1: Personality and its Characteristics

- Personality Types, Traits and Characteristics
- Social, Soft and Influencing Skill Development
- Attitude, Appearance, Time and Stress Management Skill

Unit 2: **Communication Skill**

- Professional Communication Skills (Verbal, Non-Verbal & Written)
- Communication –Understanding the Audience, Presentation, Body
 Language, Interpersonal Skills and ability to listening Skill
- Technical Communication Skills and Editorial Tools

Unit 3: Marketing Skills & Public Relations

- Marketing Planning and Strategy
- Publicity and Promotion
- Public Relations and Liasoning with Library Authority and Patrons

Unit 4: **Leadership and Vision**

- Organizational Ability, Team Leadership and Problem Solving
- Project Management, Annual Plan, Five-Year & Perspective Plan, Disaster Management, Conflict and Crisis Management
- Visionary and Futuristic Approach, Preparation of Vision Document

- Negotiation Skills & Strategies

Paper Code: LIS/2/CC/12

Paper Name: INFORMATION SOURCES & SERVICES – PRACTICE

Unit 1: **Practical Records**

- The Candidates are required to submit a report on:

- Evaluation of Reference Sources: Print and Electronic

OPAC/Web OPAC Search Strategy

- Indexing & Abstracting Records

Current Awareness List

- Bibliography Compilation

Unit 2: **Viva-Voce**

Paper Code: LIS/2/CC/13

Paper Name: ICT PRACTICAL

Unit 1: Hands on experience of Windows Operating System

Unit 2: Hands on experience of Linux Operating System

Unit 3: **Hands on experience of Application Software**

MS-Word

MS-Excel

MS-Power Point

Paper Code: LIS/2/OE/14

Paper Name: E-RESOURCES

Unit 1: **Types of e- Resources**

- E-books, E-journals, E-reports, ETD
- Access to E-Resources through Library Consortia (UGC-INFONET Digital Library Consortium, INDEST-AICTE, National Knowledge Resource Consortium)
- Open Educational Resources

Unit 2: Web Resources

- Science & Technology
- Humanities
- Social Sciences
- Evaluation of Web Resources

THIRD SEMESTER

Paper Code: LIS/3/CC/15

Paper Name: INFORMATION RETRIEVAS SYSTEMS

Unit 1: Basics of Information Retrieval Systems

- Definition, Components and Types of ISAR Systems
- Elements of File Organisation
- Artificial Intelligence and Expert System
- Information Retrieval Models

Unit 2: Subject Representation and Indexing Languages

- Alphabetical Subject Representation
- Contributions of Cutter, Kaiser, Ranganathan, Farradane and Coates
- Characteristics of Indexing Languages
- Vocabulary Control-List of Subject Headings, Thesaurus and Thesaurofacet, Classaurus

Unit 3: **Indexing Systems and Techniques**

- Assigned Indexing vs Derived Indexing
- Assigned Indexing Systems: Pre-Coordinate (PRECIS, POPSI and Chain Indexing) and Post-Coordinate Indexing System (Uniterm Index System)
- Derived Indexing Systems: Title based (KWIC, KWOC and KWAC),
 Citation based(SCI, SSCI, etc.) and Full-Text (STAIRS, LEXIS-NEXIS, etc.)
- Automatic Indexing: COMPass

Unit 4: **Information Searching and Evaluation**

- Search Methods and Search Strategy, Boolean Search
- Information Searching in different Media: Print and Electronic
- Need and Parameters of Evaluation

- Retrieval Performance: Recall and Precision

Paper Code: LIS/3/CC/16

Paper Name: ICT APPLICATION IN LIBRARIES - THEORY

Unit 1: **Library Automation**

- Purpose, Planning and Implementation
- Library Automation Software: Types and Features
- Open Source Library Software: Koha, Greenstone &D-Space
- Automation of Housekeeping Operations: Acquisition, Cataloguing,
 Circulation, Serials Control

Unit 2: Automated Services

- Electronic Reference Services
- Bibliographic and Database Search Services
- CAS/SDI in Automated Environment
- Electronic Document Delivery Service
- Library 2.0

Unit 3: Library Networks and Consortia

- Objectives, scope and characteristics
- Major Library Networks: INFLIBNET, DELNET, OCLC
- Library Consortia: UGC Infonet, INDEST-AICTE, National Knowledge Resource Consortium

Unit 4: **Library Security Technology**

- Barcode
- RFID
- CCTV, Biometrics, Smartcard

Paper Code: LIS/3/CC/17

Paper Name: ICT APPLICATION IN LIBRARIES – PRACTICE

Unit 1: Hands-on experience on Library Automation Software

Integrated Library Software: Koha / SOUL

Unit 2: **Hands-on experience on Website Designing**

HTML / Dreamweaver

Unit 3: **Viva Voce**

Paper Code: LIS/3/CC/18

Paper Name: CSST – TOUR REPORT

Students are required to prepare a report on working systems and management of visited libraries and information centres of a place outside the state preferably of a metropolitan city. In this Course, total marks will consist as under:

- (1) **Tour Report** (70 marks)
- (2) **Viva Voce** (30 marks)

Paper Code: LIS/3/SC/19A

Paper Name: ACADEMIC LIBRARY SYSTEM

Unit 1: Academic Library: Functions and Services

- Role of Academic Library in Higher Education
- Academic Library Services
- Academic Library Management
- Role of UGC for Academic Library Development

Unit 2: **Resource Management**

- Physical Resources including ICT Infrastructure
- Human Resource Development
- Financial Resource Management

Unit 3: **Collection Development**

- Collection Development Policy, Weeding out Policy
- Problems in Collection Development
- Role of Library Committee in Collection Development

Unit 4: Staff Development and Continuing Education

- Staffing Norms and Standards
- Continuing Education Program for Academic Libraries
- Personnel Management

Paper Code: LIS/3/SC/19

Paper Name: PUBLIC LIBRARY SYSTEM

Unit 1: **Public Library Development**

- Public Library: Societal and National Development
- UNESCO Contribution for Public Library Development

- Administration of Public Libraries
- National Agencies for Public Library Development
- Library Legislation

Unit 2: **Public Library Services**

- Library Services: Types
- Public Library as Knowledge Centres
- Changing Dimensions of Public Library Services
- Evaluation of Public Library Services

Unit 3: **Public Library: Resource Development**

- Resource Mobilization in Public Library
- Public Library Finance
- Information Resource Development for Public Libraries
- Human Resource Development in Public Libraries

Unit 4: **Public Libraries: Trends and Development**

- ICT Application in Public Libraries
- Resource Sharing and Networking
- Changing Scenario of Public Libraries in India, UK & USA
- Web based Public Library Services

Paper Code: LIS/3/SC/20A

Paper Name: PRESERVATION AND CONSERVATION OF LIBRARY

MATERIALS

Unit 1: Basics of Preservation and Conservation: Overview

- Preservation and Conservation: Historical Development, Need and Purpose
- Preservation of Print Materials: Books, Periodicals, Pamphlets
- Digital Preservation

Unit 2: **Preservation of Non-Print Material**

- Palm Leaves
- Manuscripts
- Films
- Floppies and Disks

Unit 3: Hazards and Control Measures to Library Materials

- Environmental Factor (Temperature, Humidity, Water, Light, Air Pollution, Smoke, Dust, etc)
- Chemical Factors
- Biological Factors

Unit 4: **Binding**

- Types of Binding of Library Materials
- Binding Material and their Varieties
- Binding Process
- Standards for Library Binding

Paper Code: LIS/3/SC/20B

Paper Name: INFORMATION RESOURCE DEVELOPMENT

Unit 1: **Types of Information Resources**

- Documentary (Primary, Secondary & Tertiary)
- Non-Documentary
- E-Resources

Unit 2: **Book Selection Principles**

- Drury's Principle
- Dewey's Principle
- McColvin's Principle
- Ranganathan's Principle

Unit 3: **Selection Tools**

- Current List
- Bibliographies
- Library Catalogue
- Books in Print
- Publishers' Catalogue
- Directories
- WebOPAC (WorldCat)
- Websites

Unit 4: Categories of Documents

- By Physical Characteristics
- By Information Characteristics
- Books and Periodicals
- Theses and Dissertations
- Govt. Publications
- Grey Literature

Paper Code: LIS/3/OE/21

Paper Name: COMMUNITY INFORMATION SERVICE

Unit 1: **Basics of Community Information**

- Community Information: Definition, Origin and Scope
- Need for and Sources of Community Information
- Role of Libraries in Dissemination of Community Information

Unit 2: Community Information Services

- Community Information Services : Meaning, Types and Target Users
- Community Information Centres: Planning and Role of Information Services
- Community Information Services to Specific Communities
- a) Rural, Urban and Metropolitan Communities
- b) Industrial, Business Communities
- c) Academic, Research, Institutional and R & D Communities
- d) Physically/Mentally Disadvantaged Communities
- e) Children, Women and Senior Citizens

Community Information Services in India, UK and USA

Paper Code: LIS/4/CC/2

Paper Name: INFORMATION SYSTEMS AND NETWORKS

Unit 1: **Information Systems**

- Definition, Types and Characteristics
- Information Organizations and Systems
- Planning and Designing of Information System
- Evaluation of Information System

Unit 2: **National Information Systems**

- ENVIS
- BIS
- PIS

Unit 3: Global Information Systems

- AGRIS
- INIS
- INSPEC
- MEDLARS

Unit 4: **Networks**

- Resource Sharing and Networking Objectives and Scope
- Features and Characteristics of Library Networks
- Data Networks NICNET, ERNET, NKN

Paper Code: LIS/4/CC/23

Paper Name: RESEARCH METHODOLOGY

Unit 1: Research and Research Design

- Concept, Meaning, Need and Process of Research
- Types of Research: Fundamental and Applied
- Research Design, Types of Research Design
- Designing Research Proposal
- Literature Search Print, Non-Print and Electronic Sources
- Literature Review

Unit 2: **Research Methods**

- Scientific Method
- Historical Method
- Survey and Case Study Method
- Experimental Method

Unit 3: **Data Analysis and Interpretation**

- Data Collection Techniques: Questionnaire, Interview, Observation, Sampling and Delphi
- Presentation of Data-Tables, Charts and Graphs

- Interpretation of Data: Frequency Distribution, Measures of Central

Tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance

Use of Statistical Packages

Unit 4: **Bibliometric Methods and Report Writing**

- Bibiometric Studies: Meaning, Scope and Parameters
- Bibliometric Laws and their Applications
- Informetrics, Scientometrics and Webometrics
- Guidelines for and Preparation of Writing Research Report (Thesis and

Dissertation)

Paper Code: LIS/4/CC/24

Paper Name: CONTENT MAMAGEMENT AND DIGITAL LIBRARY –

THEORY

Unit 1: Content Management & Digitization

- Content Development: Concept; Content Creation & Organization
- E-Content Development Strategies
- Virtual Learning Environment
- Digitization Process, Tools and File Formats

Unit 2: **Digital Library Concepts**

- Digital Library & Institutional Repository: Concepts; Digital Library

Initiatives (National & International)

- Digital Library Software(s)
- Digital Library Creation using D-Space

Paper Code: LIS/4/CC/25

Paper Name: CONTENT MANAGEMENT AND DIGITAL LIBRARY -

PRACTICE

Unit 1: Content Management & Digitization Practice

- Hands on practice of Content Management Software using Joomla
- Hands on practice of Scanner, Digital Camera & OCR

Unit 2: **Digital Library Practice**

- Hands on practice of Digital Library creation using D-Space / Greenstone
- Creation of Communities & Collection, Submission Process

Unit 3: **Viva-Voce**

Paper Code: LIS/4/CC/26

Paper Name: JOB DIARY (LIBRARY PRACTICAL WORK)

(1) **Job Diary** (70 marks)

Candidates are required to prepare Job Diary by working in the University Library or any other library specified by the Department to have hands on experiences in every possible unit/section of a library at a regular basis. The Job Diary is to be submitted by each candidate at the end of the semester. The diary is to be evaluated jointly by both the external and internal examiners.

