

#SYLLABUS#

MASTER OF LIBRARY & INFORMATION SCIENCE (MLIS)

WITH

SEMESTER-CUM- COURSE CREDIT SYSTEM

(w.e.f. Academic Session 2024-25)



**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
SAMBALPUR UNIVERSITY
Jyoti Vihar, Burla -768019**

Website: <http://www.suniv.ac.in>

SYLLABUS OF
TWO-YEAR MASTER IN LIBRARY & INFORMATION SCIENCE (MLISC)
COURSE UNDER SEMESTER-CUM- COURSE CREDIT SYSTEM
(w.e.f. 2024-25 Academic Session)
(REVISED)

Programme Details

Name of the Department	Department of Library and Information Science
Subject	Library and Information Science
Name of the Programme	M.L.I.Sc. (Master of Library and Information Science)
Duration of the Programme	2 Years – divided into 4 Semesters (Choice Based Credit System)
Eligibility	Candidates who have passed any Bachelor's Degree examination from a recognized university under 10+2+3 system are eligible to apply for admission to the M.L.I.Sc (Library and Information Science) Programme. Candidates seeking admission to the programme shall be required to appear for a written examination Common PG Entrance Test (CPET) conducted by the Odisha State Higher Education Council, Odisha.

Programme Educational Objectives (PEO)

PEO-1	Understand the nature and basic concepts of Library and Information Science
PEO-2	Analyse the relationships among different LIS concepts
PEO-3	Perform procedures as laid down in the areas of study in LIS
PEO-4	Apply the Basic Concepts learned to execute them in LIS

Programme Outcomes (PO)

PO-1	Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions
PO-2	Effective Communication: Will be able to speak, read, write and listen clearly in person and through electronic media in English and in one Indian Language
PO-3	Social Interaction (Interpersonal Relation): Elicit views of others, mediate disagreements and prepared to work in team
PO-4	Entrepreneurship Capability: Demonstrate qualities to be prepared to become an entrepreneur
PO-5	Ethics: Recognize different value systems including your own, understand the moral dimensions and accept responsibility for them
PO-6	Environment and Sustainability: Understand the issues of environmental contexts and sustainable development
PO-7	Life-Long Learning: Acquire the ability to engage in independent and life-long learning in the context of socio-technological changes

Syllabus Structure

- (1) The MLISC Programme under Semester-cum-Course Credit System shall comprise of 4 Semesters with Core Courses of 80 Credits and Non-Core courses (Inter-disciplinary, MOOCs and Value-added courses) of 10 Credits, a total credit load of 90 Credit Hours. Each credit shall consist of 12 classes of one hour duration each.
- (2) Beside, the programme includes two non-Credit Courses- (1) Yuva Sanskar in First semester and (2) NCC/NSS/Sports/Performing Arts/Yoga in Second/Third semester. The performance in Non-Credit Courses will be evaluated in terms of 3 Grades namely, A- Excellent, B-Very Good and C-Good.
- (3) The students will take one MOOCS Course according to his/her preference in consultation with the HoD and submit the document in support of undertaking the MOOCS course to the respective Department.
- (4) The result of First, Second Third Semester will be published on the basis of 20 credits Core Courses only. The result of Fourth/Final Semester will be prepared taking into consideration 80 Credits Core Courses and 10 Credit Non-Core Courses.

FIRST SEMESTER

Course No.	Course Title	End Term	Mid Term	Credit Hours
LI-C-411	Foundation of Library & Information Science	80	20	4
LI-C-412	Knowledge Organisation (Classification)	80	20	4
LI-C-413	Knowledge Organisation (Cataloguing)	80	20	4
LI-C-414	Information Sources, Systems & Services	80	20	4
LI-C-415	Knowledge Organisation (Classification & Cataloguing) Practical	80	20	4
ES-C-417	Environmental Studies and Disaster Management	60	40	2
Total Credit Hours for the First Semester				22

SECOND SEMESTER

Course No.	Course Title	End Term	Mid Term	Credit Hours
LI-C-421	ICT and Library Automation	80	20	4
LI-C-422	Information Retrieval System	80	20	4
LI-C-423	Information Indexing & Searching	80	20	4
LI-C-424	Management of Libraries & Information Centres	80	20	4
LI-C-425	Library Automation Practical	80	20	4
IDCLI-C-426	Research Ethics and Metrics (IDC)	60	40	3
MOOCS	MOOCS Course as opted by the students			3
Total Credit Hours for the Second Semester				26

THIRD SEMESTER

Course No.	Course Title	End Term	Mid Term	Credit Hours
LI-C-511	Research Methodology	80	20	4
LI-C-512	Internet & Web Resources	80	20	4
LI-C-513	Digital Library	80	20	4
LI-C-514	Professional Skill Development	40	10	2
LI-C-515	Internship	50	00	2
LI-C-516	Digital Library Practical	80	20	4
EDPH419	Entrepreneurship Development Programme	60	40	2
Total Credit Hours for the Third Semester				22

FOURTH SEMESTER

Course No.	Course Title	End Term	Mid Term	Credit Hours
LI-C-521	Research Evaluation Metrics	80	20	4
LI-E-522	ELECTIVE PAPER (<i>Select any one</i>) 1. Preservation and Conservation of Library Resources 2. Open Access and Scholarly Communication	80	20	4
LI-C-523	Electronic Resource Management	80	20	4
LI-C-524	Information Needs and Seeking Behaviour	80	20	4
LI-C-525	Project Work	100	00	4
Total Credit Hours for the Fourth Semester				20
Total Credit Hours for all Semesters: (22 + 26 + 22 + 20)				90

FIRST SEMESTER

Course No: MLIS-411-C: FOUNDATION OF LIBRARY AND INFORMATION SCIENCE

(FM: 100/4 Credits)

Course Objective:

The objective of this course is to introduce the students with the role of libraries in the society along with the overview of the philosophy and principles library profession, and the concept of library related Acts and Policies.

