

Department of Library and Information Science Ph.D Library and Information Science Programme Programme Code: ALIS91

For Regular, Part-time and External Candidates (For students admitted from the academic year 2019-2020)

COURSE-1: RESEARCH METHODOLOGY

Learning Objectives:

LO1: To understand the fundamentals of Research Methodology.

LO2: To enable the students to understand the research concepts and various problems.

LO3: To enable the students to get familiarities with the sampling techniques.

LO4: To enable the students to understand and define the right hypotheses.

LO5: To train the students to know the right methods of drafting research reports.

Unit-1: Introduction to Research

Introduction, Meaning, Concept, Characteristics, Types: Pure, Applied, Action and Inter disciplinary-Logic and Scientific Method.

Unit-2: Research Problem and Design

Literature Search and Review of Literature - Research Problem: Identification, Selection and Formulation of a Research Problem-Factors influencing selection of problems-Statement of Problems: Aims, Objectives, Purpose, Scope and Limitations - Research Design: Concept, Meaning, Definition, Need, Features, Categories: Explanatory, Diagrammatic, Descriptive, Experimental Design.

Unit-3: Sampling and Data collection

Sampling: Definition, Population, Sample ,Steps in Sample Design, Criteria for selective a sample procedures, Characteristics of Good Sampling, Sampling Techniques. Data Collection: Data Sources: Primary Sources, Secondary Sources, Data Collection Methods: Questionnaire, Survey, Observations, Interview Schedule, Case Study.

Unit-4: Hypothesis and Data Analysis

Hypothesis: Definition, Types and Relevance, Testing of Hypothesis. Data Analysis: Problem Measurement - Reliability, Validity. Data Analysis: Analysis and Interpretation-Statistical Tool and Techniques-Application Packages-Measures of Central Tendency, Frequency Distribution, Parametric and Non Parametric - Chi-Square, ANOVA, Z-Test, t-test, Correlation and Regression etc.

Unit-5: Report Writing

Planning, Style and Structure-Documentation-Presentation-Citation Standards: APA-MLA - Chicago – Plagiarism and Copy Right.

Text Books:

- 1. Gowswami. Research Methodology in Library and Information Science. New Delhi: Commonwealth, 1995.
- 2. Kothari. Research Methodology, New Delhi: Eastern Wiley, 1995.
- 3. Young, Pauline. Scientific Social Surveys and Research, New York: Prentice Hall, 1982.

Supplementary Readings:

- Goode, W.J. and Hatt, P.K. Methods in Social Science. New York: McGraw Hill, 1985.
- Kerlinger, Fred, ed. Foundation of Behavioural Research: Education and Psychology. New York. 1964.
- 3. Ravichandra Rao,I.K. Quantitative Methods in Library and Information Science, New Delhi: Willey, 1983.
- 4. Santhosh Gupta, Research Methodology and Statistical Techniques, New Delhi: Deep and Deep Publication, 2000.
- 5. Saravanavel. Research Methodology, Allahabad: Tajmahal, 1994.
- 6. Segha, R.L. Statistical Techniques for Librarians, New Delhi: Ess Ess Publication, 1998.
- 7. www.swayam.gov.in,
- 8. www.inflibnet.ac.in

Course outcomes:

At the end of the course the students able to able to

- CO1: acquire knowledge on fundamentals of social science research
- CO2: recognize various components research design
- CO3: conceive knowledge on various methods of data collection
- CO4: apply and measure data processing and analysis
- CO5: acquire knowledge on report writing

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	✓			✓		-	✓	✓	-	✓	✓	✓			✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

COURSE-2: PARADIGM SHIFT IN LIBRARY AND INFORMATION SCIENCE

Learning Objectives

- LO1: To enable the students to understand the electronic media and information analysis
- LO2: To enable the students to know about IPR
- LO3: To enable the students to understand the concepts of ISB
- LO4: To enable the students to acquire knowledge on application of TQM in libraries
- LO5: To enable the students to gain knowledge on bibliometric techniques

Unit-1: Information Analysis and Electronic Media

Concept & Meaning of Electronic Media-Databases-Bibliographic, Full Text, Statistical, Multimedia, Online-Electronic Information Resources-Dublin Core and Metadata.

Unit-2: Intellectual Property Rights

IPR Act, Right to Information Act-Concept of freedom, Censorship, Data Security and Fair use-IT Act-Indian Copy Right Act – Plagiarism.

