ANNAMALAI UNIVERSITY
DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

PH.D COURSE WORK

COURSE-1: RESEARCH METHODOLOGY

Unit-1: Research

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

Unit-2: Research 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, Purposes, Scope and Limitations.

Unit-3: Sampling

Definition, Population, Sample, Sampling Procedures-Characteristics of Good Sampling-Sampling Techniques. Data Collection: Data Sources-Primary Sources, Secondary Sources, Data Collection Methods: Questionnaire, Survey, Observations, Interview.

Unit-4: Hypothesis

Definition, Types and Relevance, Testing of Hypothesis. - 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 Models, ANOVA, Z-Test, T-test, Correlation and Regression etc.

Unit-5: Report Writing

Planning, Style and Structure-Documentation-Presentation-Citation Standards: APA-MLA

References:

1. Goode, W.J. and Hatt, P.K. Methods in Social Science. New York: McGraw Hill, 1985.
2. Gowswami. Research Methodology in Library and Information Science. New Delhi: Commonwealth, 1995.
3. Kerlinger, Fred, ed. Foundation of Behavioural Research: Education and Psychology. New York, 1964.
4. Kothari. Research Methodology, New Delhi: Eastern Wiley, 1995.
5. Ravichandra Rao,I.K. Quantitative Methods in Library and Information Science, New Delhi: Willey, 1983.
6. Santhosh Gupta, Research Methodology and Statistical Techniques, New Delhi: Deep and Deep Publication, 2000.
7. Saravanavel. Research Methodology, Allahabad: Tajmahal, 1994.
8. Segha, R.L. Statistical Techniques for Librarians, New Delhi: Ess Ess Publication, 1998.
9. Young, Pauline. Scientific Social Surveys and Research, New York: Prentice Hall, 1982.

Ph.D – MODEL QUESTION PAPER

PAPER I- RESEARCH METHODOLOGY

[Common to all the Candidates]

Answer any FIVE Questions   **(Time: 3 Hours)**
All questions carry equal marks   **(Max: 75 marks)**

1. Discuss the nature, scope and value of historical and Fundamental Research?

2. What are the sources for identification and the factors influencing selection of research topic in Library and Information Science?

3. Define and discuss various types of Research design.

4. Discuss and compare 'Interview' and 'Questionnaire' methods of data collection in Social Science Research.

5. Define and explain the need for formulating a "Hypothesis". Explain the methods of testing hypothesis.

6. Explain the methods and techniques involved in writing a research report.

7. Discuss the use of statistics in research. Explain various methods of presentation of statistics.

8. Define "Population" and "Sample". Explain with examples the different techniques of sampling.

9. Write short notes on any THREE of the following.
   a) Null Hypothesis.
   b) Content analysis.
   c) Observation.
   d) Measure of Central Tendency.
   e) Exploratory research.

COURSE-2: PARADIGM SHIFT IN LIBRARY AND INFORMATION SCIENCE

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.

Unit-3: Information Retrieval

Indexing Languages & Vocabulary Control-Natural Language Indexing-Information Retrieval models-Evaluation of IR systems-Designs and development of IR Thesaurus

Unit-4: Management

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

Unit-5: Library Science Education

Curriculum Design-Accreditation of LIS Course-Continuing Education for Library and Information Personnel.

References:

1. Brophy, Peter and Courling Kote, Quality Management for Information and Literacy Management, Bombay: Jaico, 1997.
2. 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.
4. Katz, WA collection development selection of materials for libraries, New York: HRW. 1980.
5. Martino, R.L. Information Management: Dynamics of Management Information Systems. New York: McHill, 1969.
6. Medick, Robert, G. et.al. Information systems for modern management. New Delhi: Prentice Hall, 1992.
7. Narayana, G.J. Library and Information Management. New Delhi: PHI, 1991.
8. Paliwal, P.K. Compendium of Library Administration. New Delhi: EssEss.2000.
9. Parker, Charles and Café. Thomas. Management Information Systems: Strategy and Action. New York: McGraw Hill, 1993.
10. Stuert, Robert, D and Moran, Barbara B. Library and Information Centres Management. Colorado: Libraries unlimited, 2004.