Course Outcome:

1. Remember and understand the basic concepts related to Library and Information Science
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 INFORMATION AND COMMUNICATION

- 1.1 Information: Definition, Types, Characteristics, Values and Use; Data, Information, Knowledge and Wisdom.
- 1.2 Information Science: Definition, Scope and linkages with other disciplines
- 1.3 Communication: Definition, Concept, Types, Communication Models (Theories): Shannon's Theory, Lasswell's Theory

UNIT-2 NORMATIVE PRINCIPLES OF LIBRARY INFORMATION SCIENCE, LIBRARY LEGISLATIONS AND ACTS

- 2.1 Five Laws of Library Science and Application of Five Laws in Library and Information Activities
- 2.2 Library Legislation-Concept, Need, Purpose and the Salient Traits
- 2.3 A brief sketch of Library Legislation so far made in different States in India
- 2.4 Press and Registration Act, Delivery of Books (Public Libraries) Act 1954, Indian Copyright Act, 1957, Right to Information Act,2005

UNIT-3 LIBRARY DEVELOPMENT

- 3.1 Development of Libraries with Special reference to India since 1900
- 3.2 Role of UNESCO in development of Public Libraries
- 3.3 National Information Policies in India, National Knowledge Commission
- 3.4 Library Resource Sharing
- 3.5 Library Systems: Public Library, Academic Library and Special Library-Their distinguishing features and functions.

UNIT-4 LIBRARY AND INFORMATION PROFESSION AND EXTENSION ACTIVITIES

- 4.1 Professional Ethics-The Concept and need
- 4.2 Philosophy and Ethics of Librarianship
- 4.3 Publicity and Extension Activities
- 4.4 Outreach Programmes

UNIT-5 LIBRARY ASSOCIATIONS AND NATIONAL LIBRARIES

- 5.1 Library Associations: Need, Objectives and Functions
- 5.2 Library Associations: ILA, IASLIC, IFLA
- 5.3 National Library: Its concept and role
- 5.4 National Library of India and Library of Congress (USA)

Course Objective:

The objective of this course is to impart to the students an understanding of knowledge classification and the theories of library classification, to develop skills in document classification and content analysis. The students will also learn about the structure and design of various classification schemes such as DDC and UDC and CC.

Course Outcome:

1. Remember and understand the basic concepts related to library classification.
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 FUNDAMENTALS OF LIBRARY CLASSIFICATION

- 1.1 Definition, Need, Purpose and Functions of Classification, Basic Terminologies and historical perspectives
- 1.2 Basic Terminologies of Library Classification
- 1.3 Species of Library Classification- Enumerative vs. Faceted
- 1.4 Call Number: Class Number, Book Number and Collection Number

UNIT-2 GENERAL THEORY OF LIBRARY CLASSIFICATION

- 2.1 Major Schemes of Library Classification- DDC, UDC & CC
- 2.2 Fundamental Categories (PMEST), Postulates pertaining to PMEST
- 2.3 Normative Principles of Library Classification
- 2.4 Facet Analysis, Principles of Facet Sequence, Phase Relation, Common Isolates

UNIT-3 NOTATION

- 3.1 Notations: Definition, Purpose, Types, Qualities
- 3.2 Canons of Notational Plane
- 3.3 Patterns of Notation used in DDC, UDC and CC
- 3.4 Design of Depth Classification Scheme: Basic considerations and methodology

UNIT-4 UNIVERSE OF KNOWLEDGE

- 4.1 Universe of Subjects- Types of Subjects, Structure of subjects
- 4.2 Modes of Formation of Subjects
- 4.3 Mapping of subjects in different Schemes of classification
- 4.4 Methodology for the Study of Subjects

UNIT-5 RECENT TRENDS IN LIBRARY CLASSIFICATION

- 5.1 Relevance of Classification in the context of Computerized/Digital Libraries,
- 5.2 Online Classification Schemes-Web Dewey, UDC Online, LCC
- 5.3 Organizations, Societies and Research Groups-LRC, FID/CR, CRG, DRTC, ISKO
- 5.4 Classification of Web resources, Folksonomy, Web ontology

Course No: MLIS-413-C: KNOWLEDGE ORGANISATION (CATALOGUING)
(FM: 100/4 Credits)

Course Objective:

The objective of this course is to introduce the students with the principles and theoretical aspects of cataloguing. The students will also learn about the features of various cataloguing standards including computerized catalogue and use of subject headings.

Course Outcome:

1. Remember and understand the basic concepts related to library cataloguing
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 BASICS OF LIBRARY CATALOGUING

- 1.1 Catalogue: Concept, Purpose and Objectives of Library Catalogue
- 1.2 Forms of Catalogue : Outer and Inner Forms
 - 1.2.1. Outer Forms: Conventional and Non-Conventional
 - 1.2.2. Inner forms: Alphabetical, Classified and Alphabetico-Classified Catalogue
- 1.3 Library Catalogue and Five Laws of Library Science
- 1.4 Entries: Types, Formats & their functions, Data elements in different types of Entries

UNIT-2 SUBJECT CATALOGUING, CENTRALISED AND CO-OPERATIVE CATALOGUING

- 2.1 Subject Cataloguing: Concept, Objectives, General Principles & Problems of Subject approach
- 2.2 Subject Heading Lists & their features: Library of Congress Subject Headings (LCSH) and Sears List of Subject Headings (SLSH)
- 2.3 Subject Cataloguing by Chain Indexing
- 2.4 Centralised and Co-operative Cataloguing

UNIT-3 CATALOGUING CODES

- 3.1 Cataloguing Codes: Definition, Need, Historical Developments
- 3.2. Features of Anglo-American Cataloguing Rules -2 (AACR-2, Revised Edition)
- 3.3 Features of Classified Catalogue Code (CCC 5th Edition)
- 3.4 Features of Resource Description and Access (RDA)

UNIT-4 COMPUTERISED CATALOGUING

- 4.1 Need for Computerized Cataloguing,
- 4.2 OPAC, WEBPAC, Social Online Public Access Catalog (SOPAC)
- 4.3 Cataloguing of Web Resources/Digital materials
- 4.4 Retro-conversion

UNIT-5 CURRENT TRENDS IN STANDARDIZATION OF BIBLIOGRAPHICAL DESCRIPTION & INFORMATION RETRIEVAL

- 5.1 ISBD
- 5.2. Dublin Core
- 5.3 MARC-21
- 5.4 Z39.50

Course Objective:

The objective of this course is to familiarize students with a broad range of information source, i.e., from early forms to the modern forms and to develop evaluation and practical skills in dealing with information sources. Student will be trained in developing various information services and products. They will also get acquaintance with different Library Networks, National Information Systems and Global Information Systems.

