

MANGALORE UNIVERSITY

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

DRAFT SYLLABUS FOR COURSE WORK FOR PH.D. IN LIBRARY AND INFORMATION SCIENCE

Eligibility for Admission: Holders of Master Degree in Library and Information Science or its Equivalent

Papers	Particulars	Hours of Instruction per week	Duration of Examination (hrs)	Marks			Credits
				IA	Theory	Total	
Paper 1	Research Methodology	4	3	30	70	100	4
Paper 2	Theoretical Foundations	4	3	30	70	100	4
Paper 3	Recent Developments	4	3	30	70	100	4
Paper 4	Reviewing of Literature and Planning of the Proposed Research Work with a Tentative Title	16	-	-	-	200	8
Total							20 (Credits)

PAPER – I : RESEARCH METHODOLOGY

Unit 1 : Research: Meaning, Definition Need and Purpose, Types of research, Barriers to research. **08hrs**

Unit 2 : Research Design: Identification, selection and formulation of a research problem Hypothesis: Meaning, Definitions, Types, Formulation and Testing of hypothesis. **08hrs**
Research design: Definition, Types and their characteristics, Preparation of a research proposal.

Unit 3 : Research Methods: Scientific methods, Historical method, Descriptive method, Survey method, Case Study method, Experimental method, Delphi method, Content analysis and Informetrics and Scientometrics. **08hrs**

Unit 4 : Research Techniques Tools and Sampling: Questionnaire, Schedules, Interview, Observation, Scales and Checklists, Library records and reports, Concept of study population and Sampling, Need for sampling, Types of sampling-Random and Non-random sampling techniques, Sample Bias and error. **08hrs**

- Unit 5** : Data Analysis and Interpretation: Descriptive analysis, inferential analysis, Data processing and analysis using SPSS, Interpretation of data including statistical testing of hypothesis using parametric and non-parametric measures. **08hrs**
- Unit 6** : Research Reporting and Evaluation: **08hrs**
Structure, Style and Contents, Guidelines for reporting Style manuals-Chicago, MLA, APA, e-citation, Criteria for evaluation of research report.
- Unit 7** : LIS research: Overview, Trends, ethical issues, LIS Research in India: Problems and Prospects. **08hrs**

PAPER – II : THEORETICAL FOUNDATIONS

- Unit 1** : Information society; Need for information; Information for national development; Impact of information on society; Community information services; Information Literacy, Digital Divide; Rural – Urban Divide. **08hrs**
- Unit 2** : Information resources and their organization: Traditional, Electronic Resources; Classification of web resources; Metadata Standards; Dublin Core, MARC -21, Domain Specific Metadata Standards; Ontology; DIO etc.; Knowledge Management. **08hrs**
- Unit 3** : Information use and user studies: Methods and techniques and their limitations; Information seeking behavior of users, Information use studies, Information gathering habits etc., Status of information user studies in India. **08hrs**
- Unit 4** : Information Technology Applications; Major developments in information technology; Areas of application of IT in Libraries and for information work; Library automation software; data security. **08hrs**
- Unit 5** : Digital Libraries: definition, architecture; process of digitization; limitations; important digitization projects in India and abroad. **08hrs**
- Unit 6** : Information transfer and services: Information for sustainable development; Role of Information in R & D, Rural Development; Decision Making; Information Economics. **08hrs**
- Unit 7** : Evaluation of information systems & services; Total quality management, SWOT analysis. **08hrs**

PAPER – III : RECENT DEVELOPMENTS:

- A. Information Systems and Services
- B. Advances in information Technology
- C. Information Organisation and Retrieval
- D. User Research