(2) **Viva Voce** (30 marks)

Paper Code: LIS/4/SC/27A

Paper Name: INTELLECTUAL PROPERTY RIGHTS

Unit 1: **Intellectual Property and Rights**

- IP: Concept, Genesis and Development

- Categories of IP

- Enforcement of Intellectual Property Rights & Role of WIPO

- IPR Acts and its Application in Electronic Environment

- Emerging Issues in Intellectual Property

Unit 2: **Copyright**

- Copyright: Meaning and Scope

Rights to Copyright Owner

Licensing of Copyright

- Copyright of Electronic Resources

- Copyright Laws and Related Issues

Unit 3: **Patents**

Concept and Scope

Patent Laws in India & Abroad

- Protection of Inventions

Unit 4: Copyright& Patent Violation and Infringement

- India

- USA

- UK

Paper Code: LIS/4/SC/27B

Paper Name: KNOWLEDGE MANAGEMENT

Unit 1: Basics of Knowledge Management

- Concept of Knowledge
- Types of Knowledge
- a) Explicit Knowledge
- b) Implicit Knowledge
- Concept and Scope of Knowledge Management
- Knowledge Management Cycle

Unit 2: Knowledge Management: Creation & Tools

- Knowledge Creation, Access, Transfer and Sharing
- Knowledge Tools
- Knowledge Networks
- Knowledge in Decision Making

Unit 3: **Pre-requisites of Knowledge Management**

- Sharing of Expertise
- Knowledge Mapping
- Knowledge Worker

Unit 4: Trends and Challenges of Knowledge Management

- KM Initiatives in Indian Organization
- Software for Knowledge Management
- Pioneers in Knowledge Management
- Advances in Knowledge Management

Paper Code: LIS/4/SC/28A

Paper Name: INTERNET AND ITS APPLICATIONS

Unit 1: **Internet: An Overview**

- Internet: Introduction, Historical Development and Scope of Internet
- Internet Architecture: H/W & S/W Components, Client/Server
- Principle, Routers, Connection Types, ISP, Protocols, Uniform Resource

Locator, IP Address

- Domain Name System

Unit 2: Web Languages & Web Browsers

- Web: Introduction, History and Functions
- Web Languages: HTML, XML, CSS, ASP, JavaScript, PHP
- Web Browsers: Internet Explorer, Mozilla Firefox, Google Chrome

Unit 3: **Intranet & Internet Security**

- Intranet: Components, Prerequisites and Services
 - -Extranet: Components, Prerequisites and Services
 - -Internet Security: Types of Security, Firewalls, Anti-Virus, Anti-Spyware

Unit 4: **Internet Tools & Services**

- Communication Tools: Email, Telnet, Discussion Groups
 - -Search Tools: Gopher, Veronica, Jughead, Archie, Search Engines
 - -Content Enriching Services: Blogs, Wikis, Social Community Websites

Paper Code: LIS/4/SC/28B

Paper Name: INFORMATION LITERACY

Unit 1: **Emergence of Information Literacy**

- Information Society and Information Literacy
- Information Literacy: Definition, Models and Standards
- Information Literacy: Strategic Plan
- Information Literacy and Lifelong Learning

Unit 2: **ICT and Media Literacy**

- Computer Literacy and E-Literacy
- Digital Literacy
- Media Literacy
- Information Literacy and Bridging the Digital Divide

Unit 3: **Information Literacy and Libraries**

- School, College and University Libraries
- Public Libraries
- Special Libraries
- Information Literacy and LIS Education

Unit 4: **Policy and Advocacy**

- Information Literacy: Initiatives and Forms in USA, UK and Australia
- Policies, Guidelines and Standards: UNESCO, IFLA and ALA
- Information Literacy: Skills and Competencies
- Information Literacy: Best Practices

LIST OF OE STUDENTS IN DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, MIZORAM UNIVERSITY

2013, Second Semester OE I (Course - LIS/2/OE/11: Technical Writing)

SN	Name of Student	Parent Department
1.	Florida J. Ngurhmingliani	Library & Information Science
2.	Peter Lalbiakhluna	Library & Information Science
3.	Lalruatsangi	Library & Information Science
4.	R. Lalremruati	Library & Information Science
5.	Esther Lalnunpuii	Library & Information Science
6.	Saitluangpuii	Library & Information Science
7.	Benjamin Lalpekhlua	Library & Information Science
8.	Lalmalsawma	Library & Information Science
9.	Lalramthara	Library & Information Science

2013, Second Semester OE II (Course - LIS/2/OE/12: E-Resources)

SN	Name of Student	Parent Department
1.	Florida J. Ngurhmingliani	Library & Information Science
2.	Peter Lalbiakhluna	Library & Information Science
3.	Lalruatsangi	Library & Information Science
4.	R. Lalremruati	Library & Information Science
5.	Esther Lalnunpuii	Library & Information Science
6.	Saitluangpuii	Library & Information Science
7.	Benjamin Lalpekhlua	Library & Information Science
8.	Lawmnasangzuali	Library & Information Science
9.	Lalmalsawma	Library & Information Science
10.	V. Henry Lalruatfela	Library & Information Science
11.	Lalawmpuii	Library & Information Science
12.	Mary V. Lalhriatkimi	Library & Information Science

13.	Lalramchhana Khiangte	Library & Information Science
14.	R. Laltlanzova	Library & Information Science
15.	R. Lalengmawia	Library & Information Science
16.	Lalremruata Khiangte	Library & Information Science
17.	K. Lalmuanawma	Library & Information Science

2013, Third Semester OE I (Course - LIS/3/OE/17: Community Information Service)

SN	Name of Student	Parent Department
1.	Lalthansanga	Journalism & Mass Communication
2.	Embassy Lawbei	Journalism & Mass Communication
3.	Maria Lalmuankimi	Journalism & Mass Communication
4.	H. Lalmuanpuia	Journalism & Mass Communication
5.	Mary V. Lalhriatkimi	Library & Information Science
6.	Lawmnasangzuali	Library & Information Science
7.	R. Lalremruati	Library & Information Science
8.	Saitluangpuii	Library & Information Science
9.	V. Henry Lalruatfela	Library & Information Science
10.	Benjamin Lalpekhlua	Library & Information Science
11.	Lalawmpuii	Library & Information Science
12.	Vanlalhruaii Sailo	Library & Information Science
13.	Lalawmzuala Hrahsel	Library & Information Science
14.	Lalramthara	Library & Information Science
15.	Peter Lalbiakhluna	Library & Information Science
16.	Esther Lalnunpuii	Library & Information Science
17.	Florida J. Ngurminghliani	Library & Information Science

2013, Third Semester OE II (Course - LIS/3/OE/18: Intellectual Property Rights & Copyright)

Ī	SN	Name of Student	Parent Department
Ī	1.	Jenny Lalmuanpuii	Journalism & Mass Communication
Ī	2.	Maria Lalmuankimi	Journalism & Mass Communication

3.	Embassy Lawbei	Journalism & Mass Communication
4.	Lalthansanga	Journalism & Mass Communication
5.	J. Vanlalzawma	Political Science
6.	Mary V. Lalhriatkimi	Library & Information Science
7.	Lawmnasangzuali	Library & Information Science
8.	R. Lalremruati	Library & Information Science
9.	Saitluangpuii	Library & Information Science
10.	V. Henry Lalruatfela	Library & Information Science
11.	Benjamin Lalpekhlua	Library & Information Science
12.	Lalremruata Khiangte	Library & Information Science
13.	R. Laltlanzova	Library & Information Science
14.	K. Lalmuanawma	Library & Information Science
15.	R. Lalengmawia	Library & Information Science
16.	Lalramthara	Library & Information Science
17.	Lalawmzuala Hrahsel	Library & Information Science
18.	Peter Lalbiakhluna	Library & Information Science
19.	Ramnghahmawii	Commerce
20.	K. Lalnunsanga	Commerce

2014, Second Semester OE I (Course - LIS/2/OE/11:Technical Writing)

SN	Name of Student	Parent Department
1.	Anita Chhetri	Library & Information Science
2.	Bethel Lallsangzeli	Library & Information Science
3.	Anita Vanlalnunmawii	Psychology
4.	Lalruatsangi	Psychology
5.	James Malsawmzuala	Psychology

2014, Second Semester OE 1I (Course - LIS/2/OE/12:E-Resources)

ſ	SN	Name of Student	Parent Department

1.	Anita Chhetri	Library & Information Science
2.	Bethel Lalsangzeli	Library & Information Science
3.	L. Phiengo	Library & Information Science
4.	Lalramngaihzuali	Library & Information Science
5.	R. Lalrinfeli	Journalism & Mass Communication
6.	Lallawmpuii Fanai	Journalism & Mass Communication
7.	Abhishek Prasad	Management
8.	Jitul Adhikary	Management
9.	Sadik Ali	Management
10.	Rajesh Kumar Sah	Management
11.	Sumit Sinha	Management
12.	Ajay Thapa	Management
13.	K. Laltanpuia	Chemistry
14.	Lalramhluna	Chemistry

2014, Third Semester OE I (Course - LIS/3/OE/17:Community Information Service)

SN	Name of Student	Parent Department
1.	C. Lalroluahpuia	Economics
2.	H. Lalhmudika	Economics
3.	Ajay Thapa	Management
4.	Angie V.L. Nunhlimi	Education
5.	K. Lalnunsiami	Education
6.	K. Lalramengmawii	Education
7.	Lalbiakdiki Tochhawng	Education
8.	Lalbiakzuali	Education
9.	Laldinsangi Renthlei	Education
10.	Lalruatmawii	Education
11.	Laltlanthangi	Education
12.	Pc. Zosangpuii	Education
13.	R. Lalrinhlui	Education

14.	V. Lalhmunmawii	Education
15.	Vanlallawmkimi	Education
16.	Vanlaldiki	Mizo
17.	R. Vanlalhmangaihsanga	Political Science
18.	Samuel K. Lalremruata	Political Science
19.	H.C. Robert	Political Science
17.	Rualthankhuma	
20.	James Malsawmzuala	Psychology
21.	Sarah Lalngaihawmi	Psychology
22.	Vanlalhlui	Psychology
23.	Rosangzela	Social Work
24.	KC. Zohmingsanga	Social Work
25.	R. Lallawmkimi	Social Work

2014, Third Semester OE II (Course - LIS/3/OE/18:Intellectual Property Rights & Copyright)

SN	Name of Student	Parent Department
1.	Vanlalhriatpuii Ralte	Management
2.	Lalrintluangi	Management
3.	Lalropari	Management
4.	Lalhriatpuii	Management
5.	Jitul Adhikary	Management
6.	Lalbiakmuana Hauhnar	Management
7.	Lalramzauva	Management
8.	Laltlanhlui	Management
9.	Shanatombi Devi	Management
10.	Hannah Lalhualhimi	Education
11.	H.C. Robert	Political Science
11.	Rualthankhuma	

2015, Second Semester OE 1 (Course - LIS/2/OE/11:Technical Writing)

SN	Name of Student	Parent Department
1.	Rita Kumari Katwal	Mathematics & Computer Science
2.	C. Ramthianghlimi	Physics
3.	Deborah Lalhmangzauvi	Physics
4.	Lalhmingsangi Pachuau	Physics
5.	R. Lalnunsangi	Physics
6.	V.L Hriati Khiangte	Physics
7.	Andrew Thangtea	Management
8.	C. Lalruatpuia	Management
9.	Lalrindika Ralte	Management
10.	Naga Premesh B	Management
11.	Natasha Pradhan	Management
12.	Paul Laltholeha	Management
13.	Pritam Paul	Management
14.	Robert K. Lalrinpuia	Management
15.	Samikshya Mishra	Management
16.	Sanjeev Chhetri	Management
17.	Vanlnltana Khiangte	Mizo
18.	Lalsangzuali Khiangte	Mizo
19.	Lianchichhungi	Mizo
20.	P.C. Lalngaihzuali	Mizo
21.	C. Lalhmunsangi	Education
22.	Khawpuisangi	Education
23.	Lalbiakdiki Kawlni	Education
24.	Lalruatfeli	Education
25.	Lalruatfeli	Education
26.	R.Lalhmingsangi	Education
27.	C. Lalropari	Mass Comminication
28.	Lalrempuii	Mass Comminication

29.	Malsawmkimi	Mass Comminication
30.	Mary Lalthantluangi	Mass Comminication
31.	Laldinliana	Public Administration
32.	Lalramhluna	Mass Communication

2015, Second Semester OE 1I (Course - LIS/2/OE/12:E-Resources)