Course Outcome:

1. Remember and understand the basic concepts related to various information sources, systems and services
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 INFORMATION SOURCES**

- 1.1 Sources of Information-Primary, Secondary & Tertiary; Documentary and Non-documentary
- 1.2 Bibliographical Sources: Bibliographies, Abstracting journals, Indexing Journals ; Bibliographical Control: Meaning, Purpose, UBC and UAP
- 1.3 Reference Sources: Dictionaries, Encyclopedias, Almanacs, Year Books, Directories, Handbooks, Manuals, News-Summaries, Concordances, Biographical, Geographical Information Sources

UNIT-2 ECONOMICS OF INFORMATION

- 2.1 Value of Information as a resource and commodity
- 2.2 Economics of Information Sources and Production
- 2.3 Information as a factor of production

UNIT-3 INFORMATION SYSTEMS

- 3.1 Information System: Basic Concept, Components and evaluation
- 3.2 Categories of information systems: libraries, documentation centres, referral centres, information analysis centres, databanks etc. their structure and functions.
- 3.3 Different types of information systems: Decision Support Systems, MIS etc.
- 3.4 National and International Information Systems and Library Networks: NISCAIR, DESIDOC, NASSDOC, NISSAT; Global Information Systems: INIS, AGRIS, MEDLARS; Library Networks: DELNET and INFLIBNET - their objectives, functions, services, and activities.

UNIT-4 INFORMATION SERVICES

- 4.1 Information Services : Concept, Définition, Need & Purpose; Reference Service
- 4.2 Current Awareness Services (CAS), Selective Dissemination of Information (SDI), Bibliographic, Referral, Document Delivery Service (DDS) , Translation service
- 4.3 Abstracting and Indexing Services: Meaning, Use. Types and Parts.
- 4.4 Current trends in information service

UNIT-5 INFORMATION ANALYSIS, CONSOLIDATION AND REPACKAGING

- 5.1 Information Analysis and Consolidation: Concept, Need and Purpose
- 5.2 Packaging and Re-Packaging: Concept, Need, Purpose and Criteria
- 5.3 Information Consolidation Products: Types, Design and Development

Course Objective:

The objective of this course is to impart practical training to the students in Classification and Cataloguing of various types of documents procured by a library. The students will be able to develop their practical skills in how to analyse subjects, structure, synthesize, assign class numbers and also prepare catalogue entries for documents in a library.

Course Outcome:

1. Remember and understand the basic concepts related to classification and cataloguing of documents in a library
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 CLASSIFICATION OF DOCUMENTS

Classification of Documents representing Simple, Compound and Complex Subjects using the following Schemes of Library Classification:

1. DDC 18th Edition
2. UDC Medium Edition

UNIT-2 CATALOGUING OF BOOKS (According to AACR-2 Revised Edition)

- A. Works of Personal Authorship
- B. Works of Joint Authorship
- C. Works of Corporate Authorship
- D. Pseudonymous Works

UNIT-3 CATALOGUING OF NON-BOOK MATERIALS (According to AACR-2 Revised Edition)

- A. Cartographic Materials
- B. Manuscripts
- C. Motion Pictures
- D. Video Recording

SECOND SEMESTER

Course No: MLIS-421-C: ICT AND LIBRARY AUTOMATION

(FM: 100/4 Credits)

Course Objective:

The objective of this course is to introduce the students with the basic concept of information communication technology. The students will also learn about the process of library automation and its related technology.

Course Outcome:

1. Remember and understand the basic concepts related to ICT and Library automation
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 COMPUTER AND BASIC TERMINOLOGIES OF IT

- 1.1 Computer: Definition, Concept, History, Characteristics and functions
- 1.2 Computer Hardware: Memory, Input & Output devices
- 1.3 Basic Terminologies and their Conceptual Meaning: Log-on and Log-off, Online, Offline, Command, End User and Intermediary, Modem, Password, Prompt, Bit and Byte, and Response Time, Bandwidth, Processors, ASCII, bug, Back up, Virus, Micro Processor

UNIT-2 PROGRAMMING LANGUAGES AND SOFTWARE FUNDAMENTALS

- 2.1 Programming Languages : Types, Characteristics and their Applications
- 2.2 Computer Software- System Software and Application Software
- 2.3 Operating System: Windows and Linux

UNIT-3 NETWORKING

- 3.1 Definition, Need, Client server Architecture
- 3.2 Network types & Topologies
- 3.3 Components of a Network

UNIT-4 LIBRARY SOFTWARE AND AUTOMATION OF LIBRARIES

- 4.1 An Overview of Library Softwares, types and their features:
- 4.2 Library Automation: Definition and automated housekeeping operations
- 4.3 Selection and implementation of LMS software
- 4.4 Study of Individual Automation Software Packages and their application: LIBSYS, SOUL, KOHA & NewGenLib

UNIT-5 LATEST TRENDS IN ICT APPLICATION

- 5.1 Radio Frequency Identification (RFID) and its applications in libraries
- 5.2 Internet and Web technology: What is Internet, How does it work, Basic web terminologies- TCP/IP, DNS, URL, Telnet, FTP, WWW
- 5.3 Multimedia technology and its application in libraries

Course Objective:

The objective of this course is to introduce the students with the concept of Information Storage and Retrieval System (ISRS), its types and models. The students will also learn about different methods used to evaluate ISRS.