A. INFORMATION SYSTEMS AND SERVICES:

- Unit 1** : Information Systems: Meaning, definition, structure and development, trademarks, future trends etc. **08hrs**
- Unit 2** : Information resources: their organization, access, preservation and conservation. **08hrs**
- Unit 3** : Planning, designing and development of information systems. **08hrs**
- Unit 4** : Information service: Reference service, Alerting (CAS and SDI) services, Bibliographical, Referral, Literature search, Document Delivery, Technical enquiry, Translation, Abstracting, Indexing, Web enabled service etc. **08hrs**
- Unit 5** : Study of National and International Information and documentation Systems and Services: NISCAIR, DESIDOC, SENDOC, NASSDOC, INFLIBNET, CHEMICAL, ABSTRACTING SERVICES, BIOSIS, INSPEC, MEDLARS. **08hrs**
- Unit 6** : Evaluation of information systems and services. **08hrs**
- Unit 7** : Information Products: Newsletter, House bulletins, In-house communications, Trade and Product Bulletins, Technical digests, State-of the art report, trend report, critical reviews, handbooks, manuals, reviews. **08hrs**

B. ADVANCES IN INFORMATION TECHNOLOGY:

- Unit 1** : Introduction to Information Technology, library Introduction, strategies and infrastructure requirements. **08hrs**
- Unit 2** : Library software packages, important library software packages, evaluation of library software packages. **08hrs**

- Unit 3** : Data base design development and management, web designing, evaluation of data base and web content/resources. **08hrs**
- Unit 4** : Internet technology, networks, network architecture. **08hrs**
- Unit 5** : Digital libraries, institutional repositories, Open Archive Initiatives, Open Source Software (OSS), legal issues. **08hrs**
- Unit 6** : Social Networking. **08hrs**
- Unit 7** : Content analysis of selected websites, Web design. **08hrs**

C. INFORMATION ORGANISATION AND RETRIEVAL

- Unit 1** : Introduction to information organization, classification systems, cataloguing, index and indexing systems, thesaurus and subject heading lists; future trends etc. **08hrs**
- Unit 2** : Bibliographic description: standards for Bibliographic description and organization – ISBD, MARC 21, CCF, Dublin core, ISO 2709, meta data, Z39 50 etc. **08hrs**
- Unit 3** : Information search strategies: formulation query of user query, search process, query language. **08hrs**
- Unit 4** : Information Retrieval models, Boolean model, probabilistic model, cognitive model etc. **08hrs**
- Unit 5** : Evaluation of information retrieval systems, knowledge management. **08hrs**
- Unit 6** : Evaluation of IR Systems: Purpose and criteria for evaluation, Evaluation experiments: ASLIB, The Cranfield, MEDLARS. **08hrs**
- Unit 7** : Trends in IRS: Developments, Searching and retrieval, Full text retrieval, User interfaces, IR standards and protocols. **08hrs**

D. USER RESEARCH:

- Unit 1** : Information Users and their Information Needs: Categories of Information Users; Academic Community-Teachers and Students scientists and Technologists, R & D Personnel, other professionals, Planners, Policy Makers, Ethnic Groups etc., Information needs-Definition and Models, Information seeking behaviour: Models and Procedures. **08hrs**

- Unit 2** : User Studies: Importance, Planning and Organization of User Studies in different environments, Methods, Techniques and strategies of user studies, Sampling, interview, questionnaire, diary and observation methods. **08hrs**
- Unit 3** : Techniques of Library and Information Centres Use studies: Use studies in different types of Libraries: different user groups and disciplines, Quantitative and qualitative techniques, Information studies, Survey Methods-proforma method, interview and record analysis methods including citation studies. **08hrs**
- Unit 4** : Information Literacy: Definition, need and scope; History and evolution- Library/bibliographic instructions, library tour, initiation to a freshman, library orientation and user education. **08hrs**
- Unit 5** : Methods and Techniques: Lectures, Tutorials: Use of A-V aids, programmed instructions in specified disciplines, resource based instructions etc., Information Literacy models. **08hrs**
- Unit 6** : Global perspectives: National and International standards, guidelines and policies, Selective study of Information Literacy missions, forums and task forces. **08hrs**
- Unit 7** : Information Literacy and Lifelong Learning: Integration of information literacy in different levels of education-current trends. **08hrs**


