BHARATHIAR UNIVERSITY, COIMBATORE – 641 046 M.Phil./Ph.D. - LIBRARY AND INFORMATION SCIENCE

PART - I SYLLABUS

(For the candidates admitted from the academic year 2018-19 onwards)

Subject Code	Papers	Name of the Subjects
18LISRC01	PAPER: I	RESEARCH METHODS IN LIBRARY AND INFORMATION SCIENCE
18LISRC02	PAPER: II	EMERGING TRENDS IN LIBRARY AND INFORMATION SCIENCE
	PAPER: III	SPECIAL PAPERS
18LISRS01		BIBLIOMETRICS AND SCIENTOMETRICS
18LISRS02		USERS STUDIES
18LISRS03		INFORMATION COMMUNICATION TECHNOLOGY APPLICATION IN LIBRARY AND INFORMATION SCIENCE

PAPER: I RESEARCH METHODS IN LIBRARY AND INFORMATION SCIENCE Subject Code: 18LISRC01

Objectives:

- *To identify appropriate research topics*
- To select and define appropriate research problem and parameters, and
- To write a research report and thesis

Unit – I Basic of Research

Research: Concept, Need & Purpose, Characteristics - Types - Pure and Applied, Action and Inter Disciplinary Research - Historical - Case Study - Experimental etc., - Logic and Scientific method, Literature Search and Review of Literature.

Unit – II Research Design

Research Design: Definition, Types and Characteristics, – Identification, Selection and Formulation of a Research Methods and Research Problem, Formulation of Objectives and Hypothesis.

Unit - III Data Collection Methods

Data Collection – Definition, Types and Relevance —Sampling –Data Sources –Primary, Secondary and Tertiary Data; Data Collection Methods – Questionnaire / Schedule, Observation, Survey etc.,

Unit – IV Data Analysis

Data Analysis: - Data Processing, Analysis and Interpretation—Statistical Tools and Techniques—Measure of Central Tendency, Frequency Distribution, Regression and Correlation; Testing of Hypothesis—ANOVA, Chi-Square and t Test etc., and Statistical packages SPSS etc.

Unit – V Report Writing

Research Report Writing – Types, Structure and Presentation – Article, Thesis and Dissertation, – Style Manual – APA, MLA – Application of IT in Research.

Select Text & References:

- 1.Busha, C.H. (1990). Research Methods in Librarianship. New York: Academic Press
- 2.Slater, M Ed.(1990). Research Methods in Library and Information Science. London: LAP
- 3. Young, Pauline. (1982). Scientific Social Surveys and Research. New York: PHI
- 4. Kothari, C.(1995). Methodology. New Delhi: Eastern Wiley
- 5.Goswami, K (1995). Research Methodology in LIS. New Delhi: Commonwealth,
- 6.Krishna Kumar.(1999). Research Methods in LIS. New Delhi: Har-Anand Publ.

PAPER: II : EMERGING TRENDS IN LIBRARY AND INFORMATION SCIENCE Subject Code : 18LISRC02

Objectives:

- *To enable the researcher to understand the emerging trends in LIS.*
- To train the researcher to understand the information retrieval and techniques, and
- To develop the skills to manage the Electronic Libraries

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Unit - I : Basics of Computer

Computer – Concepts, definition, Types of Computer Generations – System Hardware – Input/Output, Operating Systems - Unix – Windows- Linux - Application Software.

Unit - II: Library Automation

Library Automation -Need and Purpose - Merits and Demerits of Library Automation System - Planning and Implementation of Library Automation - House Keeping Operations- Library Automation Packages SOUL, KOHA &e-Granthalaya.

Unit - III: Library Networking

Networking: Need - Purpose - Types - LAN, WAN, MAN, Topologies -Types, Important Networks in India - INFLIBNET, DELNET, AGROCOLA AND MEDLARS.

Unit – IV: Digital Library

Digital Library: Concepts, definition, Need, Design & Development - Issues and Challenges - Digital Resources - Management of Digital Libraries - Intellectual Property Rights in Digital Environment - Digital Library Software - Dspace and Green Stone.

Unit –V: Resource Sharing and Consortia

Resource Sharing – Concepts, Scope and Need – Historical Overview –Resource Sharing methods - Barriers - Library Consortium –Concept, Need and Types - Consortium Initiatives in India – e-Shodh Sindhu, Shodhganga, NDL, NPTL etc.,

Select Texts and References:

- 1. Rajaraman, V. (2013). Fundamentals of Computers, New Delhi: PHI
- 2. Ravichandra Rao, LK, (2012). Library Automation, New Delhi: Wiley Eastern,
- 3. Moorthy, T.A. and Jain, S.P.(2009). Network Access to electronic Documents and its copyright Implications, **FID** conference proceedings, New Delhi, INSDOC
- 4. Iyer, V.K., Management of Library Information services, New Delhi: Rajat Publications.
- 5. Chowdhury, G.G. (2003). Introduction to Digital Libraries. London: Facet, 2003.

PAPER: III: SPECIAL PAPERS 1. BIBLIOMETRICS AND SCIENTOMETRICS

Subject Code 18LISRS01

Objectives:

- To Understand the importance of bibliometrics and Scientometics studies
- To Identify the various indicators used in bibliometrics and Scientometics studies, and
- To assess the validity of bibliometrics and Scientometics Studies

Unit 1:Basics of Bibliometrics and Scientometrics

Elements of Bibliometrics, Libra metrics, Scientometrics, Informetrics, Webometircs – Meaning, Definition, Scope, Evolution and their Applications in LIS

Unit 2: Theories and Laws

Theories and Laws – Lotka's Law, Bradford's Law, Zip's Law, Price Theory and Circulation Theory – Rank and Size Frequency Models.