Course Outcome:

1. Remember and understand the basic concepts related to Information storage and retrieval
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 FUNDAMENTALS OF INFORMATION RETRIEVAL SYSTEM**

- 1.1 Information Retrieval System (IRS): Definition, Concept, Components, Functions, and Qualities
- 1.2 ISRS Systems: Types of IRS- Design and Operation
- 1.3 Database: Definition, Concept and Components, Structures

UNIT-2 CLASSICAL MODELS OF INFORMATION RETRIEVAL

- 2.1 Information Retrieval Models: Basic Concept,
- 2.2 Boolean Model, Vector Space Model, Probabilistic Model
- 2.3 Alternative Set Theoretic Models: Fuzzy Set Model, Extended Boolean Model

UNIT-3 EVALUATION AND COMPATIBILITY

- 3.1 Evaluation of ISRS: Purpose, Criteria and Steps
- 3.2 Common Evaluation Measures: Recall vrs Precision
- 3.3 Evaluation Experiments and Initiatives: Cranfield Tests, SMART, Evaluation of Search Engines
- 3.4 Compatibility of Information Storage and Retrieval System: Areas of Compatibility; Interface Compatibility, Principal issues

UNIT-4 INTELLIGENT INFORMATION RETRIEVAL

- 4.1 Intelligent Information Retrieval: Introduction, Intelligent Retrieval System: Artificial Intelligence (AI), Applications of AI technologies in Libraires
- 4.2 Expert Systems: Definition, Kinds & Components, Application of Expert System in Library & Information Services
- 4.3 Semantic Web: its application in knowledge management

UNIT-5 RECENT TRENDS IN INFORMATION RETRIEVAL

- 5.1 Web Information Retrieval-Characteristics of Web IR-Components of Web IR-Crawler, Page Repository, Indexing Module, Query Module, Ranking Module-Web IR Tasks
- 5.2 Natural Language Processing (NLP): its application in information retrieval
- 5.3 Data mining, Data Warehousing
- 5.4 Web Mining: Concepts, Techniques and applications

Course Objective:

The objective of this course is to familiarize students with basic Search tools, techniques and to familiarize them different Indexing Languages and Indexing techniques. They will also get thorough knowledge on trends in Online Searching such as Cluster Based Web search; Federated Search; searching through Meta search engine.

Course Outcome:

1. Remember and understand the basic concepts related to Search tools and techniques
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 SEARCH STRATEGIES**

- 1.1 Search Strategy: Concept, need, development of a search strategy
- 1.2 Process for Searching: Preparing to search, Feedback and Refining
- 1.3 Basic Search Techniques: Word and Phrase, Boolean, Truncation, Proximity, Field, Metadata, Limit Search Techniques

UNIT-2 ONLINE SEARCHING

- 2.1 Online Searching and Retrieval: Definition, Historical development, basic features ; Searching vs. browsing
- 2.2 Online Search tools: Search Engines- Primary Search Engines, Meta search Engines, Focused crawler based search engines and Directories; Subject Gateways
- 2.3 Google Search tools and techniques

UNIT-3 INDEXING LANGUAGE AND VOCABULARY CONTROL

- 3.1 Indexing Language: Types and Characteristics
- 3.2 Vocabulary Control: Definition and Purpose. Tools of Vocabulary Control
- 3.3 Thesaurus: Structure and Function; Design/Construction of Thesaurus.(Printed material)

UNIT-4 INDEXING TECHNIQUES

- 4.1 Post Coordinate Indexing, Uniterm, KWIC, KWOC, Keyword Indexing, Citation Indexing
- 4.2 Citation Indexing – Meaning and importance, Different citation indexes: SCI, SSCI, AHCI
- 4.3 Automatic Indexing: Concept and Process; Manual vrs Automatic Indexing,
- 4.4 Automatic Term Extraction and Weighing, Automatic Text Retrieval

UNIT-5 CURRENT TRENDS IN ONLINE SEARCHING

- 5.1 Federated search: Concept, Need, Functions, Advantages, Disadvantages
- 5.2 Federated Search providers- Free and Commercial; Federated Search Engine vs Meta search engine;
- 5.3 Cluster Based Web search

Course No: MLIS-424-C: MANAGEMENT OF LIBRARIES AND INFORMATION CENTERS
(FM: 100/4 Credits)

Course Objective:

The objective of this course is to introduce the students with the basic concept of management including Human Resource Management, Financial Management and its applicability in library operations. The students will also learn about stress management, time management, change management and project management.

Course Outcome:

1. Remember and understand the basic concepts related to library management
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1: BASICS OF MANAGEMENT

- 1.1 Management: Concept, Administration vs. Management & Functions of Management (POSDCORB)
- 1.2 Management Schools of Thought: Classical, Neoclassical and Modern Management Theory
- 1.3. Principles of Management: Scientific Principles & Administrative Principles
- 1.4 Application of Management Principles in Libraries
- 1.5 Management Information System (MIS)

UNIT-2: MANAGEMENT OF LIBRARY HOUSE KEEPING OPERATIONS

- 2.1 Different Sections of libraries and information centers and their functions
- 2.2 Acquisition Procedures: Selection Principles Ordering and Accessioning
- 2.3 Technical Processing: Classification, Cataloguing and Physical Processing
- 2.4 Serial Control, Circulation and Maintenance
- 2.5 Stock Verification and Weeding: Policies and Procedures

UNIT-3: HUMAN RESOURCE MANAGEMENT

- 3.1 Human Resource Management: Concept and Importance
- 3.2 Human Resource Planning: Estimating Manpower Requirements
- 3.3 Methods of Manpower Planning Job Analysis, Job description, Recruitment, Selection, Induction& Deployment
- 3.4 Human Resource Development: Performance Appraisal, Training & Development

UNIT-4: FINANCIAL MANAGEMENT AND TQM

- 4.1 Sources of Finance
- 4.2 Budgeting: Concept, Types of budgets-Line, ZBB, PPBS
- 4.3 Total Quality Management (TQM): Its Concept, Contribution of TQM Pioneers
- 4.4 Quality Indicators in LIS: LibQUAL, ISO-9000

UNIT-5: LATEST TRENDS IN LIBRARY MANAGEMENT

- 5.1 Stress Management
- 5.2 Time Management
- 5.3 Project Management
- 5.4 Change Management

Course Objective:

The objective of this course is to train the students with the use of software related to office automation and library automation. The students will also acquaint with few programming languages and use of database management systems.