SN	Name of Student	Parent Department
1.	Lalawmpuia	Biotechnology
2.	Cordelia Lalawmpuii	Public Administration
3.	B. Lalhmunsiami	Psychology
4.	Deborah	Psychology
5.	Lalhmingsangi Pachuau	Psychology
6.	R. Lalnunsangi	Psychology
7.	V.L. Hriati Khiangte	Psychology
8.	Naga Premesh B	Management
9.	Natasha Pradhan	Management
10.	Pritam Paul	Management
11.	Samikshya Mishra	Management
12.	Sanjeev Chhetri	Management
13.	LalchhanhimaTlau	Mizo
14.	Lalmuanawma	Mizo
15.	K. Laldingliana	Mizo
16.	Lalbiadiki	Mizo
17.	K. Lalmawizuali	Mizo
18.	Vanlaltana Khiangte	Mizo
19.	Lalthawmmawii	Mizo
20.	Zoramchuana	Mizo
21.	P.C. Lalawmpuii	Mizo
22.	Lalsangzuali Khiangte	Mizo
23.	Laltlansai	Mizo

24.	Lianchichhungi	Mizo
25.	P.C. Lalngaihzuali	Mizo
26.	C. Lalhmingsangi	Education
27.	Khawpuisangi Ralte	Education
28.	Lalnunhlima	Education
29.	Ambrose Lalmuanpuia	English
30.	Vanlalpeki Sailo	English
31.	Benjamin Vanzamliana	English
32.	Angela Lalhruaitluangi	English
33.	C. Lalropari	Mass Communication
34.	Lalrempuii	Mass Communication
35.	Malsawmkimi	Mass Communication
36.	Mary Lalthantluangi	Mass Communication

2015, Third Semester OE 1 (Course - LIS/3/OE/17:Community Information Services)

SN	Name of Student	Parent Department
1.	B. Lalhmunsiami	Psychology
2.	C. Ramthianghlimi	Psychology
3.	Deborah	Psychology
3.	Lalhmangaihzuali	
4.	Lalhmingsangi Pachuau	Psychology
5.	Lalrohlua	Psychology
6.	R. Lalnunsangi	Psychology
7.	V. Lalngaihzuali	Psychology
8.	V.L. Hriati Khiangte	Psychology
9.	Lalmawipuii	Management
10.	Lalngaihsaki Hnamte	Management
11.	Naga Premesh Bandi	Management
12.	Natasha Pradhan	Management
13.	Samikshya Mishra	Management

Sanjeev Chhetri	Management
Lalbiakzuali	English
H. Lalremruatthiama	Political Science
Lalhlimpuia	Political Science
C.Lallianmawia	Political Science
C.Lalropari	Mass Communication
H.Lalrammuanpuia	Mass Communication
J. Lalnunmawia	Mass Communication
K. Lalrozawna	Mass Communication
L. Kammuanlal Ngaihte	Mass Communication
Lalnunkimi Kawlni	Mass Communication
Lalrempuii Pachuau	Mass Communication
Malsawmkimi	Mass Communication
Marianne Zothanpui Hmar	Mass Communication
Mary Lalthantluangi	Mass Communication
Michael Zosangliana	Mass Communication
R. Lalduhsaka	Mass Communication
William Lalrindika	Mass Communication
	Lalbiakzuali H. Lalremruatthiama Lalhlimpuia C.Lallianmawia C.Lalropari H.Lalrammuanpuia J. Lalnunmawia K. Lalrozawna L. Kammuanlal Ngaihte Lalnunkimi Kawlni Lalrempuii Pachuau Malsawmkimi Marianne Zothanpui Hmar Mary Lalthantluangi Michael Zosangliana R. Lalduhsaka

2015, Third Semester OE 1I (Course – LIS/3/OE/18:Intellectual Property Rights)

SN	Name of Student	Parent Department
1.	C. Vanlalhruaia	Mizo
2.	K. Lalkhawngaihi	Mizo
3.	Lalsangzuali Khiangte	Mizo
4.	Lianchichhuangi	Mizo
5.	K. Laldingliana	Mizo
6.	Rohmingthanga	Commerce
7.	Lalchantluangi Pachuau	Commerce
8.	B. Lalhmunsiami	Psychology
9.	Deborah	Psychology

	Lalhmangaihzuali	
10.	R. Lalnunsangi	Psychology
11.	V.L HriatiKhiangte	Psychology
12.	Amith Hajong	Management
13.	C. Lalbiaknungi	Management
14.	Naga Premesh Bandi	Management
15.	Natasha Pradhan	Management
16.	Samikshya Mishra	Management
17.	Sanjeev Chhetri	Management
18.	Lalbiakzuali	English
19.	Zonuntluangi	Political Science
20.	C. Lalropari	Mass Communication
21.	Lalnunkimi Kawlni	Mass Communication
22.	Lalrempui Pachuau	Mass Communication
23.	Malsawmkimi	Mass Communication
24.	Marianne Zothanpuii	Mass Communication
24.	Hmar	
25.	Mary Lalthantluangi	Mass Communication
26.	R. Lalduhsaka	Mass Communication
27.	William Lalrindika	Mass Communication
28.	Zorammawia	Physics
29.	Malsawmdawngliana	HAMP

Department of Library and Information Science

Questionnaire for Teachers on

Choice Based Credit System in Library and Information Science: A Case Study

Name of Teacher:	
Teaching Experience:	
Dimension 1: Impact of CBCS on Teachers	

1. Do you think that introduction of CBCS has affected the following?

				If yes, to what extent?			
I	mpact on workload of teachers	Yes	No	Large	Some	Not at	
				Extent	Extent	all	
a.	Increased the teaching workload						
	of teachers						
b.	Increased the administrative						
	workload of teachers						
c.	Increased the testing and						
	evaluation workload of teachers						

Sl.]	Responses		
no.	Statement	Strongly	Disagree	Undecided	Agree	Strongly
no.		Disagree	Disagree	Ondecided	Agree	Agree
2	With the introduction of Open					
	Electives under CBCS, teachers					
	are not able to pay due attention to					
	their main courses in their					
	respective departments.					
3	CBCS gives a chance to students					
	to study from some of the best					

1	teachers in the university.			
4	Because of inadequate number of			
1	teachers in my department, it is			
1	not able to do justice in open			
	electives.			
5	Do you think that too much of			
j	internal evaluation exercises in			
	CBCS do not leave much time for			
1	teachers to teach.			
6	Too much involvement of teachers			
j	in testing and evaluation under			
	CBCS does not leave much time			
1	for supervision of research			
	scholars.			
7	Too much involvement of teachers			
j	in testing and evaluation under			
	CBCS does not leave much time			
1	for teachers for their personal			
1	research.			
8	Number of open electives offered			
	by each academic department			
	needs to be reduced so as to give			
1	more time to teachers to teach			
1	their main courses in their			
1	respective departments.			

Dimension 2: Need of Training on CBCS

S1.]	Responses		
no.	Statement	Strongly	Disagree	Undecided	Agree	Strongly
no.		Disagree	Disagree	Chacciaca	715100	Agree
1	There should be frequent training					

	of Heads and Deans regarding			
	CBCS.			
2	There should be frequent training			
	of teachers regarding CBCS.			
3	Do you feel that there should be			
	frequent training of office staff of			
	examination branch regarding			
	CBCS?			
4	A special workshop should be			
	organised for teachers to			
	understand the details about			
	grading, semester, credit system,			
	credit transfer etc. by inviting and			
	involving resource persons with			
	appropriate expertise.			
5	There should be a mechanism to			
	provide training to new Heads and			
	Deans on CBCS.			
6	There should be a provision to			
	provide training on CBCS to the			
	teachers and staff of exanimation			
	branch.			
7	There is a need to conduct a			
	Centralised Orientation			
	Programme on CBCS for students			
	every year soon after admission.			

Dimension 3: Issues relating to Choice of Open Electives

Sl.]	Responses		
no.	Statement	Strongly	Disagree	Undecided	Agree	Strongly
		Disagree			8	Agree

1	A long list of Open Electives			
	creates confusing among students			
	in selecting their desired OEs.			
2	Number of Open Electives offered			
	by each academic Department			
	need to be reduced from two to one			
	so as to give more time to teachers			
	to teach their main courses in their			
	respective departments.			
3	Students should be given complete			
	freedom in selecting their Open			
	Electives.			
4	Restriction imposed on			
	departments with regards to the			
	admission of students in open			
	electives beyond their intake			
	capacity should be removed.			
5	Students should exercise their			
	selection of open electives before			
	the closing of preceding semester			
	so as to start the open elective			
	classes soon after the			
	commencement of the 2 nd or 3 rd			
	Semester classes.			
6	Students have adequate freedom in			
	selection the course of their choice			
	under the existing CBCS.			
7	Academic Advisers in the			
	department are playing their due			
	role in assisting students in			
	selection of their Soft Courses and			
1	1	1	ı	

	Open Electives.					
		1		-	•	1
Dime	ension 4: Impact of CBCS on Stude	nts				
1	. Do you agree that the opportunit	ies provided	for interact	ion among stu	udents fr	om various
	departments under CBCS will	help in: (you	u may tick	more than	one alte	rnatives, if
	desired)					
	a) Providing enriched education	al experience	es			
	b) Integration of knowledge					
	c) Interdisciplinary approach to	learning				
	d) Understanding of unity of kn	owledge				
	e) None of the above					
Sl.]	Responses		
No.	Statement	Strongly	Discours Hadai	Undecided	Agree	Strongly
110.		Disagree	Disagree	Officecided	Agree	Agree
2	CBCS provides more					
	interactive relationship between					
	the teacher and the taught.					
3	There are still certain					
	confusions about CBCS among					
	the students.					
1	Students are more motivated by					

5. Do	you	believ	e that	with	the	introduction	of CBCS,	students'	performance	has	improved?
Yes		No									
If yes,	to w	hat ext	ent								

CBCS than the old system.

increases the quality of students

Implementation of

	Impact of CBCS on	Performance of	Students
To a great extent	To some extent	Not at all	Has negatively affected performance

6. Do you belie	eve that introduc	ction of CBC	S has increased	the physical and n	nental workload o
the students?					
Yes No					
If yes, to what o	extent				
P	hysical Workloa	ıd		Mental Workloa	d
To a great	To some	NI-4 -4 11	To a great	To some	N-4 -4 -11
extent	extent	Not at all	extent	extent	Not at all
7. Do you belie	eve that Open E	lectives in the	e CBCS has imp	proved the employa	ability of students
Yes No					
If yes, to what	extent				
	Degree of impa	act of CBCS of	on Employabilit	y of Students	
To a great	To some over	ent Not a	Dep	ends on the type o	f Open
extent	To some exte	ent Not a	t an	Electives offered	d

Dimension 5: Impact on the Functioning of Departments

Sl.			R	Responses		
No	Statement	Strongly	Disagree	Undecid	Agree	Strongly
		disagree	Disagree	ed	Agice	Agree
1	My department have the					
	required infrastructure for CBCS					
2	Without IT support, maintenance					
	and retrieval of office records					
	relating to CBCS is not possible					
3	With the introduction of CBCS,					
	the workload of the examination					

	department relating PG			
	examination has been transferred			
	to academic departments			
4	Too much involvements of			
	academic departments in testing,			
	evaluation and compiling of			
	results, the quality of teaching			
	has been compromised			
5	Supporting staff in my			
	department is not adequately			
	trained in CBCS			
6	There is too much of internal			
	evaluation exercises in my			
	department under CBCS			
7	Teachers in my department			
	remain too busy in the			
	conducting of evaluation			
	exercises under CBCS			

Dimension 6: Problems Relating to Successful Implementation of CBCS

S1.			Responses						
	Statement	Strongly	Disagrag	Undecided	Agree	Strongly			
no.		disagree	Disagree	Undecided		agree			
1	Students faced problems in								
	attending Open Elective								
	classes in departments due to								
	the long distance between								
	departments								
2	Non availability of buses in								
	time after OE classes, many								
	departments miss their								

	classes in their parental			
	departments			
3	The CBCS introduced by			
	Mizoram University is not			
	fully choice based as it			
	imposes many restrictions			
	on the students in selecting			
	their open electives			
4	The University does not yet			
	have the required			
	infrastructure for the			
	successful implementation			
	of CBCS			
5	Academic advisers in the			
	department have not been			
	playing their due role in			
	helping students in selection			
	of their open electives			
6	Assigning of first two			
	periods on two days in a five			
	days week to open electives			
	has seriously affected the			
	teaching learning process in			
	the Core and Soft courses			