Unit 3: Citation Analysis

Citation analysis – Definition, Theory of citation, Different forms of citations – Bibliographic coupling – Co-citation – Citation mapping – Co-Citation Proximity Analysis (CPA), Co-word Analysis, Citation Indices (SCIE, A&HCI, SSCI, Scopus, etc)

Unit 4:

Bibliometrics and Scientometrics – Elements and Applications – Scientific Productivity – Growth and Obsolescence of Literature – Indicators: Authorship Pattern, Collaboration pattern, Productivity index – Journal Performance indicators: Journal's Impact Factor; h-index, g-index, i10 index, etc – Mapping of Science.

Unit 5:

Emerging trends: Altmetrics – Concept, Evolution, and its applications in LIS

Select Texts and References:

- 1. Baker S L. and Lancaster S W (1991). Measurement and evaluation of library services. 2ed. Information Resources Press: Arlington
- 2. Carpenter R.L and Vasu E.S. (1979). Statistical methods for librarian, Chicago. LA
- 3. Donohue, J C. (1990). Understanding scientific literature. A Bibliometric approach. London: MIT Egghe,
- 4. L and Rousseau R (1990). Introduction to Informetrics: Quantitative methods in library, Documentation and Information Science. Amsterdam, Elsevier
- 5. Garfield, E (1979). Citation Indexing: its theory and application in science and technology and humanities. New York: John Wiley,

2.USER STUDIES

Subject Code: 18LISRS02

Objectives:

- To know Origin and Development of User Studies
- To know Different methods of User Studies, and
- To know Recent Trends in User Studies

Unit - I - User Studies

User studies: concept – Definition, Types and Methods - Aims and objectives –Need and Importance of user studies -. Major user studies conducted in India - USA - UK.

Unit – II Information Seeking Behavior

Information Seeking Behavior - Concept, Definition and Importance - Models -Wilson, Kublthau, Ellis etc.,

Unit - III User Behaviour

University and college library user behaviour - evolving a theory of user behavior - characteristics having effects of user behaviour - Patterns of user behavior users and their influencing factors - Limitations in behavioral research in librarianship.

Unit – IV User Education

User education: Concepts – definition and need for user education – Aims and Objectives – Planning of user education – problems of user education. Users interaction with documentary resources and non documentary resources for their current information needs.

Unit - V - Evaluation Criteria

Evaluation of user studies: Important features failure analysis - Methodology of user evaluation - Oriented evaluation - purpose of user evaluation.

Further Readings

- 1. Kumar, PSG. (2006). Use and User Studies. New Delhi: BR Publications.
- 2. Devarajan. (1987). User Studies. New Delhi: Allied Publishers
- 3. Kumar, PSG. (2004). Library and Users: Theory and Practice. New Delhi: BR Publications
- 4. Sridhar, MS. Library Use and User Research. New Delhi: Concept Publishing Co.,
- 5. Wilson, T.D. (2006). On User studies and Information needs, Journal of Documentation. 62(6), PP 658-670
- 6. Ellis, David, (1993). Modeling the Information seeking Patterns of Academic Researchers. A grounded theory approach Library Quarterly. 63(4), PP469-486

4. INFORMATION COMMUNICATION TECHNOLOGY APPLICATIONS IN LIBRARY AND INFORMATION SERVICES

Subject Code: 18LISRS03

Objectives:

- To find out the different purposes of using ICT
- To assess to what extent users are utilized ICT based library resources, and .
- To train digital library management

Unit - I: Introduction to ICT

Information Communication Technology: Concepts, Definition, Need, Scope and Objectives – Application of ICT in LIS.

Unit- II: INTERNET

Internet: Concept, Need - Purpose - Types - Web Technology: www,e-mail, http - Search Engine: Google, Yahoo and Altavista – Web Browser: Chrom, Internet Explore, Mosilafire box and Opera.

Unit - III: Digital Library

Digital Library – Concept, Scope, Need and Purpose, Characteristics, Digital Library Management, Design and Organization of Digital Libraries - Architecture - Protocols - Metadata - Standards. Digital Library Initiatives – Digital Library Initiatives in India – Open Source Initiatives - Open Archive Initiative (OAI).

Unit – IV : Creation of Digital Library

Building the digital library – Digitization – Process and methods – Planning for Digitization – Institutional Repositories – Open Source Software for Digital Library: GSDL and D Space: Future of Digital Libraries.

Unit – V: Library Application Software

Library Application Software: Concept, Need and Purpose – KOHA, SOUL, Green Stone and D Space

Select Tests and References:

- 1. Ravichandra Rao, I.K, Library Automation, New Delhi: Wiley Eastern,
- 2. Moorthy, T.A. and Jain, S.P. Network Access to electronic Documents and its copyright implications, FID conference Proceedings, New Delhi, INSDOC
- 3. Iyer, V.K, Management of Library Information services, New Delhi, Rajat Publications.
- 4. Jain V.K (2009). Information Technology. New Delhi: Atlantic
- 5. Tripathi, Aditya and others. (2010). Open Sources Library Solutions. New Delhi: ESS ESSPubication.