

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
UNIVERSITY OF CALICUT**



Master of Philosophy Programme in Library and Information Science – Syllabus

Paper 1 - RESEARCH METHODOLOGY

Unit 1 Research

Concept, meaning, need and functions of research
Types of research-fundamental, applied including Inter-disciplinary and multi-disciplinary approach
Ethical aspects of research

Unit 2 Research Design

Types of research design
Identification and formulation of research problem
Hypothesis: formulation, types and testing
Literature search: print, non-print and electronic sources
Review of related literature

Unit 3 Research Methods

Scientific method
Historical method
Descriptive method
Survey method
Case study method
Experimental method
Delphi method; Brainstorming method

Unit 4 Research Techniques and Tools

Questionnaire
Interview
Observation
Scales and scaling techniques
Online research tools
Sample and sampling techniques

Unit 5 Data Analysis, Interpretation and Report Writing

Processing data: editing, coding and analyzing data
Descriptive and inferential data analysis
Presentation of data- tables and graphs
Techniques of interpretation
Structure, style and contents of research report
Style manuals- APA and MLA
E-citation and reference management tools – Zotero, EndNote
How to avoid plagiarism- Best practices and methods
Trends in Library and Information Science research

Paper II – INFORMATION TECHNOLOGY APPLICATIONS IN LIBRARIES

Unit 1 Library Automation

Need for library automation
Areas of library automation
Automation of library housekeeping operations
Selection of hardware and software for automation
Integrated library management systems: Koha
OPAC/WebOPAC, Webscale Discovery Services

Unit 2 Digital Libraries

Digital library: definition, scope and characteristics
Major digital library initiatives in the world and in India
Digital library technologies-digital representation and compression
Identification of, accessing, processing, storage, delivery and use of digital resources
Digital library creation - prerequisites; content development; Metadata development; and search options
Open source digital library software - GSDL

Unit 3 Institutional Repositories

Institutional repositories-concepts, characteristics, need and purpose
Institutional repositories in India
Design and architecture of institutional repositories
Contents and standards of institutional repositories
Institutional repository software – DSpace, EPrints, Fedora
ROAR, DOAR, SHARPA-ROMIO

Unit 4 RFID in Libraries

RFID-characteristics and features
RFID components; how does RFID works
Application of RFID in libraries
Barcode, QR Code, Biometric, Smartcards: Features and applications

Unit 5 Application of Emerging Technologies in Libraries

Library 2.0/3.0
Application of Artificial Intelligence, Expert Systems, Robotics, Machine Learning, Block Chain technology, Cloud computing, Virtual Reality and Augmented Reality in libraries
Role of libraries in Research Data Management

Paper III- Continuing Professionals Development of Library Professionals

Unit 1 Library Management

- Concept, definition and scope
- Management schools of thought
- General principles and their application
- POSDCORB, MBO
- Human Resource Management in libraries: Organizational structure, recruitment, selection, induction, motivation, performance appraisal, stress management, time management

Unit 2 Types of libraries and their functions and sections

- National, Public, Academic, Special libraries
- Academic libraries – School, College and University libraries
- Different sections of library and information centers and their functions

Unit 3 Continuing Professional Development (CPD) programmes

- Concept and definition of CPD
- Types of CPD programs: Training programs, refresher courses, orientation trainings, workshop, seminar, conference, conventions, MOOCs, etc.
- Key areas of training- Basic computer and networking knowledge, Library Automation, Strategic Management.
- Types of Training:- In – Service Training, Induction Training, Management Training, Continuing Professional Development (CPD)
- Training Facilities in India

Unit 4 Library and Information Science Profession

- Condition of work
- Promotions, service rating, tenure and dismissal
- Librarianship as a profession – Professional skills and competencies
- Professional ethics
- Promoters of library and information services and their programmes and activities: UNESCO, IFLA, ILA, IASLIC, UGC and RRRLF

Unit 5 Library professionals / Information professionals

- Library professionals / Information professionals: definition
- Librarians and library staff: selection procedure, qualifications of librarian, educational level, size of the staff and categories of staff
- Different designation of library professionals
- Continuing education for librarians
- Role of library and information professionals in Digital era

Paper III: Social Media and Infodemic

Unit 1: Information and Communication

- Information
- Communication Process
- Communication Theories and Models
- Channels and Barriers
- Digital Information

Unit 2: Social Media

- Social Media Platforms
- Social Media Tools
- Social Media and Marketing
- Role of Social Media in the Society
- Media Ethics: Cyber Law and Ethics

Unit 3: Information Literacy

- Information Literacy definition, need and purpose
- Role of Information Literacy in the society
- Policies and Strategies
- Information Literacy Standards: Foundations & Implications
- Types and models of information literacy

Unit 4: Misinformation and Disinformation:

- Misinformation and Disinformation: Definition and Introduction
- Formats of Misinformation and Disinformation, factors leading to the spread of Fake news.
- Social Mediaplatforms and the spread of misinformation and disinformation.
- Misinformation and Disinformation: Detection & Fact Checking
- Combating disinformation and misinformation through Media and Information Literacy (MIL)

Unit 5: Infodemic:

- Information overload/explosion
- Infodemic: Definition, Introduction
- Infodemiology: an emerging transdisciplinary scientific field
- Social Media and Infodemic
- Infodemic Management

Paper-III Academic Library and Accreditation

Unit 1: Library; Libraries In Modern Era

Libraries and Information Centres: Definition, Need and Importance.