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Paper – II: Paradigm Shift in Library and Information Science

[Common to all the Candidates]

Answer any FIVE Questions   **(Time: 3 Hours)**
All questions carry equal marks   **(Max: 75 marks)**

1. Discuss the need and purpose of Bibliographic Databases

2. Role of Doublin core in the Digital Libraries

3. Define and discuss the need and purpose of Intellectual Property Rights.

4. Describe the problems of Data Security in Digital Era.

5. Brief the information organization using the Thesaurus.

6. Explain the concept and elements of TQM.

7. Explain the fourteen principles of Total Quality Management.

8. Discuss the marketing of Library and Information Services.

9. Write short notes on any THREE of the following.

    a) Meta Data.
    b) Copy Right Act.
    c) Risk Management.
    d) RFID.
    e) Curriculum Design.

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.

References:

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.

Ph.D – MODEL QUESTION PAPER

1-USER STUDIES

Answer any FIVE Questions   **(Time: 3 Hours)**
All questions carry equal marks   **(Max: 75 marks)**

1. Define user. Explain the different kinds of users and their information needs.

2. What is user study? Explain the different methods of user studies in details.

3. Critically examine the various user studies conducted in India.

4. Explain the different information needs of college communities and the ways to fulfill their needs.

5. Explain the different categories of documentary sources necessary for satisfying the current information needs of research scholars.

6. Explain the criteria for evaluating a good user study.

7. What are the problems uncounted in conducting user studies suggest the solutions to overcome the problems?

8. Explain the information needs of faculties in universities.

9. Write short notes on any THREE of the following.

    a) UGC-INFONET.
    b) User Study Vs User Education.
    c) Categories of Information.
    d) User Behaviours.
    e) Citation Studies.

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.

References:

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.

References:

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.

Ph.D – MODEL QUESTION PAPER

3-ICT IN LIBRARY AND INFORMATION CENTRES

Answer any FIVE Questions   (Time: 3 Hours)

All questions carry equal marks   (Max: 75 marks)

1. Discuss the need and components of information and communication technology

2. Examine use of ICT in library and information centres.

3. Write an essay on open source software

4. What are institutional Repositories? Explain its important in resource sharing programme of libraries.

5. Define database discuss various steps involved in develo0pment of databases using WINISIS.

6. Define resource sharing and explain its components, categories and security.

7. What is meant by consortium? Discuss various consortiums available for different discipline.

8. Critically examine need, purpose and areas of automation in library and information centre.

9. Write short notes on any THREE of the following.

   a) Bibliographical database.
   b) INFLIBNET.
   c) Green stone.
   d) Operating system.
   e) SQL.

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.

References:

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.

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4-DIGITAL LIBRARIES

Answer any FIVE Questions   **(Time: 3 Hours)**
All questions carry equal marks   **(Max: 75 marks)**

1. Define digital library and discuss its objectives, characteristics and development.

2. Explain different types of OCR file formats.

3. Define internet and explain its origin and development

4. Discuss the need and importance of different type of network based services.

5. Critically examine various digital resources with suitable example.

6. Write an essay on digital preservation.

7. Explain about web services.

8. Discuss the importance of browser and search engine in the task of information retrieval process.

9. Write short notes on any THREE of the following.

   a) Full text data bases.
   b) E-mail.
   c) Web OPAC.
   d) Online.
   e) Web 2.0.

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.

References:

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

1. Define Bibliometrics. Explain the nature and scope of Bibliometrics

2. Describe the Lokta's law and Bradford's law of scattering in Bibliometrics.

3. Explain the structure and utility of science citation index (SCI)

4. Explain the factors in the evaluation of scientific literature through citation index.

5. Discuss the recent development in application of the term 'Bibliometrics'.

6. Explain the various types of communication in primary literature.

7. Explain the studies that had contributed to the development of bibliometrics.

8. Write an essay on 'Web of Science'.

9. Write short notes on any THREE of the following.

    a) Zipf's law.
    b) H. index.
    c) Authorship studies.
    d) Historical Development of Bibliometrics.
    e) Operation Research.

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.

References:

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.

1. Define information sources. Discuss features and its types

2. Critically examine the various E-Resources and services available for academic community of Arts and Science colleges.

3. Discuss the role of information transfer in the information cycle.

4. Explain the features if INFLIBNET and DELNET.

5. Describe the various types of database services used by academic and research community.

6. Write an essay on different types of core services offered by Arts and Science colleges.

7. Describe the role of E-Journal in research and development activities in college environment.

8. Explain the role of UGC INFONET services towards the development of research.

9. Write short notes on any THREE of the following.

   a) NICNET.
   b) E-Books.
   c) Web of science.
   d) Documentary delivery service.
   e) Non-documentary sources.