Course Outcome:

1. Remember and understand the basic concepts of programming language and software related to library automation.
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 USE OF SYSTEM SOFTWARE AND APPLICATION SOFTWARE**

- 1.1 WINDOWS-10, Linux
- 1.2 MS-Word, EXCEL, POWERPOINT, MS-ACCESS

UNIT-2 HANDS ON EXPERIENCE WITH LIBRARY AUTOMATION SOFTWARE (ANY ONE)

- 2.1 NewGENLIB
- 2.2 E-Granthalaya
- 2.3 Koha

UNIT-3 PROGRAMMING LANGUAGE AND DATABASES

- 3.1 Basic Programming in HTML, C, PHP and Java
- 3.2 Opensource RDBMS (MySQL and PostGreSQL)

Course Objectives

The objective of this course is to familiarize students with basic concepts of Research ethics and different quantitative metrics used for measuring research impact. To aware the students about different types of research misconduct and to avoid plagiarism.

Course Outcome:

1. Remember and understand the basic concepts related to research ethics and metrics.
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

UNIT-1: RESEARCH ETHICS

- 1.1 Ethics with respect to science and research, Intellectual Honesty and research Integrity
- 1.2 Principles of Research Ethics
- 1.3 Research Communication: Definition, Types of research publications
- 1.4 Open access scholarly communication, Definition, Types, Need, Merits and Pitfalls, Major Open Access Initiatives

UNIT-2: RESEARCH MISCONDUCT

- 1.1 Research Misconduct, definition, types: Falsification, Fabrication, Plagiarism, Conflict of Interest, and Salami Slicing
- 1.2 Predatory Publications, Definition, Characteristics, Identification and avoidance
- 1.3 Copyright and Creative Commons
- 1.4 Guidelines against Research Misconduct: UGC, COPE and WAME

UNIT-3: PLAGIARISM

- 1.1 Definition and concepts of plagiarism, detection of plagiarism, different plagiarism detection tools
- 1.2 Different types of plagiarism-Global Plagiarism, Verbatim Plagiarism, Paraphrasing Plagiarism, Patchwork Plagiarism, Self Plagiarism
- 1.3 Citing, Quoting and paraphrasing- Dos and Don'ts, acceptable practices and procedure
- 1.4 Regulations of Plagiarism in India- UGC

UNIT-4: RESEARCH METRICS

- 1.1 Research Metrics, Definition, Need, Purpose, function and types
- 1.2 Journal Level Metrics: Journal Impact Factor, CiteScore, SJR, SNIP
- 1.3 Author Level Metrics: h-index, g-index, i10-index, m-index
- 1.4 Citation Databases and Indexing Services: Web of Science, Scopus, and Google Scholar

THIRD SEMESTER

Course No: MLIS-431-C: RESEARCH METHODOLOGY

(FM: 100/4 Credits)

Course Objective:

The objective of this course is to introduce the students with the basic concept of research methodology including research types and various methods, tools, techniques used in LIS research. The students will also be familiar with the concept of citation analysis and bibliometric study.

Course Outcome:

1. Remember and understand the basic concepts related to Research Methodology and Bibliometrics
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 FUNDAMENTAL CONCEPTS OF RESEARCH

- 1.1 Research-Definition, Concept, Elements, Functions, Purpose and Scope
- 1.2 Research and its Classification - Pure Vs Applied Research, Individual Vs Collaborative, Interdisciplinary Vs Multidisciplinary, Team, Relay Research
- 1.3 Factors to be considered in determining Research Problems

UNIT-2 RESEARCH METHODS AND DATA COLLECTION

- 2.1 Methods of Research: Survey Method, Case Study Method and Delphi Techniques
- 2.2 Scientific Method-Its Concept, History and Procedural Steps
- 2.3 Methods of Data Collection: Primary data- Questionnaire, Interview and Observation
- 2.4 Secondary data; Historical/Recorded data

UNIT-3 RESEARCH DESIGN, PLANNING AND REPORT WRITING

- 3.1 Research Design - Its concept, Purpose, Attributes, Components and steps
- 3.2 Synopsis-Its concept and Essential Components
- 3.3 Hypothesis-Its concept, Functions, Types and Sources
- 3.4 Report Writing-Concept, Attributes, Qualities and Outlines of a Good Report

UNIT-4 RESEARCH ETHICS

- 4.1 Ethics with respect to science and research, Intellectual Honesty and research Integrity
- 4.2 Principles of Research Ethics
- 4.3 Research Communication: Definition, Types of research publications
- 4.4 Research misconduct- definition, types, Dos and Don'ts

UNIT-5 STATISTICAL METHODS – BASICS

- 5.1 Statistical Methods-Its Concept, Definitions, Basic Steps, Factors involved
- 5.2 Frequency Distribution
- 5.3 Mean, Median, Mode, Standard Deviation and Range
- 5.4 Types of Time Series and Correlation
- 5.5 Sampling Techniques-Data, Correlation and Regression, Use of z and χ^2 Statistics

Course Objective:

The objective of this course is to familiarize students with a broad range of Web based information sources, i.e., Online Database, E-books, E-journals, E-prints, E-databases and to acquaint students with various internet based information resources such as Library Consortia, Open access resources and OA initiatives in India. Students will get detailed idea about various Subject Based Information Sources on web.