Dimension 7: Impact of CBCS on Quality and Flexibility of Education

Sl.			Responses				
no	Statement	Strongly	Disagree	Undecided	Agree	Strongly	
lio lio		disagree	Disagree	Ondecided	Agicc	agree	
1	Quality education can be achieved						
	better through Choice Based						

Credit System (CBCS) than the					
old system					
There is more flexibility in the					
Choice Based Credit System					
(CBCS) than the old system					
Most of the open electives offered					
by my department under CBCS					
are job oriented					
CBCS, which works on credits, is					
a better way of evaluation					
CBCS, with its interdisciplinary					
approach, helps students to					
integrate their understanding of					
various disciplines					
The number of class tests/					
seminars/ assignments etc. Under					
C-1 and C-2 in CBCS needs to be					
reduced					
CBCS, with its interdisciplinary					
approach, helps students to					
integrate their understanding of					
various disciplines					
	There is more flexibility in the Choice Based Credit System (CBCS) than the old system Most of the open electives offered by my department under CBCS are job oriented CBCS, which works on credits, is a better way of evaluation CBCS, with its interdisciplinary approach, helps students to integrate their understanding of various disciplines The number of class tests/ seminars/ assignments etc. Under C-1 and C-2 in CBCS needs to be reduced CBCS, with its interdisciplinary approach, helps students to integrate their understanding of	There is more flexibility in the Choice Based Credit System (CBCS) than the old system Most of the open electives offered by my department under CBCS are job oriented CBCS, which works on credits, is a better way of evaluation CBCS, with its interdisciplinary approach, helps students to integrate their understanding of various disciplines The number of class tests/ seminars/ assignments etc. Under C-1 and C-2 in CBCS needs to be reduced CBCS, with its interdisciplinary approach, helps students to integrate their understanding of	There is more flexibility in the Choice Based Credit System (CBCS) than the old system Most of the open electives offered by my department under CBCS are job oriented CBCS, which works on credits, is a better way of evaluation CBCS, with its interdisciplinary approach, helps students to integrate their understanding of various disciplines The number of class tests/ seminars/ assignments etc. Under C-1 and C-2 in CBCS needs to be reduced CBCS, with its interdisciplinary approach, helps students to integrate their understanding of	There is more flexibility in the Choice Based Credit System (CBCS) than the old system Most of the open electives offered by my department under CBCS are job oriented CBCS, which works on credits, is a better way of evaluation CBCS, with its interdisciplinary approach, helps students to integrate their understanding of various disciplines The number of class tests/ seminars/ assignments etc. Under C-1 and C-2 in CBCS needs to be reduced CBCS, with its interdisciplinary approach, helps students to integrate their understanding of	There is more flexibility in the Choice Based Credit System (CBCS) than the old system Most of the open electives offered by my department under CBCS are job oriented CBCS, which works on credits, is a better way of evaluation CBCS, with its interdisciplinary approach, helps students to integrate their understanding of various disciplines The number of class tests/ seminars/ assignments etc. Under C-1 and C-2 in CBCS needs to be reduced CBCS, with its interdisciplinary approach, helps students to integrate their understanding of

Signature of Respondent Teacher

Department of Library & Information Science Questionnaire

On

Choice Based Credit System in Library and Information Science: A Study

	Name of Student:
	Academic Session:
1.	Do you understand the concept of Choice Based Credit System (CBCS)?
	Yes No
	If yes, to what extent?
	a) To a great extent
	b) To some extent
	c) Not at all
2.	Do you think that CBCS overburdens students with too many core and soft courses and tests,
	seminars, assignments and otheir evaluative exercises?
	Yes No
	If yes, to what extent?
	a) To a great extent
	b) To some extent
	c) Not at all
3.	According to your understanding, what do you think of CBCS?
	i) More emphasis on skills
	ii) More emphasis on specialization
	iii) More student centric
	iv) More job oriented
	v) More focused on quality of education
	vi) None of the above
4.	Do you agree that students face problems in attending Open Electives classes due to long
	distance between departments?
	Yes No No

5.	Which of the	e following factor(s) influenced your selection of Open Elective	es?
	(You can tic	k more than one)	
	a)	Short distance of the department offering Open Electives.	
	b)	Relevance of the Open Electives.	
	c)	My personal interest in the Open Electives.	
	d)	Selection of Open Electives by close friends.	
	e)	Advice given by the Head/Senior teacher/Academic adviser o	f department.
	f)	Popularity of the teacher teaching the Open Electives.	
	g)	Non-availability of my choice.	
6.	Do you thin	k that all restrictions imposed on selection of Open Electives s	hould be removed
	and students	be given complete freedom in the selection of their Open Elec	tives?
	Yes N	[о	
7.	Has your de	epartment appointed Academic Adviser to assist students in	selection of Open
	Electives and	d Soft Courses?	
	Yes N	[O	
8.	Who in your	department helped you in selecting your Soft Courses and Op-	en Electives?
	a)	Head of Department	
	b)	Academic Adviser	
	c)	Senior Teachers	
	d)	No one	
9.	Could you so	elect the Soft Courses of your choice in 2 nd Semester?	Yes No
10.	Could you so	elect the Soft Courses of your choice in 3 rd Semester?	Yes No
11.	Could you so	elect the Open Electives of your choice in 2 nd Semester?	Yes No
12.	Could you so	elect the Open Electives of your choice in 3 rd Semester?	Yes No
13.	What was th	e attendance of students in Open Electives in 2 nd Semester?	
	a)	Very regular	
	b)	Regular	
	c)	Irregular	
	d)	Very Irregular	
14.	What is the	attendance of students in Open Electives in 3 rd Semester?	
	a)	Very regular	

	b)	Regular		
	c)	Irregular		
	d)	Very Irregular		
15.	Did you get	OE of your own choice?		Yes No
	If no, please	state the reasons.		
		ever miss your class in your		
		ity of transportation in time?	Yes N	No
	If yes, how	•		
		Many times		
	,	Some times		
17.	_	ee that students should not be		Electives from their own
	department?		Yes No	
18.	· ·	red education? Yes		er centred education to a
19.	What are the	e benefits that you get from Ch	oice Base Credit System	?
a)				
b)				
c)				
d)				
20.	What proble	ems have you faced with regard	l to Choice Base Credit S	ystem?
a)				
b)				
c)				
d)				
21.	Give sugges	stions to overcome the problem	ns in successful impleme	entation on Choice Based
	Credit Syste	m in Mizoram University.		
a)				
b)				

c)	
d)	

(Signature of Respondents)

ABSTRACT ON

CHOICE BASED CREDIT SYSTEM IN LIBRARY AND INFORMATION SCIENCE IN MIZORAM UNIVERSITY: A CASE STUDY

A dissertation submitted in partial fulfilment of the requirement for the Degree of

Master of Philosophy in Library and Information Science

Submitted by
VANLALHRUAII SAILO
MZU Registration No. 825 of 2007-08
M.Phil Registration No. MZU/M.Phil./214 of 22.05.2015

Supervisor
Dr. Lalngaizuali
Assistant Professor

School of Economics, Management & Information Science
Department of Library and Information Science
Mizoram University, Tanhril, Aizawl
2016

1. INTRODUCTION

Higher education has played an important role to India's emergence in the global knowledge economy. But it is still believed that a crisis is undergoing the Indian higher education system. This crisis has been termed as 'quiet crisis' by the National Knowledge Commission (NKC). Globalisation has forced the nation to exploit new opportunities including in the areas of higher education which require a proper and proactive policy of internationalization of higher education so as to support the process of creation and distribution of knowledge in Indian universities. This will further help in nation building through application of knowledge and skills to cope with the expectation of the 21st century teaching and learning (Rath & Samantaray, 2014). As per recommendations of National Knowledge Commission and UGC as well as Association of Indian Universities, the central universities, state universities and other institutions of higher education need to carry out academic reforms. The 11th five year plan of India proposed various measures for academic reforms in higher education. It recognised the need to introduce the academic reform in the university and college education system. The National Knowledge Commission in its report to the nation in 2008-2009 on higher education and Yashpal Committee Report in 2009 recommended revamping of higher education through academic and administrative reforms. Keeping in view the challenges of the changed times and make the higher education in Indian universities compatible with the universities in developed nations, the UGC (11th Plan, March 2009) and later on the Association of Indian Universities (AIU) stressed on the following recommendations:

- 1. Semester System
- 2. Choice Based Credit System
- 3. Curriculum Development
- 4. Examination Reforms
- 5. Administrative Reforms. (Roy, Khanam & Devi, 2013)

Thus, the academic reforms need to be carried out in the arena of admission procedures in various courses, a uniform academic calendar switch over from annual to semester system, acceptance of grade and credit system, introduction of Choice Based Credit System and semester system, examination reforms including continuous internal assessment and grading system, teachers' assessment and other related reforms.

All the above recommendations for reforms have been reviewed in by representatives of various universities in the State and considered for implementation with the aim of transforming Higher Education – a transformation where students changed from being passive recipients of knowledge to becoming active participants of the knowledge imbibing process. The education system in the State thus changes from a teacher-centric to learner-centric mode. It should aim at all-round integral development of students' personality so that they become good citizens of the new world order. (Implementation of CBCS, Government of Gujarat, 2011)

Choice Based Credit System (CBCS) offers a flexible system of learning and permits students to:

- Learn at their own pace
- Choose electives from a wide range of courses
- Undergo additional courses
- Adopt an interdisciplinary approach in learning
- Inter College/University transfer of Credits
- Complete a part of programme in the parent institute and get enrolled in other institutions for specialised courses.
- Enhance skill/employability by taking up project work, entrepreneurship and vocational training
- Carry on and transfer their credit
- Make best use of the expertise of available faculty.

2. REVIEW OF LITERATURE

The scholar made an extensive survey of available literature in the specific area of study so as to get abreast with the information. As CBCS is introduced recently, there is a need for reviewing the research publications in order to know the status of CBCS and its importance. The scholar has mentioned below the literature consulted for the study which have been collected from different articles and websites.

Phukan, R.S. (2015, June 24) in his article 'What is CBCS or choice based credit system? How does it work?' states it is too early to say whether CBCS will be successful or not. The UGC has always initiated measures to bring efficiency and excellence in the Higher Education System of India. The basic motive is to expand academic quality in all aspects, right from the curriculum to the learning-teaching process to examination and evaluation systems. However, so far multiple methods are

followed by different universities across the country towards examination, evaluation and grading system. Considering this diversity, the implementation of the choice based credit system seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system.

Dhawan, J. (2015, September 5) in his paper 'What is a choice based credit system (CBCS)? What are its advantages?' states that the current higher education curriculum does not impart the necessary skills that would make the students employable adequately. There is a lack of Interdisciplinary approach as well as there is a very little scope for value based courses to be taught. In addition the students don't learn to think and analyze on their own and the system is not effective enough in meeting/empowering students to think on matters/issues independently. So, the 11th five year plan of India as well as the National Knowledge Commission has recommended revamping of higher education through academic and administrative reforms. The UGC in its 11th plan has emphasized on such reforms and this was followed by the recommendations made on similar lines by the Association of Indian Universities (AIU). CBCS facilitates student's mobility, helps self learning, offers more flexibility, records students' workload realistically and respects student's autonomy.

Mishra, A. (2015, October 30) express an idea in his article 'Choice based credit system needs systemic changes' that Choice Based Credit System (CBCS) was implemented in order to make great changes in Indian higher education institutions; there was also strong resistance from groups of academics and students, especially from the University of Delhi, one of the India's largest and leading universities. It seems that there is teacher shortage, lack of flexibility and guidance, no clarity on student mobility and lack of adequate infrastructures in the implementation of CBCS. Unless these shortages are not restored, a credit system designed to offer choice and flexibility to students may not succeed especially in Indian universities struggling with challenges of huge teacher vacancies, inadequate infrastructure, crippling bureaucracy and enormous student numbers.