Unit-3: Information Seeking Behaviour

Concept - Definition, Need and Importance of ISB, Methods, Criteria for evaluation of ISB.

Unit-4: Management

TQM: Definition, Concept, Element, Technology Management, Risk Management.-Contingency Management-Change Management-Marketing of Library and Information Services, RFID.

Unit-5: Bibliometrics Techniques

Concept - Definition - Theories and Laws - Qualitative and Quantitative Techniques Citation - Scientometrics - Informetrics - Librametrics.

Text Books:

- 1. Brophy, Peter and Courling Kote, Quality Management for Information and Literacy Management, Bombay: Jaico, 1997.
- Eisenberg, Michael, Information Literacy: Essential skills for the Information Age. Westport publ.: Libraries Unlimited, 2005.
- 3. Evans, Edward, G. ed. Management Information Systems. New Delhi: S.Chand &co., 1986.

Supplementary Readings:

- 1. Katz, WA collection development selection of materials for libraries, New York: HRW. 1980.
- 2. Martino, R.L. Information Management: Dynamics of Management Information Systems. New York: McHill, 1969.
- 3. Medick, Robert, G. et.al. Information systems for modern management. New Delhi: Prentice Hall, 1992.
- Narayana, G.J. Library and Information Management. New Delhi: PHI, 1991.
- 5. Paliwal, P.K. Compendium of Library Administration. New Delhi: EssEss.2000.
- Parker, Charles and Café. Thomas. Management Information Systems: Strategy and Action. New York: McGraw Hill, 1993.
- 7. Stuert, Robert, D and Moran, Barbara B. Library and Information Centres Management. Colorado: Libraries unlimited, 2004.
- 8. www.swayam.gov.in,
- 9. www.inflibnet.ac.in

Course outcomes

At the end of the course the students able to able to

CO1: understand the electronic media and information analysis

CO2: know about IPR

CO3: understand the concepts of ISB

CO4: acquire knowledge on application of TQM in libraries

CO5: gain knowledge on bibliometric techniques

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	✓			✓			✓	✓		✓	✓	✓	-		✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

COURSE 3: FIELD OF SPECIALIZATION

1-USER STUDIES

Unit-1: User Studies

Concept-Definition and Categories-Aims and Objectives- Importance of User Studies-Need for Conducting User Studies.

Unit-2: Information Literacy

Concept-Definition-Need-Methods and Sources Used-Evaluation of Information Literacy Programmes- Goals and Objectives, Techniques and Methods, Online User Education-Evaluation .

Unit-3: Information Sources

User's Interaction with Documentary Resources and Non-Documentary & Electronic Resources.

Unit-4: Information Seeking Behavior

Information Needs of Scientists and Social Scientists-Information Seeking Methods.

Unit-5: Evaluation

Evaluation of User Studies-Criteria-Techniques of Evaluation-Proforma Method-Interview Method and Record Analysis Method.

- 1. Devarajan. User Studies, New Delhi: Allied Publishers, 1987.
- 2. Kumar, PSG. Use and User Studies Publication. New Delhi: BR Publication, 2006.
- 3. Kumar, PSG. A Students manual of Library and Information Science. New Delhi: BR Publication, 2002.
- 4. Kumar, PSG. Library and Users: Theory and Practice. New Delhi: BR Publication, 2004.
- 5. Sridhar, MS. Library use and user research (with 20 case studies). New Delhi: Concept Publishing Company, 2002.

2-INFORMATION RESOURCES MANAGEMENT

Unit-1: Information Resources Management

Meaning, Concept, Types of Information Resources, Value and Importance, Evaluation of Information Resources.

Unit-2: Human Resource Planning (HRP)

Meaning, Importance, Process and Problems.

Unit-3: Performance appraisal

Meaning, Approaches to Performance Appraisal, Methods/Techniques of Appraisal System, Importance, Purpose and Limitation.

Unit-4: Human Resource Development

Meaning, Components Pre-Requisites for Successful HRD Programmes: HRD Trends: Job Rotation, Job Enlargement, Job Enrichment. Training and Development: Meaning, Need, Importance, Types: On the Job and Off the Job Training, Training effectiveness, Evaluation of Training Programme.

Unit-5: Total Quality Management (TQM)

Quality of Work Life, Human Resource Information System: Meaning and Importance: ISO 9000 Series, Competency Management: Meaning and Importance.