Course Outcome:

1. Remember and understand the basic concepts related to Internet and Web resources
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 GROWTH OF INTERNET AND WEB RESOURCES**

- 1.1 Internet: Definition & Concept, inception, growth and development
- 1.2 Basic Internet services-E-Mail, FTP, Telnet, IRC, News groups
- 1.3 Web Browser: Concept, function; Features of Internet Explorer & Firefox

UNIT-2 INTERNET AND ORGANIZATION OF WEB RESOURCES

- 2.1 Organization of Web Resources: Classification & Cataloguing
- 2.2 Selection and Acquisition of Web Resources: Need, Standards, and Criteria
- 2.3 Online Database: It's Concept and Taxonomy-Bibliographic, Full text, Numeric , Citation Searching

UNIT-3 INTERENET BASED INFORMATION RESOURCES

- 3.1 E-resources on the Web, E-books, E-journals, E-prints, E-databases
- 3.2 Open Access initiatives: Philosophy, grounds of OA, benefits, OA initiatives in India
- 3.3 Library Consortia: Definition, need, function; Library consortia initiatives in India

UNIT-4 SUBJECT BASED INFORMATION SOURCES

- 4.1 Web based Social Science Information
- 4.2 Web based Information Sources in Health and Medicine
- 4.3 Web based Information Sources in Business Management
- 4.3 Web Based Information Sources in Engineering

UNIT-5 LATEST TRENDS AND TOOLS OF INTERNET

- 5.1 Web 2.0: Definition and Concept, Features, Introduction to Web 3.0 and Web 4.0
- 5.2 Web 2.0 Tools: Wiki, Blog, Social Bookmarking, Video Sharing, Document Sharing, Social Networking, RSS; Application of Web 2.0 in libraries- Library 2.0
- 5.3 Cloud Computing: Concept, Need, Functions; Cloud computing application in Library

Course No: MLIS-433-C: DIGITAL LIBRARY**(FM: 100/4 Credits)****Course Objective:**

The objective of this course is to introduce the students with the basic concept of digital libraries and major digital library initiatives. The students will also be familiar with the components and architecture of digital library along with related legal issues.

Course Outcome:

1. Remember and understand the basic concepts related to Digital library and information systems
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:**UNIT-1 INTRODUCTION AND OVERVIEW TO DIGITAL LIBRARIES**

- 1.1 Digital Libraries: Conceptual Framework; Definitions, Models and Theories
- 1.2 History and evolution of Digital Libraries, Digital Divide
- 1.3 Issues and challenges involved in building digital libraries
- 1.4 Major Digital library Initiatives in India and abroad

UNIT-2 COLLECTION DEVELOPMENT IN DIGITAL LIBRARIES

- 2.1 Digital Resources: Nature, Characteristics and types
- 2.2 Building Digital Library Resources – Born Digital and Digitized, Digital Conversion: general issues, digitization process, standards, file formats, Unicode, Metadata
- 2.3 Selection and Acquisition of materials for Digitization
- 2.4 Digital Collection Management and Evaluation – Issues and Strategies

UNIT-3 DIGITAL LIBRARY ARCHITECTURE

- 3.1 DL Architecture Overviews, Principles and Types: Distributed, Federated, Service Oriented and Component based Architectures.
- 3.2 Digital Library Components: Identifiers – Handles – Digital Object Identifier (DOI) Persistent Uniform Resource Locator (PURL), Interoperability, Security
- 3.3 Digital Library Software: Open Source – GSDL & DSpace
- 3.4 User Interface for DL – Need, Design principles for effective user interface

UNIT-4 INFORMATION MANAGEMENT AND ACCEESS

- 4.1 Metadata: Role of Metadata in Digital Resource Management; Metadata Harvesting
- 4.2 Metadata Schemas: Generic Schemas: DCMI, MODS, TEI; Domain Specific Schemas: METS, VRA Core
- 4.3 Information Access in Digital Libraries-Open Access
- 4.4 Information Discovery in DL– Harvesters and Federated Search Engines, OAIPMH, OpenURL, Web Portals

UNIT-5 PRESERVATION AND LEGAL ISSUES

- 5.1 Legal Issues of DL – Intellectual Property Rights (IPR), Copyright, Open Licenses – GNU, Creative Commons
- 5.2 Approaches to Digital Preservation: Policies & Strategies
- 5.3 Preservation Metadata Maintenance Activity (PREMIS) and Preservation Projects
- 5.4 Digital Archiving: Concepts, Methods and Procedures, Self Archiving Policies

Course No: MLIS-434-C: PROFESSIONAL SKILL DEVELOPMENT

(FM: 50/2 Credits)

Course Objective:

The basic objective of this course is to orient the students with essentials of Communication in LIS Profession. The students will be acquainted with various Communication Skills such as Listening skill, Speaking Skills and writing skills including project writing abilities..

Course Outcome:

1. Remember and understand the basic concepts related to Communication skills for LIS Professionals
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT I PERSONAL COMMUNICATION SKILL

- 1.1 Listening: Meaning, Scope, Types, Essentials of good listening, Listening Process, Barriers to Listening and Strategies to improve Listening
- 1.2 Speaking: Meaning, Scope, Factors affecting Speaking, Strategies for developing effective speaking skills and Voice Modulation
- 1.3 Presentation: Planning, Designing and Delivery of Presentation. Enhancing presentation with fonts, colours, tables & Illustrations and other visual aids
- 1.4 Group Discussions: Importance, Process, Rules, Significant skills and Common mistakes

UNIT-II PROFESSIONAL COMMUNICATION SKILL

- 2.1 Letter writing – Letters of promotion & warning letters, Commercial Letters, Enquiries, Quotations and Tender Notices, purchase order, delivery note, invoice & credit note, Correspondence with Public Authorities, Preparing Minutes of Meetings;
- 2.2 Internal Communication: Memo, Office Order, Office Circular, Office Note, Correspondence with Branch Offices.
- 2.3 Report writing, Project Reports, Executive Summary of Documents. Press Releases, Design of Brochures, Leaflets, Bulletins and Newsletters
- 2.4 Official E-mail Communications

Course No: MLIS-435-C: INTERNSHIP**(FM: 50/2 Credits)****Course Objective:**

The basic objective of this course is to orient the students with practical library operations in modern/automated libraries. The students will be acquainted with various technical and managerial skills.