Ralhan, A. (2015, March 10) in his article, 'Why Delhi University's choice based credit system is a bad idea' mentioned that students of Delhi University will again be taken as subjects for an experiment after the hurried imposition of the semester system and the Four Year Undergraduate Program in recent years. This time,

the plans are to form a new education policy. UGC has come up with a program called Choice Based Credit System. CBCS flaunts that the scheme is in the interest of students, but this ultimately seems to comply only with the market oriented world, where a large section of half-educated students will be used for small sector jobs. The idea of this program is not something new in itself. So far, no clear guidelines have been given as to what kind of a syllabus CBCS will propose. Honours degrees and programs should not be treated as vocational courses. It is perhaps an attempt to lure them not to go through a rigorous academic plan but only to seek "efficiency". The question to be asked is, how are the students going to form their own syllabi? And what is this concept of transferring from one college to another and from one discipline to another? Even if the system gets implemented, such guidelines do not seem to contribute fruitfully to the academic nature of a university. The focus does not seem to be on one's academic and personal growth, rather it's a well thought out strategy to attack the potential and radical growth of the students who can question the structural, cultural, social, and economic hegemony of a society. When the different progressive fronts are fighting for issues like better infrastructure, permanent jobs for teachers and increase in number of seats for students – the fact that gets highlighted is that while the basic facilities have not been procured, the authorities like MHRD and UGC are being ignorant on their part. After the announcement of the UGC guidelines, it appears that Delhi University will again be seen struggling against the UGC and the MHRD's aristocratic behaviour. How much time and energy it will take to undo this mess is still uncertain, but the various progressive fronts have already strongly started opposing the proposed idea of CBCS.

Sharma, Shiksha (2015, May) mentioned in her paper 'Choice Based Credit System: Standard of education will suffer, says teachers' mentioned that a group of academicians from Delhi's Central Universities expressed their opposition against the 'thoughtlessness' behind the Choice Based Credit System (CBCS) and the opacity and reckless speed with which it is being pursued. The new system (CBCS) proposes a common syllabus for central universities, a common entrance test, faculty and credit transfer. Romila Thapar, renowned historian mentioned this common syllabus for 51 universities is not only a mammoth task, but also largely unnecessary. God universities will have to lower standards in order to conform to a common standard of teaching the same syllabus. Instead of giving a green signal to the UGC's ambitious

plan of implementing CBCS from the coming academic session, the group proposed an alternate way of achieving seamless national wide mobility of students.

Derepak, K.R. (2015, **December**) described in his paper 'Choice Based Credit System: the Path Ahead' that the University Grants Commission has brought out guidelines for the introduction of the choice based credit system (CBCS) in higher educational institutions for graduate, postgraduate, diploma and certificate programs. The expressive stated purposes of the introduction of the scheme are mainly to provide opportunity for students to have a choice of courses or subjects. This would mean that the program would emphasize more on students earning the prescribed number of credits to qualify rather than being herded to come out successfully within the normal stipulated time for the degree. The scheme is also expected to provide mobility to students within the country, and, eventually, even internationally, as the credits earned at one institution can be expected to be transferred freely. While there can be no argument against the imperative to have portability in education at college and university-level and also providing opportunity to students to choose, it is a fact that only a small percentage of the institutions in the country are in a position to bring in these changes in letter and spirit.

Kelkar, Alka S.; & Ravishankar, Lakshmi (2014) in their paper 'Choice Based Credit System: boon or bane?' analyses the teachers' opinions, problems faced and recommended suggestions for better implementation of the CBCS. The authors described the evaluation of the implementation of credit system among the faculty members from colleges affiliated to Mumbai University. The study revealed that most of the respondents agreed that the objectives are achieved, CBCS emphasized on evaluation of the students only and increased the workload of teachers while it did not help the performance of students. The author suggested that improvement of infrastructure and teaching aid, reduced teacher student ratio and promoting self-study.

In their paper, 'Internationalization of library and information science education: adopting choice based credit system (CBCS) in Indian universities with special reference to library and information science in Mizoram University', Rath, Pravakar; & Moorttimatee, Samantaray (2014) discussed the introduction of choice based credit system in library and information science keeping in view the international trends and developments with regards to its recognition, credit transfer

and quality assurance. It further discusses the credits, courses and components of Master's course in Library and Information Science based on Choice Based Credit System and introduced in Mizoram University, located in the north-eastern parts of India. The authors also conclude that the effective implementation of the course depends on proper counselling to the students opting for soft courses and open electives and monitoring at regular interval.

Vaidyan, V.K (2014) in his article 'A critical analysis of credit-semester in India' described about the evolution of course credit system and its accountability, that is, it measures progress of students and teaching staff. It also describes the implementation of Course-Credit system in India along with 4-point grading system, Grade to mark conversion and 100-point grading system. The author also express that the action plan proposed by UGC outlines the need to consider and adopt semester system, choice based credit system, and flexibility in curriculum development and examination reforms in terms of adopting continuous evaluation pattern reducing the weightage on the semester-end examination so that students enjoy a de-stressed learning environment all through.

Dutta, Indrajeet; & Dutta, Neeti, (2013) in their article 'Choice based credit system: an academic reform in higher education' states that, in the 11th five year plan, UGC initiated academic and examination reforms across the country called Choice Based Credit System (CBCS). CBCS promotes curricular flexibility and students' mobility along with a choice of learning some skills as required by our knowledge societies. In his letter to Prime Minister, Sam Pitroda, Chairman of NKC has said, "We propose a transition to a course credit system where degrees are granted on the basis of completing a requisite number of credits from different courses, which provides students with choices". The CBCS is not a new system especially for many centuries as many of the foreign universities have designed their courses on CBCS pattern and are practising it for more than four decades. Presently many of our higher education institutions are offering programme based on credit based system but they offer very little choices to students. As education sector has been globalised and government has reacted in response to this globalisation, therefore it tries to bring foreign Educational Bill wherein opening of off-campuses of foreign universities in India become a reality but in these universities there is so much curricular flexibility to offer to the students, therefore, there is an urgent need that our universities also introduce the Choice Based Credit System.

Pathania, Kulwant Singh; & Pathak, Anuradha (2013), discussed in their paper 'Choice based credit system: the need of the hour' that the blend of quality enhancement to stand in competitive market, and flexibility to meet the students' requirement is the need of the hour. It also express that one needs to find a system that matches students' scholastic needs as well as their personal aspirations. India needs multi-dimensional and broad-based quality education to maintain its leadership in the 21st century. Therefore, India should show the concern over the quality in education as the education in India is not competitive in terms of the quantity and quality with other countries.

Katoch, Kuldeep Singh; & Katoch, Suman Kumari (2013) discussed in their paper 'Choice based credit system and semesterization in Himachal Pradesh: the road ahead' that the universities have to perform multiple roles, like creating new knowledge, acquiring new capabilities and producing an intelligent human resource pool through challenging teaching, research and extension activities so as to balance both the need and the demand. The authors of this article describe about the challenges of expansion, equity and excellence of higher education in Himachal Pradesh and academic reforms in Himachal Pradesh. They also highlighted the lacking in the present system and advantages, challenges and suggestions of CBCS.

Roy, Nil Ratan; Khanam, Umme Khadiza; & Devi, Tribeni (2013), in their paper 'Attitude towards choice based credit system of pg level students in higher education: a study on Assam University' discussed that the 11th plan (Eleventh Five Year Plan 2007-2012 of Planning Commission, Government of India) recognized the need to introduce the academic reform in the university and college education system. The academic reform necessarily includes changes in admission procedures in various courses. Modification in assessment and examination methods, switch over from annual to semester system, acceptance of grade and semester system, CBCS, teachers' assessment, and other related reforms in Assam University, the CBCS has been started in its PG level courses across the discipline since 2010. As this is the reformed structure of education system, so still this system has not been materialized in full form. This study is an attempt to know the level of attitude of PG level Arts and Science students towards CBCS. The study reveals that Science background students

and Boys students are having higher level positive attitudes towards CBCS in comparison to Arts and Girls students.

In his paper 'Fostering a liberal credit system', Singh, Dheeraj (2010) states that Indian schools, colleges and universities traditionally follow a definite "pass" or "fail" system. Sometimes, students are followed to move on to the next class, or semester, on the condition that they sit for all papers that they fail to clear. But the University Grants Commission has been pushing Indian universities to adopt a more liberal system. One was to initiate a "choice-based credit system" – in conjunction with the semester and grading systems. This has the potential to improve the Indian higher education system. So far, universities appear reluctant to embrace the reforms. Perhaps, this willingness to reform the traditional system of learning could be attributed to a lack of understanding.

Rajendran, M. (2010) published an article 'Curriculum-cum-quality assurance: a major ingredient for assessment and accreditation in higher education' which concerned about the curriculum development that this is an essential ingredient to strengthen the quality of education for which, attention should be focused on socially relevant curriculum, innovative and interdisciplinary areas, periodically restructuring the curriculum equivalent to international standards, ICT components in the content of the curriculum, diversity with employable potential, stress on soft skills development, basic science and vocational based curriculum etc. For this development, the Choice Based Credit System is widely encouraged by many institutions and the philosophy of the system is to create knowledgeable individual to understand his own curriculum and discipline meaningfully from the perspective and insight of other inter-disciplinary and multi-disciplinary cultures, which would, in turn, bring a lot of changes, innovation and improvement in the realm of higher education.

Hatekar, Neeraj (2009) proposed in his article 'Changing higher education scenario in India' that postgraduate teaching and research in state universities will have to be taken over by the central government to ensure the survival of this important part of the higher education system. It also states that the higher education scene in the country is set to experience a dramatic change but the ability of the state universities to cope with this change is extremely doubtful. The success of the new

central universities and the proposed national universities will come about at the cost of the state universities, which cater to the majority of students in the country.

Baradol, A.K. (2009, August) presented a paper 'Bologna Process of Library and Information Science Education in SAARC Countries: A proposal', at the World Library and Information Congress: 75th IFLA General Conference and Council, Milan, Italy, which provides a brief description of Library and Information Science (LIS) education in SAARC countries. It deals briefly the similarities, differences and common problems of LIS education in SAARC countries and European countries where Bologna Process has been accepted. It covers the structure of the LIS education programmes and explains the quality of LIS education. The paper briefly mentions about the efforts done for restructuring of LIS education through seminars and conferences. The efforts of Indian University Grants Commission (UGC) regarding the introduction of Choice Based Credit System (CBCS) have been highlighted. It proposes to introduce Bologna Process of LIS education among SAARC countries. It discusses the introduction of qualifications framework of three cycles' viz., bachelor, master and doctorate. The acceptance of curricular framework has been suggested. Paper recommends the creation of awareness about the Bologna Process of LIS education.

Jeyasingh, G. Stanley (2005)in his article 'Choice based credit system' describes about Choice based credit system (CBCS), or a cafeteria like system as it is a solution for transformation from the traditional teacher oriented education to a student-centred education. It also emphasized making responsibility for their own education in this way; students can benefit the most from all the available resources. Academic commissions and committees such as UGC, TANSCHE and NAAC also recommend CBCS for higher education.

3. RESEARH GAP

On the analysis of the above literature review, it has been observed that there are sufficient numbers of research conducted on higher education system of learning with emphasis given to CBCS covering LIS education as well as different universities. But no other studies have been conducted on the implementation of CBCS in Mizoram University with special reference to the department of library and information science. This research gap motivated the scholar to undertake the

implementation of choice based credit system in library and information science in Mizoram University.

4. STATEMENT OF THE PROBLEM

A comprehensive study on Choice Based Credit System (CBCS) has not yet been undertaken so far by any research scholar in library and information science. CBCS was adopted from the year 2012 in Mizoram University. After scanning the different syllabus under CBCS, the scholar felt it necessary to undertake the present research problem in CBCS adopted under Department of Library and Information Science, MZU. A draft regulation was placed before the CBCS (PG) Committee in its meeting held on 31.03.2015. The Committee has approved the Regulations for PG programmes in Mizoram University which was implemented from July 2015. The study focus on the assessment and adoption of CBCS. So, such a study which is the need of the hour is very much required and thus prompted the scholar to take up the present research problem.

5. OBJECTIVES OF THE STUDY

The objectives of the present study are:

- 1) To present the importance of CBCS by the university in general and the department of Library and Information Science in particular.
 - 2) To understand the types of core, soft and elective courses offered by the Department.
 - 3) To assess the mobility of students across the departments in OE courses.
- 4) To obtain feedback from students and teachers about the benefit and learning outcome of implementing CBCS in MLIS.