Types of libraries - National, Public, Academic, and Special Libraries.

Academic libraries – Types of academic libraries: School, College and University libraries.

Changing trends and Concepts in Library: Digital Library, Virtual Library, Green Library, Industrial Libraries and Corporate Libraries.

Unit-2: Academic Library Infrastructure and Staff

Library Building / Space: Building and space management of library and information centres - Safety issues - Equipments and furniture- in addition for differently abled people.

Academic Library Finance and Budgeting.

ICT based Library Infrastructure: Hardware and Software.

Academic Library Staff Pattern: Professional, Semi Professional and Non Professional Staffs

Library Professional Ethics and Qualities of good librarian.

Unit 3: Academic Library Services

Reference service Definition, need and types: Ready reference service, Long range reference service and Virtual Reference Services.

User Education & Methods: Lecture, Seminars, Guided Tour and Virtual Tour.

Web based resources and services: Library portal and Blog.

Library Cooperation - Library Networks and Library Consortia: INFLIBNET, E-Shodh-Sindhu and NList.

Unit-4 : Academic Library Management

Principles of Management and their application in Academic libraries: POSDCORB, MBO and TQM.

Human Resource Management: Job Requirement and Recruitment Process, Staff Manual, Human Relations, Performance Appraisal, Staff Development

Latest Technology used in Library Management System: Barcode System and RFID

Unit-5: Academic Library Accreditation

Accreditation and Quality Control: Need and Purpose.

Higher Education Accreditation Bodies in India; UGC- NAAC, AICTE, National Board of Accreditation (NBA), Bar Council of India (BCI) and Medical Council of India (MCI)

Library Accreditation: Need

ACRL & ACRL; Standards for Libraries in Higher Education

UGC-NAAC Guideline for Academic and Research Libraries

Paper III-Digital Information Resources

- Unit-1 Introduction to information sources
Concept, Nature, evolution, functions, characteristics and importance of information sources
Types of sources: Primary, Secondary and Tertiary sources
Documentary and Non-documentary sources
Print and non-print sources
- Unit-2 Primary, Secondary and Tertiary Sources
Periodicals and e-journals, Patents, Reports, Specification, Standards, Research reports, Theses and dissertations, Conference proceedings, Trade literature and Unpublished sources
Indexing, abstracting and reviewing periodicals, dictionaries, encyclopedias, bibliographical, biographical, geographical and statistical sources, handbooks and manuals, directories, yearbooks and almanacs
Union catalogues, bibliography of bibliographies, guides to literature
- Unit-3 Digital Information Sources
Introduction to digital information sources, definition, features, scope, importance, advantage and disadvantage
Databases and multimedia sources
Bibliographic, numeric, full text Open Access databases
Search tools and techniques
BIOSIS, PubMed, EBSCO, ProQuest, Elsevier, Ingenta, J-Gate, Indest
- Unit-4 Types of Digital Information Sources
Database
Multimedia
E-journals
E-books
Directories
E-thesis and dissertation
E-zine
- Unit-5 Digital Resources Management
Digital Information literacy
Procurement of e-journals, procurement of online resources
Digital information through CDS/DVDS
Digital information gathering through scanning
Digital devices

Paper III- Altmetrics for Research Impact Measurement

- UNIT-1 Overview of Informetrics**
- Concept, Genesis & Definition of informetrics
 - Bibliometrics
 - Scientometrics
 - Webometrics
- UNIT-2 Sources for Informetric data**
- Web of Knowledge
 - Scopus
 - Google Scholar
 - SCImago
 - Indian Citation Index
- UNIT-3 Citation Analysis**
- Citation Studies
 - Co- Citation Analysis
 - Citation Index
 - Impact Factor, H-index, g-index, i10-index
- UNIT-4 Altmetrics**
- Definitions & Classification of Altmetrics
 - Standards in Altmetrics
 - Technological Capabilities of Altmetrics
 - Altmetrics Issues
- UNIT-5 Altmetrics Tools/App**
- ImpactStory
 - ReaderMeter
 - ScienceCard
 - PLoS Impact Explorer
 - PaperCritic
 - CrowdoMeter