- 1. Craich Robert, L. Training and Development-Hand Book, New Delhi: McGraw Hill, 1987.
- 2. Famularo, Joseph. Handbook-Human Resources Administration, Singapore: McGraw Hill, 1987.
- 3. Jeya Gopal, R. Human Resources Development Conceptional analysis and strategies, New Delhi: Sterling, 1993.
- 4. Rao, J.V. Varma, Khandwal Anil, K.K., Abraham, E.S. Human Resources Development. Jaipur: Rawat, 1997.
- 5. Sing, P.N. Developing and Managing Human Resources. Bombay: Schhandra Publishers, 1993.

3-ICT IN LIBRARY AND INFORMATION CENTRES

Unit-1: ICT Basics

Introduction-Need-Components of Information and Communication Technology-ICT in Library and Information Centres-Operating System: Windows-Computer Technology, Audio-Visual Technology and Telecommunication Technology

Unit-2: Library Software

Open Source Software: Green Stone, Koha-Library Automation Package: SOUL-Institutional Repositories, Open Access Initiatives.

Unit-3: RDBMS

Introduction and concept of RDBMS-DBMS Vs RDBMS- Interfaces using SQL-Development of Databases Using WINISIS / MySQL / MS Access

Unit-4: Networks

Concepts-components-categories-Security-Resource Sharing: Library networks and consortium, Study of UGC Info net, DELNET, INDEST and INFLIBNET.

Unit-5: Library Automation

Need and Purpose, Planning, Areas of Automation, OPAC, Web OPAC, Bibliographical and Full Text Databases

- 1. Hunt, Reger and John Shelly. Computer and Commonsense. New Delhi: PHI, 1982.
- 2. Kaul, HK. Library Network: An Indian experience. New Delhi: Virgo, 1992.
- 3. Levey, lan. Automating Library Procedure. London: LA. 1984.
- 4. MS Corporation. Discovering MS office 2000 premium and professional, USA, 1999.
- 5. Minasi, Marks. Mastering in Windows NT server. New Delhi: BPB, 1999.
- 6. Mini-Micro CDS/ISIS. Reference Manual and CDS/ISIS Pascal Manual, UNESCO: Paris, 1989.
- 7. Saravanan, T. WINISIS for Beginners.2nd ed.CMR: Rajalakshmi Publications, 2010.
- 8. Saravanan, T. Information Architecture, New Delhi: Ess Ess Publications, 2012.
- 9. Saravanan, T. Library Automation. CMR: RTSV Publications, 2013.
- 10. TEDD, LA. Introduction to computer based library system. Ed.2. London: Hyden, 1984.
- 11. Wise, Richard. Multimedia: A critical introduction. London: Routledge, 2000.

4-DIGITAL LIRBARIES

Unit-1: Digital Libraries

Genesis, Definition, Objectives, Characteristics and Development- Digitalization Process: Input Capture devices-Image Editing Software & OCR File Formats, Image Formats, Audio Formats, Video Formats, Storage Media Formats.

Unit-2: INTERNET

Definition, Origin and Development, Network Based Services: OPAC, Web OPAC, Abstracts and Indexes.

Unit-3: Digital Sources

Digital Library Packages: GSDL, DSpace.-Digital Collections: E-Books, E-Journals, E-Theses-E-Newspapers, E-Magazines, E-Dictionaries, Databases: CD & Online etc, Online Bookshops-Digital Preservation, Issues and Solutions.

Unit-4: Web Services

E-Mail, Discussion Forums, BBS, Mailing Lists, Web 2.0.

Unit-5: Browsers & Search Engines

Web Browsers: Definition, Features-Internet Explorer, Mozilla Firefox, Google Chrome-Search Engines: Definition, Features-Google, Yahoo, Altavista.

- 1. Carter, Roger. The Information Technology Handbook. London: Henemann, 1987.
- 2. Gorman, G.E. Digital Factor in Library and Information Services. London: Facet, 2002.
- 3. Jeanne, F.M. A Librarians Guide to Internet: A Guide to searching evaluating Information. Oxford: Chandos Publishing, 2006.
- 4. Lancaster, F.W. Electronic Publishing and their implications for libraries and beyond. London: Clive Bingley, 1990.
- 5. Lucy, A. Tedd. An Introduction to computer based library system. Ed.3. Chinch ester: wiley, 2005.
- 6. Richard Jones. The Institutional Repository. Oxford: Chandos Publishing, 2006.
- 7. Viswanathan, T. Communication Technology, New Delhi: TMH, 1995.
- 8. Zorkoczy, Peter. Information Technology. An Introduction. London: Otiman, 2005.