6. RESEARCH METHODOLOGY

The following methodologies were adopted by the research scholar for data collection, analysis and interpretation with regard to CBCS implementation, adoption etc. Out of the total number of 62 students and 8 faculty members of the department of library and information science, a total number of 62 students and 8 faculties were selected as sample size which comes to 70. The scholar distributes a total number of 70 questionnaires to ascertain information relevant to the study. A detailed study on the implementation, adoption and the problems faced by the teachers and students regarding CBCS were made.

i) Questionnaire Method

The scholar designed a structured questionnaire which was circulated to all the Faculty (8) and three batch students of the department under study to elicit data which helped the scholar in getting information for improvement and suggestions of CBCS. The three batches here includes the students of 2012-2014(17 students), 2013-2015(23 students) and 2014-2016 (22 students)who pursued Master of Library and Information Science, Mizoram University. Hence, the total population comprises of 70, which includes 8 faculty and 62 students. Out of the 70 questionnaires circulated, 70 questionnaires were received, which constitutes 100% of the sample size.

ii) Interview Method

The personal interview method was also applied to supplement the questionnaire method both to the three batches students and faculty members to obtain their feedback with regard to learning outcome, benefit and obtain suggestions for improvement.

7. CHAPTERIZATION

Chapter 1 deals with introduction of Choice Based Credit System and development of higher education in India. The introduction discusses different committee reports like NKC (2008), Yashpal Committee report and UGC guidelines on adoption of Choice Based Credit System. It further discusses the statement of the problem, objectives, scope of the study, methodology, review of literature and different chapters covered in the topic.

Chapter 2 explains the meaning of CBCS, Objectives and Advantages of CBCS. It also include the significant of grading in CBCS, UGC guidelines on adoption of CBCS, applicability of the grading system, types of courses, examination and assessment, computation of SGPA and CGPA, format for transcripts and conversion of grade points into percentage.

Chapter 3 deals with the implementation of CBCS in Mizoram University, Department of Library and Information Science (MZU). It cover the syllabus which includes Objectives of courses, programme structure of MLIS under Choice Based Credit System, admission requirement, examination and scheme of papers, Job diary, Curriculum Stipulated Study Tour (CSST) and Open Electives offered by the department under study.

Chapter 4 analyzes the data received from the respondents which are the three batches of MLIS Students from 2012-2015 and faculty members of the department. Data collected are scientifically analyzed and interpreted to draw suitable conclusions.

Chapter 5 derives conclusion from the Chapter 4 and made suggestions so as to improve the Choice Based Credit System in the Department of Library and Information Science as well as the university as a whole.

Choice Based Credit System is a new system of learning which was recently started by the UGC in the higher education system. UGC guidelines on adoption of CBCS, meaning, objectives, examination and grading system is explained in the next chapter entitled "Choice Based Credit System: An Overview"

8. MEANING OF CHOICE BASED CREDIT SYSTEM (CBCS)

Choice Base implies that the learner has the choice to select the subjects that he/she would like to learn within the prescribed time period and the program parameters. For example, a learner who wants to major in Library Science wishes to study Economics may be permitted to do so under the Choice Based System. A Credit is a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit shall mean one contact hour of teaching for theory or two hours for laboratory/ practical course per week in a semester of 18 weeks. Two tutorial hours for a course shall amount to one credit. One credit shall be assigned to one week of field training program/ curriculum stipulated study tour (CSST) where students spend the entire duration in the field along with the faculty member(s). Up to two credits shall be assigned to one month of internship undergone in a Company/Organization/Institutions approved by the Head of the Department.A Credit System is a systematic way of describing an educational program by attaching credits to its components. The definition of Credits in higher education systems may be based on different parameters, such as student workload, learning outcomes, entrepreneurship skills, contact hours, innovation and creativity talents, etc. Credit Point refers to the 'Workload' of a learner. It is an index of the number of learning hours deemed for learning of a certain segment. It is the product of grade point and number of credit of a course. These learning hours broadly classified into hours spent on attending actual lectures/tutorials/laboratory works/seminar etc. and notional hours spent on reading, reflecting, discussing, attending counselling sessions, watching specially prepared videos, writing assignments, preparing for examinations, etc.

Thus, CBCS is a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses, acquire more than the required credits, and adopt an interdisciplinary approach to learning. It is a transformation from the traditional teacher-centered education to a student-centered education. CBCS provides greater flexibility with multiple exits, multiple pathways and vertical mobility.

9. OBJECTIVE OF CBCS

The main objectives of CBCS are:

- To provide broad based education;
- To provide students with greater flexibility in choice of courses;
- To provide students multi-disciplinary curriculum;
- To adopt an interdisciplinary approach in learning which enables integration of concepts, theories, techniques, and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline;
- To enable students to choose courses at basic/advanced level/inter-disciplinary;
- To enable students to choose electives from a wide range of courses;
- Complete a part of program in the parent institute and get enrolled in another institution for specialized courses;
- To enable students to acquire job oriented skills by taking up project work, entrepreneurship and vocational training;
- To enable students to progress at their own pace;
- Make best use of the expertise of available faculty;
- To enable highly motivated students to undergo additional courses and acquire more than required number of credits;
- Promotes students' mobility
- Collaboration with industry and foreign partners to foster innovations. This will go a long way in capacity building of students; and
- To Bridge the gap between professional and social exposure to provide a holistic education. This will greatly improves the employability of students. (Rao, D.H;2015)

10. ADVANTAGES OF CBCS

➤ Shift in focus from the teacher-centric to student-centric education since the workload estimated is based on the investment of time in learning, not in teaching.

- ➤ Helps self-paced learning. Learners may undertake as many credits as they can cope with without having to repeat all the courses in a given semester if they fail in one or more courses. Alternatively, they can choose other courses and continue their studies. (Student may undertake as many credits as they can cope with without repeating all courses in a given semester if they fail in one or more courses).
- ➤ CBCS allows students to choose inter-disciplinary, intra-disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and aptitude) and more flexibility for students.
- ➤ CBCS makes education broad-based and at par with global standards. One can take credits by combining unique combinations. For example, if a learner is studying Library Science, he/she can also simultaneously take a course in Economics, Biotechnology with Biochemistry or Environmental Science etc.
- Facilitates Learner Mobility. CBCS offers flexibility for students allowing them to choose inter-disciplinary courses, change majors, programs, etc. to study at different times and different institutions to complete one course (ease mobility of students). Credits earned at one institution can be transferred.
- Respects 'Learner Autonomy'. Allows learners to choose according to their own learning needs, interests and aptitudes.
- ➤ Helps to record course work and to document learner workload realistically since all activities are taken into account -not only the time learners spend in lectures or seminars but also the time they need for individual learning and the preparation of examinations etc.
- > CBCS is beneficial for achieving more transparency and compatibility between different educational structures, and
- ➤ Helps to round off valuation errors. (Rao, D.H, 2015)

11. SIGNIFICANCE OF GRADING IN CBCS

- ✓ Advantages of moving away from numerical marking to grading.
- ✓ Grading provides a more realistic assessment of the learner.
- ✓ Stigma of 'fail' is minimized in grading.
- ✓ Grading enables the use of both 'absolute' and 'relative' grading depending upon the context.
- ✓ Relative grading provides possibilities of placing students in comparable categories regardless of their relative achievements in different subjects, and

The grading system is considered 'better' and 'desirable' because this will facilitate student mobility across institutions within the country and across other countries, and also enable potential employers to assess the performance of students. (Rao, D.H, 2015)

12. INTRODUCTION OF CBCS IN MIZORAM UNIVERSITY

Mizoram University was established by an Act of Parliament (No. 8 of 2000) and it started functioning with effect from July 2001. The University is located at Aizawl, the capital city of Mizoram and spread over two campuses of 1000 acres main campus on the outskirts of the city (PG Campus) and 750 acres campus in the city (UG Campus). The objectives of the University as enshrined in the Act reads 'to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may seem fit, to make provisions for integrated courses in humanities, natural and physical sciences, social sciences, forestry and other allied disciplines in the educational programmes in the University; to take appropriate measures for promoting innovations in teaching learning process, interdisciplinary studies and research; to educate and train manpower in the development of the State of Mizoram; and to pay special attention to the improvement of the social and economic conditions and welfare of the people of the State, their intellectual, academic and cultural development'.

The University is presently offering B.Tech., M.A., M.Sc., M.Com., MLIS., M.S.W., M.B.A., M.Phil and Ph.D. programmes in 33 disciplines under 8 School of Studies. System for evaluation of students' performance in various examinations has been changed to grading system and all courses are converted to switch over to the Choice Based Credit System since 2012 which was further revised and implemented from the academic session of July 2015. Till date the University has a total strength of 214 teachers and 352 non-teaching & technical staff. Currently more than 1000 PG students & research scholars are enrolled in the University. All the classrooms are equipped with latest audio-visual teaching aids and the university is planning virtual classrooms for engineering courses that will be linked to IIT Bombay. Continuous internal assessment of student is conducted for 40% of marks in each paper and end-semester examination is conducted for the remaining 60% of marks. 80% of attendance is mandatory for all students for appearing in the examination. University

has a well laid down academic calendar ensuring minimum 90 days teaching per Semester.

The Mizoram University has made a regulation called Mizoram University Regulation Governing Post-Graduate Programmes under the Choice Based Credit System (CBCS) and Continuous Assessment and Grading Pattern (CAGP). CBCS has been offered in all the Post-Graduate programmes in the Mizoram University Campus from the Academic Year 2012-2013. The CBCS and CAGP are applicable to all full-time Post Graduate (PG) programs of study approved by the Academic Council. It shall be also applicable to any other program of study approved by the Academic Council that has been prescribed to follow the CBCS pattern. The teaching and evaluation shall be on semester pattern. Eligibility, qualifications and admission procedure for each program of study shall be as per Mizoram University Ordinances.

The Choice Based Credit System (CBCS) enables the student to obtain a degree by accumulating required number of credits prescribed for that degree. The number of credits earned by a student reflects the knowledge or skill acquired by him/her. Each course is assigned with a fixed number of credits based on the contents to be learned. A student also has choice in selecting the prescribed courses (core, elective or minor or soft skill courses) out of those offered by various departments. The grade points earned for each course reflects the student's proficiency in that course. The Choice Based Credit System enables the student to earn credits across departments and provides flexibility in duration to complete a program of study.(Rath & Moorttimatee, 2014).

13. INTRODUCTION OF CBCS IN THE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, MIZORAM UNIVERSITY

The Department of Library & Information Science was established during the academic session 2002-2003. Prof. A.K Sharma, Ex Vice-Chancellor formally inaugurated the Department on 20th August, 2002 at the Central Library of Mizoram University. The Department offered one year BLIS Course in 2002 followed by one year MLIS Course in 2003. It is only 2004 when two new faculty members (Professor – 1, Lecturer - 1) joined the Department and took initiatives to combine both the courses with integrated MLIS Course of two years duration offered from 2005 academic session. The same year the Department also offered Ph.D Program in Library & Information Science. Two more faculty members (Reader – 1, Lecturer - 1)

joined in 2005. The Department further took initiative to start M.Phil Programme in 2007 which was the first course not only in Mizoram University but in the North East Region as well.

Right from the beginning, it was a great challenge to the Department to start an up-to-date and need based MLIS course, developing other infrastructure like Computer Lab, Department Library, Learning Resources and more teaching and non teaching staff. As on date there are eight (8) faculty members which is the total sanctioned strength for the department.

The integrated MLIS Course was further revised and implemented with effect from 2011 – 2012 academic sessions. As per UGC instructions, the Department of Library & Information Science, Mizoram University adopt Choice Based Credit System from 2012 – 13 sessions. The syllabus is given in **Appendix I**. A draft regulation was placed before the CBCS (PG) Committee in its meeting held on 31.03.2015. The Committee has approved the Regulations for PG programmes in Mizoram University which was implemented from July 2015.