Course Outcome:

1. Remember and understand the basic concepts related to routine library operations
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

The students shall have to undergo internship program in a university library or a research library with advanced ICT facilities. The duration of the Internship Programme is 30 days. On completion of the internship programme, the candidate should have to submit the report of his/her work experience. The respective library where the candidates complete the internship program shall submit the performance appraisal report of the candidate. The marks of the Internship programme will be distributed as follows:

- (a) Internship Report of the Student: 30 Marks
- (b) Performance Appraisal Report by the competent authority of the library: 10 Marks
- (c) Viva-voce: 10 Marks

Course No: MLIS-436-C: DIGITAL LIBRARY PRACTICAL
(FM: 100/4 Credits)

Course Objective:

The objective of this course is to provide hands on experience to students on library software especially used for bibliographic data management and building digital libraries. The students will also be trained with how to install, customize and use different applications of the software.

Course Outcome:

1. Remember and understand the basic concepts related to library softwares for Digital Library, Content Management and reference management
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 DIGITAL LIBRARY SOFTWARE

- 2.1 GSDL
- 2.2 D-Space

UNIT-2 CONTENT MANAGEMENT AND REFERENCE MANAGEMENT

- 1.1 Joomla
- 1.2 Drupal

.UNIT-3 Reference Management Software

- 3.1 Mendeley
- 3.2 Zotero

FOURTH SEMESTER

Paper- MLIS-441-C: RESEARCH EVALUATION AND METRICS

(FM: 100/4 Credits)

Course Objectives:

The objectives of this course is to provide an understanding for Bibliometrics, Sceintometrics, Informatics & Webometrics to the students. It also helps students to understand calculation of research impact and mapping of science using science mapping tools.

Course Outcome:

1. Remember and understand the basic concepts related to ICT and Library automation
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 INTRODUCTION TO INFORMATION METRICS

- 1.1 Bibliometrics, Sceintometrics, Webometrics, Informetrics: Concept, Origin and Developments
- 1.2 Bibliometric Laws: Lotka's Law, Bradford's Law, Zipf's Law
- 1.3 Application of Bibliometric laws

UNIT-2 CITATION ANALYSIS

- 2.1 Concept of Citation, Citation count, Self-citation, Co-citation, Bibliographic Coupling
- 2.2 Impact Factor: origin, concept, need, measurement and variations
- 2.3 Citation and Quality Indicators: H-index, I10 - index, G-index

UNIT-3 TOOLS AND TECHNIQUES

- 3.1 Citation Databases: Web of Science, Scopus, ICI, Google Scholar, Publish or Perish, SCImago Journal and Country Rank
- 3.2 Webometric tools & techniques
- 3.3 Research impact analysis: IRINS

UNIT-4 MAPPING OF SCIENCE

- 4.1 Mapping of Science: Concept, need, Techniques and steps
- 4.2 Tools for Mapping of Science
- 4.3 Mapping of Science with VOS Viewer and SciMAT

UNIT-5 ALTMETRICS

- 5.1 Altmetrics: Concept, Origin, Developments & Techniques
- 5.2 Altmetrics Tools: PLOS, Impactstory, Plum Analytics, Altmetric.com
- 5.3 Pros and Cons of Altmetrics over traditional metrics

Course Objective:

The objective of this course is to make the students familiar with the concept of preservation of different types of library materials. The students will also learn about digital preservation and various digital preservation initiatives.

Course Outcome:

1. Remember and understand the basic concepts related to preservation and conservation of library materials.
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 CONCEPT OF PRESERVATION AND CONSERVATION

- 1.1 Preservation and Conservation: Concept, Need & History
- 1.2 Evolution of Writing Materials
- 1.3 Inherent characteristics of the Library Materials – Manuscripts, Books, Periodicals and Newspapers

UNIT-2 HAZARDS TO LIBRARY MATERIALS

- 2.1 Environmental Factors – Temperature, Humidity, Light and Dust
- 2.2 Biological Factors – Fungi, Insects and Other Pests
- 2.3 Chemical Factors – Chemicals used in Production and Preservation of Documents

UNIT-3 PREVENTIVE METHODS OF PRESERVATION OF LIBRARY RESOURCES

- 3.1 Preventive Measures for Environmental Factors
- 3.2 Preventive Measures for Biological and Chemical Factors
- 3.3 Disaster Preparedness/Response
- 3.4 Care and Handling of Library Resources

UNIT-4 NON-BOOK MATERIALS AND THEIR PRESERVATION

- 4.1 Variety of Non-Book Materials
- 4.2 Physical Environment for Storing of Non-Book Materials
- 4.3 Care and Handling of Non-Book Materials

UNIT-5 CURRENT TRENDS IN PRESERVING THE LIBRARY MATERIALS

- 5.1 Digital Preservation: It's Need
- 5.2 Challenges and Strategies for Preserving Digital Contents
- 5.3 Role of International/National Organisations
- 5.4 Indian Initiatives towards Digital Preservation

Course Objectives:

The objective of the course is to help students to understand the concepts of Open access, its benefits & different paths or routes of open access. It aims for helping students to understand importance of Open Licenses and Open Educational Resources.