5- INFORMETRICS AND BIBLIOMETRICS

Unit-1: Origin

Origin and Development of Bibliometrical Studies-Nature and Scope of Bibliometrics-Historical Development-Sources of Bibliometric data.

Unit-2: Laws

Lotka's Law of Scientific Productivity, Bradford's Law of Scatter, and Zipf's Law of Word Occurrence- Identifying and Defining Literature-Study of the structure of documents-Authorship Studies-Form of Documents-Types of communication in primary literature-

Unit-3: Citation

Describing Literature-Document Relationship Studies-SCI-SSCI-Citation Analysis, Co-Citation and Bibliographic Coupling- Mapping the Structure in Science-Impact Factor-Evaluation of Citation: H-Index, G-Index.

Unit-4: Evaluation

Size and Growth of Literature-Relationship, Associations and Groupings-Use of Documents for Evaluation-Assessment of Authors, Documents, Countries and Institutions.

Unit-5: Services

Testing the Effectiveness of Abstracting and Indexing Services, Citation Index-Structure, Use and Method of Compilation-Advanced Research: Use of information services (e.g., Dialog, Web of Science, Scopus, Google Scholar)-Simple statistical methods of classifying, counting, describing, and comparing such preferences.

- 1. Baker, Robert K. Doing Library Research: an introduction for community college students. Colorado: Web view Press, 1981.
- 2. Downs, Robert B. How to do Library Research. Urbana: University of Illinois Press, 1966.
- 3. Gosh, G.B. Trends of information service in India. Calcutta: World Press, 1974.
- 4. Kumar, P.S.G. Research in Library and Information Science in India. New Delhi: Concept Publishing Co. 1987.
- 5. Mishra, J.K. Indian research in library and information science. Ludhiana: Medallion Press, 2001.
- 6. Busha, Achrles H. and Harter, Stephen P. Research methods in librarianship: techniques and interpretation. New York: Academic Press, 1980.
- 7. Kothari, C.R. Research Methodology: methods and techniques. Ed.2.New Delhi: New Age International Publishers, 2004.
- 8. Nirnjan, A.N. Research in LIS schools of Indian Universities. Ludhiana: Medallion Press, 2002.
- 9. Sahegal, R.L. Applied statistics for library science research. New Delhi: Ess Ess Publications, 1998.
- 10. Swanson, Don R. Operations research implication for library. Chicago: University of Chicago Press, 1972.

11. Sinha, Suresh C. Citation analysis of research field and information technology development. New Delhi: Ess Ess Publication, 2001

6-INFORMATION SOURCES AND SERVICES

Unit-1: Information Sources

Definition, Features, Types –Documentary and Non-Documentary Sources.

Unit-2: E-Resources and Services

E-Books, E-Journals, E-Zines, Bulletin Boards, Hyper Media and Multimedia- Online Services

Unit-3: Internet

Role in Information Transfer-Services: INFLIBNET, DELNET, UGC-INFONET, NICNET.

Unit-4: Databases

Database Services-Types: INSPEC, COMPENDEX, Scopus, Google Scholar, Web of Knowledge/Web of Science

Unit-5: Core Services

Reference Services-CAS-SDI-Abstracting & Indexing-Bibliographic-Translation-Reprography-Documentary Delivery Services.

- 1. Fecko, Mary Peth. Electronic Resources, Access and Issues, London: Bowker and Co., 1997.
- 2. Jeevan, V.K.J. E-Resources and Digital Services, New Delhi: Ess Ess Publications, 2011
- 3. Krishnan, Gopal. Digital Libraries in Electronic Information Era. New Delhi: Authors Press, 2000.
- 4. Omesh Aadhavan, Management of Digital Library, Jaipur: Oxford Book Company, 2011.
- 5. Sathayanaranan, B. Multimedia its Applications in Library and Information Science. Chennai: T.R. Publications, 1998.
- 6. Shiva Sukeela, Electronic Resources Management. What, Why and How, New Delhi: Ess Ess Publications, 2010.