14. DATA ANALYSIS

Data collected from the respondents are analysed and interpreted in order to present the factual findings stated below:

a. Respondents Rate

Altogether, a total number of 70 questionnaires were circulated to both the faculty and the three batch students of the Department of Library and Information Science in Mizoram University to ascertain their interest about CBCS. The break-up is given in Table 4.2.1 supplemented with the Graph- 4.2.1 for clear understanding.

Table a: Respondents Rate

Sl. No	Year		QD		QR	%
2271		F	S	F	S	, 0
1	2012-14	8	17	8	17	100
gdfgf2	2013-15	8	23	8	23	100
3	2014-16	8	22	8	22	100
	Total		70		70	100

While analysing the Table- 4.2.1 'Distribution of respondents', it is revealed that out of the 70 questionnaires circulated between the faculties and the students of Dept. of Lib. & Inf. Science, Mizoram University all 70 questionnaires (100%) were received. Further, while calculating the mean value of the faculties and the student year wise, it comes to 12.5 for the year2012-14, 15.5 for 2013-15 & 15 for 2014-16 respectively. Further, the mean value for the faculties for all the years under study, it comes to 8 for faculties and 20.66667 for students.

This shows the interest of both the faculties and the students which by positive nature for implementation of CBCS in the department.

b. Impact of CBCS on Teachers

With the introduction and implementation of CBCS from July2012, there are many changes including change in the syllabus, working hours, evaluation system and the workload of the teachers. As a result, the teachers also need to learn and adjust in many areas in order to have a great impact in the department. The questionnaires circulated among the teachers were sum up in the Table- 4.2.2 to find out the impact of CBCS program.

Table b: Impact of CBCS on Teachers

Sl. No	Impact of CBCS	Yes	No	Total
1	Increased the workload of teachers	6(75%)	2(25%)	8
2	Due attention cannot be given to Students	4(50%)	4(50%)	8
3	Students learns from the best teacher in the university	2(25%)	6(75%)	8
4	Less time for supervision of research scholars	4(50%)	4(50%)	8
5	Less time for personal research	3(37.3%)	5(62.5%)	8
6	Reduction of Open Electives	5(62.5%)	3(37.5%)	8

The scholar while ascertaining the views of the faculties grouped into six components with regard to the implementation of CBCS program in the Department placed in Table-4.2.2 shows that 6 (75%) of the teaching faculty in the department under study is of the opinion that CBCS increased the workload of teachers while 4 (50%) each opined that the teacher due to constraint in time due to introduction of Open Electives could neither provided proper attention to the students nor supervision

of research scholars while, 4 (50%) of respondents think that too much involvement of teachers in testing and evaluation under CBCS gives them less time for supervision of research scholars. Further, 2 (25%)admitted that, CBCS program facilitate good learning from the teachers time and again while, 6(75%) are against the view. Again, 3(37.3%) faculties viewed that the introduction of CBCS gives the teachers less time for their personal research. Regarding Open Electives while, 5(62.5%) of teachers want to reduce the number of Open Electives offered by the department so as to give more time for teachers to teach their main courses in their respective departments.

c. Need of Training on CBCS

CBCS and its guidelines need to be learned and understood by the faculties as well as the students and staff. For this, the scholar grouped the questions into four categories and data obtained is placed in Table- 4.2.3 for analysis supplemented with Graph- 4.2.3 for clear understanding.

Table c: Need of Training on CBCS

Sl. No	Need of Training	Yes	No
1	Heads and Deans regarding CBCS Guidelines	8(100%)	0
2	Teachers	8(100%)	0
3	Examination Department Staff	7(87.5%)	1(12.5%)
4	Students	8(100%)	0

From the above Table- 4.2.3 it is found that, all the 8 (100%) teachers agreed with an idea that frequent training or workshop for Heads, Deans, Teachers and Students regarding CBCS should be organised to understand the details about grading, semester, credit system, credit transfer etc. and to keep abreast with the latest development for wider benefits to the students. According to them it must be performed with through resource persons with appropriate expertise. Further, while extracting the opinion from the teachers about imparting training to the examination cell it could be found that, 7 (87.5%) faculties do favour with the system while, 1 (12.5%) expressed negative. Likewise, again while taking the opinion of all 8 teachers about imparting training to the students it could be found that, all the 8 teachers expressed their willingness. Hence, broadly it can be viewed that, training is a must for any type of induction of new system including CBCS.

d. Issues Relating to Choice of Open Electives

An issue relating to the choice of open electives was one of the segments of the questionnaire and the data so obtained from the teachers under coverage has been placed below in Table- 4.2.4 supported with Graph- 4.2.4 for better understanding. The question has been split into six sub-headings as shown in the table below.

Table d: Issues Relating to Choice of Open Electives

Sl. No	Related Issues of Open Electives (OE)	Yes	No
1	Long list of OE creates confusion among students	4(50%)	4(50%)
2	OE offered should be reduced from two to one	2(25%)	6(75%)
	Freedom should be given to students in selecting		
3	their OE	8(100%)	0
	Restrictions on department intake capacity should		
4	be removed	3(37.5%)	5(62.5%)
	Selection of OE should be done at the preceding		
5	semester	1(12.5%)	7(87.5%)
	Academic advisers in the department are playing		
6	their role	8(100%)	0

Table- 4.2.4 on analysis revealed that, 4 (50%) of teachers are admitted with the idea that a long list of Open Electives creates confusion among students in the selection of their desired Open Electives while, another 4 (50%) teachers did not support the idea. OE offered should be reduced from two to one, a component of the question on analysis found that, while only 4 (25%) respondents of teachers agreed to the idea, the other 6 (75%) teachers contended with the idea so as get more time by the teachers to teach their main courses in their respective departments and engagement in research work. Further, while analysis the data on the issue on Freedom should be given to students in selecting their OE, all 8 teachers (100%) supported. Further, 3 (37.5%) of teachers are envisaged with an idea that imposing restrictions on departments in regards to the admission procedures of Open Electives to take beyond their intake capacity should be removed, while, other 5 (62.5%) teachers opposed to it. Again, with regard to selection of OE should be done at the preceding semester only 1 (12.5%) teacher favoured while, 7 (87.5%) teachers do away with such idea. Moreover, with regard to the academic advisers in the

department are playing their role. It could be found that, all 8 (100%) teachers accepted the phenomena.

e. Impact of CBCS on the Functioning of Department

The implementation of Choice Based Credit System in the University has an impact on the functioning of departments regarding I.T support infrastructures, examination, quality of teaching, training, staff and evaluation system. The Table-4.2.5 supplemented with Graph- 4.2.5 explains below the impact of CBCS on the functioning of the department.

Table e: Impact of CBCS on the functioning of the Department

Sl. No	Impact of CBCS on Department	Yes	No
1	Department has required infrastructure	7(87.5%)	1(12.5%)
2	IT helps in maintaining of CBCS related records	5(62.5%)	3(37.5%)
3	Workload have been transferred from Examination to Academic Departments	8(100%)	-
4	Staff are not adequately trained	6(75%)	2(25%)
5	CBCS need lots of internal evaluation	7(87.5%)	1(12.5%)

While analysing Table- 4.2.5 it could be found that, good number of teachers i.e., 7 (87.5%)mentioned that the department have sufficient infrastructures to meet the requirements of CBCS while, 1 (12.5%) went against the notion. Likewise, 5 (62.5%) teachers agreed that without IT support, maintenance and retrieval of office records relating to CBCS are not possible, but 3 (37.5%) opined negative. The total population i.e., 8 (100%) appreciated that, with the introduction of CBCS, the workload of the examination department relating P.G examination has been transferred to academic departments which otherwise over burdened the teachers. Further, while6 (75%) teachers agreed that supporting staffs in their department are not adequately trained, 2 (25%) disagreed. Further, with regard to internal evaluation is exercised in the department under CBCS are more as viewed by 7 (87.5%) teachers, 1 (12.5%) teacher dissented. Overall it can be viewed that, there is an increasing pressure on the Dept. with the induction of CBCS program.

f. Problems Relating to Successful Implementation of CBCS

With the introduction of CBCS in the University, problems have incrementally increased with regard to transportation, student's mobility from one department to other, selection of Open Electives, infrastructures and the teaching learning process. The table below explains the problems relating to successful implementation of CBCS in the University.

Table f: Problems relating to successful implementation of CBCS

Sl. No	Related problems for successful implementation of CBCS	Yes	No
1	Distance between departments	8(100%)	-
2	Non availability of transportation in time	8(100%)	-
3	Unavailability of adequate infrastructure	6(75%)	2(25%)
3	Not fully choice based	7(87.5%)	1(12.5%)
5	Academic advisers are not playing their role	3(37.5%)	5(62.5%)
6	Timing allotment of OE classes have seriously affected core and soft courses in the department	5(62.5%)	3(37.5%)

From the Table 4.2.6 it could be found on analysis that, 8(100%) teachers opined that students faced problems in attending Open Elective Classes due to the long distance between departments; and due to the non-availability of buses in time after O.E classes, large number of students missed their classes in their parental departments. 7 (87.5%) teachers agreed that the CBCS introduced by Mizoram University is not fully choice based as it imposes many restrictions on the students in selecting their Open Electives, although another 1 (12.5%) disagreed. 3 (75%) teachers viewed that the University does not have the required infrastructures for the successful implementation of CBCS while 1 (12.50%) teacher did not agree. Further, very less number of teachers i.e., 3 (37.5%) opined that, Academic advisers are not playing their role while 5 (62.5%) did not support the idea. Moreover, 5 (62.5%) of the teachers expressed that timing allotted for OE classes have seriously affected core and soft courses in the department as assigning of first two periods on two days in five days week to Open Electives has seriously affected the teaching programs while,

3(37.5%) teachers opposed to this. Hence, there is a mixed opinion on various issues on Problems relating to successful implementation of CBCS.

g. Impact of CBCS on Quality and Flexibility of Education

With the introduction of Choice Based Credit System, the University experienced a great impact on the quality and flexibility of education. The following table explains the impact of CBCS, with its interdisciplinary approach, on the quality and flexibility of education.

Table g: Impact of CBCS on Quality and Flexibility of Education

Sl. No	Impact of CBCS on Education	Yes	No
1	CBCS brings quality education	6(75%)	2(25%)
2	More Flexibility in CBCS	5(62.5%)	3(37.5%)
3	OE offered under CBCS are job oriented	3(37.5%)	5(62.5%)
4	Evaluation work can be done better	5(62.5%)	3(37.5%)
5	Interdisciplinary approach leads to understanding of other disciplines	7(87.5%)	1(12.5%)
6	Number of internal assignments under C1 and C2 needs to be reduced	5(62.5%)	3(37.5%)

Table- 4.2.7 on analysis it could be found that, majority of respondents 6 (75%) felt that quality education can be achieved better through Choice Based Credit System (CBCS) rather than the old system, while other2 (25%) disagree with them. Further, 5(62.5%) appreciated to the fact that there is more flexibility in Choice Based Credit System (CBCS) while3 (37.5%) depreciate it. Again, 5(62.5%) agreed that most of the Open Electives offered by their respective department under CBCS are not job oriented so they think that CBCS, which works on credits, is a better way of evaluation.7(87.5%) teachers felt that CBCS, with its interdisciplinary approach, help students to integrate their understanding of various disciplines while only 1(12.5%) is against it.5(62.5%) agree that the number of class tests/seminars/assignments etc. under C-1 and C-2 in CBCS need to be reduced while, 3 (37.5%) depreciate to it. Hence, there is a mixed opinion on Impact of CBCS on Quality and Flexibility of Education.

h. Understanding Level of CBCS by the Students

There is a difference of understanding level of Choice Based Credit System among the students and the data grouped into three components has been placed in the following Table 4.2.8 supported with Graph- 4.2.8 for clear understanding.

Table h: Understanding Level of CBCS by the students

Sl. No	Level of understanding	No. in Support
1	Great Extent	7(11.29%)
2	Some Extent	50(80.64%)
3	Not at All	5(8.06%)

After analysis of the above Table-4.2.8 it could be found that, major chunk of students which constitute 50(80.64%) are aware of the CBCS program while, 7 (11.29%) students understand the concept of CBCS to a great extent and 5 (8.06%) students don't have any idea about the concept of Choice Based Credit System (CBCS). It is the hour that, the students should be fully appraised with the CBCS program through training, orientation etc.

i. Factors Influencing the Selection of Open Electives

While selecting Open Electives, there can be many choices of factors which influence the students. The following table reveals the influencing factors among the students in the selection of Open Electives.

