



# Gyanveer University Sagar (M.P.)



## Ph.D Entrance Test Syllabus Session: 2024-25 Library and Information Science

### Part A : Research Methodology

### Part B : Library and Information Science

## Part-A Research Methodology

#### Unit-I Introduction

1. Research- Meaning, Concept, Nature, Steps, Types and Characteristics.
2. Scientific Inquiry Philosophical and Sociological foundations of research  
Interdisciplinary approach  
and its implications in various research areas.

#### Unit-II Methods of Research

1. Qualitative and quantitative methods of research like Historical, case study, ethnography, exposit facta, survey (Normative, descriptive, evaluative etc.) field and laboratory experimental studies.
2. Characteristics of methods and their implications in research areas.

#### Unit-III Development of research proposal

1. Research proposal and its elements Formulation of research problem-criteria of sources and definition Development of objectives and characteristics of objectives.
2. Development hypotheses and applications.

#### Unit-IV Methods of data collection

1. Concept of sampling and other concepts related to sampling. Probability and non-probability samples, their characteristics and implications.
2. Tools of data collections, their types, attributes and uses. Redesigning, research tools-like questionnaire, Dairies, observation, interviews, scales and tests etc.

#### Unit-V Methods of data analysis

1. Analysis of qualitative data based on various tools. Analysis of quantitative data and its presentation with tables, graphs etc.
2. Statistical tools and techniques of data analysis-measures of central tendency, dispersion.



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3. Decision making with hypothesis testing through parametric and non-parametric tests.
4. Validity and delimitations of research findings.

### Unit-VI Report writing and evaluations

1. Principles of report writing and guide lines according to style manuals. Writing and presentation of preliminary, main body and reference section of report. Picture and Graphs. Introduction to SPSS. Evaluation of research report.

### References:

1. Wilkinson & Bhandarkar: Methodology and Techniques of Social Research.
2. Pauline V young: Scientific Social Surveys and Research.
3. Panneerselvam, R., Research Methodology, Prentice Hall Of India, New Delhi,2004
4. Kothari: Research Methodology.
5. Festinger. L & D. Katz: Research Methods in Behavioral Science.
6. Sellitz, Et Al: Research Methods in Social Relations.

## Part-B

### Library and Information Science

#### Unit-1 Library and Information Society:

1. Information, Information Science, Information Society.
2. Information as a Resource/Commodity.
3. Information Transfer Cycle-Generation, Collection, Storage and Dissemination
4. Communication- Channels, Barriers.
5. Intellectual Property Rights.
6. Library and Information Policy at the National level Associations: ILA, IATLIS, IASLIC,
7. International Library Associations- IFLA, ALA, CILIP
8. Historical Development of Libraries in India.
9. Different Types of Libraries.
10. Library Legislation and Public Library Acts.

#### Unit-2 Reference and Information Sources:

1. Information Sources: Nature, Types and Characteristics.
2. Evaluation of Reference and Information Sources and Web Resources.
3. Human and Institutional Resources.
4. Primary Sources of Information (Print and Electronic).
5. Secondary Sources of Information (Print and Electronic).
6. Tertiary Sources of Information (Print and Electronic).
7. Electronic Information Resources, Databases: Bibliographic, Numeric, Multimedia and Full text.



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8. Current Awareness Service, SDI, Inter-Library Loan, DDS, Library Websites, SMS Alert Services, Ask A Librarian.
9. Documentation Centre, Information Centre, Referral Centre, Translation Centre.
10. Information Systems and Networks: National- NIScPR, DESIDOC, NASSDOC, INFLIBNET, National Knowledge Network (NKN), NICNET. International - INSPEC, AGRIS, BIOSIS, INIS, MEDLERS. Patent Information System (PIS), OCLC.

### **Unit-3 Information, Knowledge and Library**

1. Data, Information, Knowledge and Wisdom. Knowledge Society.
2. Communication: Meaning, Types, Theories, Models and Barriers.
3. Intellectual Property Rights: Copyrights. Right to Information Act, Information Technology Act.
4. National Knowledge Commission (NKC), National Mission on Libraries and National Education Policy-2020.
5. Role of UNESCO, UGC and Raja Rammohun Roy Library Foundation in the Promotion of Libraries. Public Relations and Extension Activities.

### **Unit- 4 Knowledge Organization**

1. Universe of Subjects. Modes of Formation of Subjects, Universe of Knowledge in CC, DDC and UDC.
2. Library Classification: Theories, Canons, Principles and Postulates, Devices, Mnemonics, Five Fundamental Categories, Notation, Facet Analysis, Phase Relations, Common Isolates. Web Dewey.
3. Library Cataloguing: Codes of Cataloguing- CCC and AACR-II, Headings and Library of Congress Subject Headings, Normative Principles, CIP, Union Catalogues.
4. Web OPACs, ISBD, CCF, RDA, FRBR. MARC-21, Dublin Core, ISO2709, Z39.50.
5. Indexing System: Pre -Co-ordinate and Post- Coordinate Indexing Systems.

### **Unit- 5 Management**

1. Management: Definition, Principles, Levels and Functions, Management Information System (MIS), MBO, Change Management.
2. Human Resource Management, Job Evaluation and Performance Appraisal, Leadership, Total Quality Management (TQM), SWOT Analysis, MBO, Staff Manual.
3. Book Selection Policies.
4. Financial Resource Management: Sources of Finance, Mobilization of Financial Resources, Methods of Financial Estimation, Budgeting Methods, Cost Effective and Cost Benefit Analysis. Library Authority and Library Committee, Library Rules and Regulations, Annual Report and Library Statistics.
5. Management of Functional Units of Library and Information Centers: Functions, Procedures and Activities of Acquisition Section, Technical Section, Circulation Section, Periodical Section, Maintenance Section. Stock Verification. Library Building, Furniture and Equipment, Knowledge Management.



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### Unit- 6 Computer and Information Technology

1. Computer Components - CPU, Input and Output Devices, Internal and External Storage Devices.
2. Hardware and Software. Operating Systems, Microsoft Windows, Unix, Linux. Programming Languages. MS Office: Word, Excel, Power Point and Access.
3. Computer Networks: Definition, Topologies, Types, Transmission Channels, Mode and Media, ISDN, Modulation, Bandwidth, Multiplexing, Standards and Protocols. Wireless Communication, Mobile Communication, Videotext, Voice Mail.
4. Internet: www. Search Engines, Protocols and Standards: HTTP, SHTTP, FTP, SMTP, TCP/IP, URL. Search Strategies.
5. Data Security: Firewalls, Cryptographic Techniques, Anti-virus Software.

### Unit- 7 Library Automation

1. Library Automation: Definition, Need, Purpose and Advantages.
2. Automation of Library Operations: Acquisition, Cataloguing, OPACs, Circulation and Serial Control. Application of Barcode, RFID, QR Code and Biometric Technology in Libraries.
3. Creation of Database- CDS/ISIS, WINISIS. Use of Library Software: Koha, Libsys, SOUL, E Granthalay. Standards for Library Automation.
4. Digital Library: Genesis, Characteristics, Types, Standards, Protocols, Digital Preservation, Digital Library Software (Open Source): Green Stone, Dspace.
5. Institutional Repositories, Content Management Systems, Artificial Intelligence, Expert Systems, Cloud Computing. Ontology, Semantic Web, Big Data, Data Mining.