Course Outcome:

1. Remember and understand the basic concepts related to Open Access and Open Educational Resources
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1	INTRODUCTION TO OPEN ACCESS
	1.1 Open Access: Definition, Purpose, Merits and pitfalls
	1.2 Philosophy and history of Open Access
	1.3 Open Access types- Gold, Green, Diamond, Hybrid, Bronze and Black
	1.4 Advocates of Open Access
UNIT-2	OPEN ACCESS INITIATIVES
	2.1 Open Access Conventions- Budapest, Bethesda and Berlin
	2.2 Global Open Access initiatives
	2.2 OA initiatives in India
	2.3 OA Policies and Mandates in India
UNIT-3	POPULAR OPEN ACCESS RESOURCES AND INSTITUTIONAL REPOSITORIES
	3.1 Open Access Digital Resources: arXiv, PubMed, Shodhganga
	3.2 Networked Digital Library of Theses and Dissertations (NDLTD), Directory of Open Access Journal (DOAJ), Directory of Open Access Books (DOAB), Directory of Open Access Repositories (DOAR)
	3.3 Institutional repositories: Definition, objectives, purpose, technology and workflows.
UNIT-4	OPEN LICENSES
	4.1 Introduction to Open Licenses, Need and Purpose
	4.2 Guide to Open Licensing, Principles and features
	4.3 GNU Open License for documents
	4.3 Creative Common Licenses- features and types
UNIT - 5	OPEN EDUCATIONAL RESOURCES (OER)
	5.1 Introduction to OER, Definition, types, features, forms, benefits
	5.2 OER Platforms in India- SWAYAM, NPTEL, E-PG Patshala
	5.3 Major International OER Platforms
	5.4 OER Policy- objective, elements, execution- a few case studies

Course Objective:

The objective of this course is to introduce the students with the basic concept of electronic resources, and Electronic Resource Management System (ERMS). The students will be acquainted with the application, workflow and technology framework of popular ERMS.

Course Outcome:

1. Remember and understand the basic concepts related to Electronic resource management
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1 INTRODUCTION TO E-RESOURCES

- 1.1 Electronic Resources: Definition, Emergence, features, advantages and disadvantages, Print vs E-resources
- 1.2 Types of E-Resources: Databases, E-Books, E-Journals, Multimedia objects, E-references, Scholarly materials, Subject Guides, Web Search Tools, Subject Gateways
- 1.3 Effective E-Resource Framework, E-Resource Life Cycle

UNIT-2 ELECTRONIC RESOURCE MANAGEMENT SYSTEM (ERMS)

- 2.1 ERMS: Concept, need, features, types, functional requirements, benefits
- 2.2 Application Modules of ERMS
- 2.3 ERM Technology Framework: OpenURL, DLTERM

UNIT-3 ERM WORKFLOW

- 3.1 Principles and Policies of E-Resource Development, Selection, Licensing, Renewal, Deselection
- 3.2 Acquisition, Technical Services, Delivery, ILL, Marketing and maintenance
- 3.3 Content Providers, Library-vendor relation, and collaboration

UNIT-4 USAGE, EVALUATION AND IPR

- 4.1 Use Statistics-COUNTER, Citation Studies, Observation Logs, Interviews and Focus Groups
- 4.2 Evaluation of E-Resources: Need, Criteria and Methods
- 4.3 Copyright, Fair use, Relevant Acts, Digital Rights Management (DRM)

UNIT-5 ARCHIVING AND PRESERVATION

- 5.1 E-Archives: Meaning, Features, Registry Models
- 5.2 Preservation of E-Resources: Meaning, Challenges, issues and strategies
- 5.3 Preservation Policies, Preservation Initiatives-LOCKS and CLOCKS

Course Objective:

The objective of this course is to introduce the students with the basic concept of information seeking behavior and information literacy. The students will also learn different techniques of user studies and methods of user education programmes.

Course Outcome:

1. Remember and understand the basic concepts related to Information needs and Seeking Behaviour
2. Analyse the Various Concepts to understand them through case studies
3. Apply the knowledge in understanding practical problems
4. Execute/create the Project or field assignment as per the knowledge gained in the course

Course Content:

UNIT-1	TYPES OF USERS AND THEIR NEEDS 1.1 Composition of User Community 1.2 Classification of Users: Planners, Policy Makers, Managers, R&D Personnel, People at Grass Root, Academics 1.3 Assessment of Information Needs of Users
UNIT-2	METHODS AND TECHNIQUES OF USER STUDIES 2.1 User Study: Its Need, Types, benefits, and Steps in Planning User Studies, impact on LIS 2.2 Questionnaire Method 2.3 Case Study Method & Interview Method 2.4 Observation Method and Survey Method
UNIT-3	INFORMATION SEEKING AND USES OF INFORMATION 3.1 Information Seeking Behaviour (ISB): Concept and Models 3.2 Information Seeking Behaviour of different user groups 3.3 Uses of Information in various activities: Management activities, Decision Making, R & D, Teaching & Learning, social development
UNIT-4	USER EDUCATION AND EVALUATION OF USER STUDIES 4.1 User Education: Concept, need, 4.2 Methods of User Education 4.3 Evaluation of User Studies: Definition, Need, and Criteria 4.4 Methods and Steps in Evaluation
UNIT-5	INFORMATION LITERACY 5.1 Information Literacy: Meaning and Concept 5.2 Salient Features of Information Literacy 5.3 Digital Information literacy and Library Users

Project Work of 4th semester will be assigned to the students (jointly or individually) at the beginning of the Third Semester and will be completed in the Fourth Semester. The distribution of the works/marks will be as follows

Semester wise work and distribution of marks (in %) for the project			
Third Semester (20%): Evaluation of interim Report of the Project Work			
Background of the problem (5%)	Review of Literature (5%)	Objectives (5%)	Methodology (5%)
Fourth Semester (80%): Evaluation of Final Report of the Project Work			
Project Work (50%)		Viva-voce (30%)	

The Evaluation and Viva-voce of the Final Project Report will be done jointly by the Internal and External Examiners.