Unit 1: Basics of research:
1. Meaning, characteristics, need/importance, types of research: basic and applied
2. Scientific method: characteristics, inductive and deductive methods
3. Research ethics: ethical research practices, plagiarism
4. Impact factor, h-index
5. Validity, reliability, variables (dependent, independent, extraneous)

Unit 2: Steps in research
1. Research problem- identification and formulation
2. Research proposal, contents
3. Hypothesis: need, types, testing
4. Literature review: types of literature (primary and secondary, print and electronic), types of review (thematic, chronological)
5. Statistical techniques: frequency distribution, measure of central tendency, standard deviation, measure of dispersion, variance, correlation, regression, Z-test, T-test, Chi-square test; graphical presentation of data

Unit 3: Research methods:
1. Survey, pilot survey
2. Case study
3. Experimental
4. Historical
5. Delphi and content analysis
6. Bibliometrics, scientometrics, webometrics, Altmetrics, citation analysis

Unit 4: Data collection techniques and tools
1. Types of data, measurement scales
2. Questionnaire
3. Interview, focus group
4. Observation
5. Sampling technique: sample size, sampling errors, sampling methods or types

Unit 5: Research reporting
1. Thesis: structure and contents
2. Research article: structure and contents
3. Citation styles: APA, Chicago, MLA, reference management software
4. Citation of various types of documents
5. Thesis evaluation, criteria
Subject Concerned Syllabus
Library & Information Science (Ph.D.)

Unit 1: Foundation of Librarianship
1. History of Libraries
2. Laws of Library Science: Dr. S.R. Ranganathan,
3. Principles of Donald Urqhart
4. Information: Contributions of Belkin, Robertson, Derwin, DIKW model
5. Information communication-channels, barriers
6. Resource Sharing
7. IPR
8. Public libraries, legislation, NKC, library and information associations, professionalism

Unit 2: Information Sources and services
1. Primary, secondary and tertiary
2. Electronic information sources, databases: features, pricing models, open access resources, institutional repositories, usage data, consortia, evaluation of electronic information sources
3. CAS, SDI, Referral, Reader’s advisory service, digital reference service

Unit 3: Knowledge Organization
1. Universe of Subjects: structure and attributes, modes of formation of subjects
2. Classification schemes: history, development, current status
3. Bibliographic record formats, AACR2R, MARC21, FRBR, RDA, Metadata
4. Indexing system, search strategies, Information Retrieval and models
5. vocabulary control: thesaurus, taxonomies, ontologies, folksonomies

Unit 4: Management of Libraries
1. Collection development: selection, acquisition, evaluation, weeding out
2. History of management thoughts
3. Financial management, budgeting, cost-benefit and cost effectiveness analysis
4. Human resource management
5. TQM, PERT/CPM, Marketing of library and information services/products, reengineering, six sigma

Unit 5: Application of Information Technology in Libraries
1. Library Automation,
2. Networking, Components of Network, Internet Protocols
3. OSI Model
4. Digital libraries, Metadata, Metadata Standards etc.
5. Software: Library management software, Software for institutional repositories,
6. Barcode, RFID, cloud computing,
7. OPAC, discovery services/federated search services, Internet, internet security,
8. Web 2.0 and its Components, Application of web 2.0 tools in Libraries
9. Cloud Computing, MOOC
10. New Trends in IT
Research Methodology : M.Phil.

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5. Thesis evaluation, criteria
Subject Concerned Syllabus
Library & Information Science (M.Phil.)

Unit I
Intellectual Property Rights-Concept, Censorship-Print and Non-Print Media,
Library and Information Policy at the National Level
LIS Education in India
LIS Profession
Library & Information Services
Role of UGC in the growth and development of Libraries and information centres in
institutions of higher education in India.
Information Literacy.

Unit II
Vocabulary Control-Thesaurus, List of Subject Headings
Databases-Search Strategies, Boolean Operators
Knowledge management
Information Processing & Organization
Current Trends in Information Storage & Retrieval

Unit III
Financial management-Resource Generation, Cost-Benefit analysis PERT, CPM
Performance Evaluation of Library & Information centres and Services
Marketing of Information Products and Services
Total Quality Management (TQM)
New Techniques in Library management.

Unit IV
Impact of IT on Library.
Library Networking & Networks,
Network Topologies
Hypertext, Hypermedia, Multimedia
Integrated Services Digital Network (ISDN), Open System Interconnection (OSI)
Digital Library, Virtual Library
Electronic Documents
Library Automation
Internet Components, Services, Browsing-web Browsing, Search Engines Meta-data, Digital
Object Identifier (DOI)
Metadata, Institutional Repository, Open Source Software, Web 2.0
Current trends in IT