Table i: Factors influencing the selection of Open Electives

Influencing Factors	No. of Respondents
Short distance between the departments	22 (35.48%)
Relevance of the Open Electives	10(16.12%)
Personal Interest	31(50%)
Selection by friends	10(16.12%)
Advice given by Faculties	6(9.68%)
Popularity of the teacher	6(9.68%)
Non-availability of choice	1(1.62%)

The Table- 4.2.9 on analysis deduced that, 31 (50%) which is the highest expressed their personal interest on CBCS while, 22(35.48%) viewed that, short distance of the departments influenced in the selection of Open Electives, 10(16.12%)

opined that they are influenced by the relevance of the Open Electives offered and influenced by their friends respectively. Further, 6(9.68%) expressed that; they choose Open Electives as per the advice of faculties and popularity of the teacher respectively. Only 1(1.62%) student conveyed for non-availability of choice. In general it can be viewed that, there is an influence of open electives and the students go by their choice of subject.

j. Problems Faced by the Students

Choice Based Credit System is beneficial for students but still many problems lies with the students due to their mobility from one place to the other. Data relating to the problems encountered by them is placed below in Table- 4.2.10 complemented with 4.2.10 for clear understanding of the issue.

Table j: Problems faced by the students

Sl. No	Types of Problems	Yes	No
1	Long distance between the departments	54(87.09%)	8(12.90%)
2	Too many core and soft courses	50(80.64%)	12(19.35%)
3	Students should have complete freedom in selection of OE	55(88.70%)	7(11.29%)
4	Soft courses should be selected by the students	62(100%)	-
5	Non availability of transportation	38(61.29%)	24(38.70%)

From the above Table- 4.2.10, it is revealed that, 62 (100%) of the student respondents think that soft course should be selected by the student themselves followed by 55 (88.70%) who feel that, students should have complete freedom in selection of OE, 54 (87.09)% of students who expressed that they face problem due to long distance between departments and 50(80.64%) who expressed that, there are too many core and soft courses followed by (38(61.29%) who viewed that they face problems regarding transportation. This shows clearly that the respondents give great importance to transportation. So it is certain that, the students encounter with problems in one way or other.

k. Importance of CBCS among Students

The introduction of CBCS has a great impact on the students which enables the students to gain more knowledge and more capabilities. The Table- 4.2.11 supported with Graph- 4.2.11 below explain the importance of CBCS among the students.

Table k: Importance of CBCS among the students

Sl. No	CBCS	No. of Respondents	Percentage
1	More emphasis on skills	8	12.91%
2	More emphasis on specialization	9	14.51%
3	More student centric	10	16.12%
4	More job oriented	4	6.45%
5	More focus on quality of education	30	48.38%
6	None of the above	2	3.22%

The above Table- 4.2.11 on analysis revealed that nearly half of the students, i.e., 30(48.38%) feel that CBCS focus more on quality education followed by 10(16.12%) who agreed that it is more student centric while 9(14.51%) students think that CBCS put more emphasis on specialization. Some of the respondents i.e., 8(12.91%) still give more importance to skill and 4 (6.45%) viewed it as job oriented. But 2 (3.22%) didn't agree any of the above statements. Hence, overall the induction of CBCS is fruitful in every respect.

1. Selection of Soft Courses under CBCS

A soft course may be a theory, practical, field based or project work which is optional for students to register. Students can exercise their choice among a set of soft courses from the list of soft courses specified for each programme of study. The Table- 4.2.12 supported with Graph- 4.2.12 below explain the selection of Soft Courses by the students in a semester.

Table 1: Selection of Soft Courses under CBCS

No. of Students Selecting Soft Course	Yes	No
Second Semester	0 (0%)	62 (100%)
Third Semester	0 (0%)	62(100%)

A study of data from the above Table 4.2.12 indicates that students of Library and Information Science in Mizoram University could not select Soft Course papers of their choice in Second Semester and Third Semester. It is revealed that 62(100%) students which comprise the total population of the study are learning the soft courses selected by the department.

m. Selection of Open Electives under CBCS

Generally a course which can be chosen from a pool of courses and which may be very specific or specialised or advanced or supportive to the discipline/subject of study or which provide an extended scope or which enables to exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course. Elective courses may be offered by the main discipline/subject of study or by sister/related discipline/subject of study. The Open Elective subjects have to be chosen by the students of second semester and third semester.

Table m: Selection of Open Electives under CBCS

No. of Students Selecting O.E	Yes	No
Second Semester	49 (80%)	13 (20%)
Third Semester	42 (68%)	20 (32%)

The analysis of the above Table 4.2.13 shows that majority of the students which constitutes 49(80%) in the second semester and 40(68%) in the third semester can select the open electives of their choice while the remaining students which comprise of 13(20%) students in the second semester and 20(32%) students in the third semester could not select open electives of their choice but rather allotted to them. So, it is clear that while some of the students cannot select their choice of open electives, majority of the students can select open electives of their choice.

n. Attendance of Students in Open Electives

Students attended Open Electives twice a week. This Open Electives is mandatory for the students to attend in the second and third semester. The students have to go to other departments to learn their choice of open electives which may be located far from the parent department. The attendance of the students in Open Electives is given in the following table 4.2.14.

Table n: Attendance of Students in Open Electives

Attendance of students	Second Semester	Third Semester
Very Regular	12 (19%)	10 (16%)
Regular	46 (74%)	42 (68%)
Irregular	4 (6%)	6 (10%)
Very Irregular	0 (0%)	0 (0%)

While analysing the above Table 4.2.14, it can be found that majority of the students which constitutes 74% in second semester and 68% in third semester are regular in attending their Open Elective classes. Some students that are 19% and 16% are very regular and few students which comprise 6% and 10% are not regular in attending their Open Elective classes. In general, it can be said that Open Elective classes are regular in Second Semesters and Third Semesters.

15. FINDINGS

After due analysis of the above tables from the questionnaires and interviewed with the students and faculties, following findings were deduced.

- 1. A total number of 70 questionnaires were circulated in which 70 questionnaires were received from the students and faculties of the department. This shows the interest of the faculties and students for implementation of CBCS in the department.
- Introduction of CBCS has increased the work load of teachers in areas of teaching, administrative work, testing and evaluating the students which in turn reduce the time for their personal research and also gives them less time for supervision of research scholars.
- Majority of the teachers opined that the number of Open Elective courses should be reduced and they agreed that complete freedom should be given to students while selecting Open Electives.
- 4. Head of Department, Deans, Teachers, Examination Staff and Students should undergo training on CBCS Rules and Regulations so that selection of Open Electives for the next semester can be done meticulously.
- 5. All of the faculties are of the opinion that freedom should be given to students while selecting the choice of Open Electives and that selection of the open electives should not be done at the preceding semester. The restrictions imposed of the department for their intake capacity should be removed so that students can have the benefit of choosing their choice of OE.

- 6. The findings also reveal that with the introduction of CBCS, workloads have also been transferred from examination to academic departments. As a result teachers as well as staff should be adequately trained.
- 7. The department has required infrastructure because IT helps in maintaining of CBCS related records. At the same time, CBCS needs lot of internal evaluation which increase the manual workload. The teachers are of the opinion that number of internal assignments under C1 and C2 needs to be reduced.
- 8. The Academic Advisers in the department are also playing their role in assisting students in selection of their Soft Courses and Open Electives.
- 9. Due to the long distance between departments, inadequate infrastructure in the University like transportation which has not been available in time, too many core and soft courses, inadequately trained teachers, and timing allotment of Open Elective classes seriously affects the selection of Open Electives, thus, imposing restrictions which make it not fully choice based.
- 10. Interdisciplinary approach leads to understanding of other disciplines and there is more flexibility in CBCS which leads to quality education as it is student centric. But at the same time, OE offered under CBCS is not job oriented.
- 11. Choice Based Credit System is a new system of learning and the findings reveal that most of the students understand Choice Based Credit System (CBCS) to some extent only and there are some students who does not understand CBCS system at all.
- 12. Majority of the students select Open Electives by their personal interest while some students select OE due to short distance between the departments. It is also found that students select OE due to the relevance of OE course offered by other departments. Students also select OE influenced by opinion or views of their classmates. They also select OE due to the advice given by the faculties and academic advisers.
- 13. The study also reveals that students encountered problems regarding long distance between the departments because of non- availability of transportation which in turn resulted in missing of classes in their parent department.
- 14. Majority of the students are also of the opinion that under CBCS, there are too many core and soft courses and that selection of the soft courses should be done by the students.
- 15. Nearly half of the students feel that CBCS focused more on quality education.
- 16. The students are also of the opinion that complete freedom should be given to them while selecting OE.

17. Attendances of students in Open Elective classes are regular in general.

16. SUGGESTIONS

Based on the feedback received from the respondents through the analysis of the data obtained through questionnaires and interview, the researcher developed suggestions for the improvement of Choice Based Credit System in the Department of Library and Information Science, Mizoram University. These suggestions are listed below:

- 1. Before starting the new session in the university, elaborative orientation regarding CBCS should be given to the students to understand the CBCS system.
- 2. The workload of the teachers should be reduced so that teachers can have more time for their personal research and for supervising research scholars.
- 3. Open Electives courses should be reduced for two to one in a semester.
- 4. Training should be organised by the concerned authority regarding CBCS guidelines, rule and regulations for Head of Department, Deans, Teachers, Examination department staff, staff of the department and students as well.
- 5. While selecting the Open Electives courses, due importance should be given to the students' opinion for selecting their choice of Open Electives. Besides, students should also be given chance to take Open Elective in the parental department.
- 6. Proper transportation should be arranged so that students can attend OE classes in other departments which are located far off from their parent department.
- 7. O.E Courses offered by different departments should be more job/skill development oriented.
- 8. Students should have complete freedom in selecting Soft courses of their choice.

 Therefore CBCS should provide more option to the students for soft course.
- 9. C-1 and C-2 evaluation criteria and no. of tests/assignments should be less in number (maximum 2) in each semester. This will reduce the burden of students and teachers and at the same time it will provide more time for the teachers in preparation for their classes.
- 10. C-1 and C-2 internal test papers should be supported by a feedback format signed by teacher and to be returned to students so that the students will know their strengths and weaknesses.
- 11. The teaching should be more inclined to audio-visual methods instead of traditional method.

17. CONCLUSIONS

The UGC has formulated various regulations and guidelines from time to time to bring efficiency and excellence in the higher education systems and maintain minimum standards and quality across the Higher Educational Institutions in India. The important measures include innovation and improvements in curriculum, teaching-learning process, examinations and evaluation systems.

All the higher education institutions across the world are implementing a system of credits. Comparatively, there is the European Credit Transfer System (ECTS) in Europe's universities, the National Qualifications Framework in Australia, Pan-Canadian Protocol on the Transferability of University Credits, Credit Accumulation and Transfer System (CATS) in UK, and even the systems operating in the US, Japan, etc are based on credit system. In compliance with these global grading system, the UGC recommended academic reforms in the recent years to let the overall improvement in the higher education system in India. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system.

While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching-learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. The UGC has come up with the Choice Based Credit System (CBCS) programme in which the students have a choice to choose from the prescribed courses which are offered as core, elective, foundation or soft courses in which they can learn at their own pace and the entire assessment is graded-based on a credit system. The basic idea is to look into the needs of the students so as to keep up-to-date with development of higher education in India and abroad.

Presently the performance of students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and

colleges based on grades. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated guidelines.

The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to access the performance of students. CBCS aims to redefine the curriculum keeping pace with the liberalisation and globalisation in education. It allows students an easy mode of mobility to various educational institutions spread across the world along with the facility of transfer of credits earned by students.

The Indian Higher Education Institutions have been moving from the conventional annual system to semester system. Currently many of the institutions have already introduced the Choice Based Credit System. The semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching.

Whether it is too early to say the implementation of CBCS in the Department of Library and Information Science, Mizoram University will be successful or not, the basic motive is to expand academic quality in all aspects, right from the curriculum to the learning-teaching process to examination and evaluation systems. However, so far multiple methods are followed by different universities across the country towards examination, evaluation and grading system, the implementation of the choice based credit system in the department seems to be a good system in assessing the overall performance of a student in a universal way of a single grading system.