

Scientific & Technical Posts for Library Science (Indicative, Syllabus and weightage for written test)

Sl No	Topics	(Weightage %)		
		STA	STO	Scientist -B&C
1	<ul style="list-style-type: none"> Types of Libraries – Academic, Public and Special. Library Legislation and Library Acts in Indian States; The Press and Registration of Books Act; Laws of Library Science. Professional Associations - National – ILA, IASLIC, IATLIS; International – IFLA, ALA, CILIP, ASLIB, SLA; Role of UGC, RRRLF and UNESCO in Promotion and Development of Libraries. Library and Information Science Education in India Library Extension Activities Trends in Library and Information Science 	10	5	5
2	<ul style="list-style-type: none"> Data, Information, Knowledge and Wisdom. Information Life Cycle - Generation, Collection, Storage and Dissemination. Information Science - Relationship with other subjects, Information Society and Knowledge Society. Communication – Concept, Types, Theories, Models, Channels and Barriers; Trends in Scholarly communication. IPR and Legal Issues - Categories, Conventions, Treaties, Laws. Right to Information Act (RTI); Information Technology Act. National Knowledge Commission; National Mission on Libraries 	10	5	5

3	<ul style="list-style-type: none"> ● Information Literacy - Areas, Standards, Types and Models; Trends in Information Literacy ● Information Sources - Nature, Characteristics, Types and Formats. ● Sources of Information - Primary, Secondary and Tertiary; Documentary and Non-Documentary. ● Reference Sources - Bibliographical, Biographical, Educational, Language and Geographical. ● Electronic Information Resources - Subject Gateways, Web Portals, Bulletin Boards Discussion Forums /Groups. ● Databases: Bibliographic, Numeric, Full text, Multimedia; Open Access Databases. ● Evaluation of Reference Sources and Web Resources. ● Search and Discovery Services. ● Library Resource Sharing and Library Consortia – National and International. ● National Information Systems and Networks: NISCAIR, DESIDOC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National Knowledge Network (NKN), Biotechnology Information System Network ● International Information Systems and Networks: INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS). 	10	15	15
4	<ul style="list-style-type: none"> ● Type of Users - User Studies, User Education. ● Community Information Services. ● Reference Service – Concept and Types; Referral Services ● Alerting Services - CAS, SDI, Inter Library Loan and Document Delivery. ● Mobile based Library Services and Tools – Mobile OPAC, Mobile Databases, ● Mobile Library Website, Library Apps, Mobile Library Instructions, Augmented Reality, SMS Alerts, Geo-Location, Reference Enquiry. ● Web 2.0 and 3.0 - Library 2.0- Concept, Characteristics, Components; Instant Messaging, RSS Feeds, Podcasts, Vodcasts, Ask a Librarian ● Collaborative Services- Social Networks, Academics Social Networks, Social Tagging, Social Bookmarking. 	10	10	10

5	<ul style="list-style-type: none"> • Universe of Knowledge - Nature and Attributes; Modes of Formation of Subjects. • Knowledge Organisation - Classification -Theories, Canons, and Principles; • Simple Knowledge Organisation System (SKOS), Taxonomies, Folksonomy, Trends in Classification. • Mapping of Subjects in Library Classification Schemes – DDC, UDC and CC. • Knowledge Organisation: Cataloguing - Canons and Principles; Centralized and Co-operative Catalogue; Library Cataloguing Codes: CCC and AACR - II. • Standards of Bibliographic Record Formats and Description – ISBD, MARC 21, CCF, RDA, FRBR, Bibframe. • Standards for Bibliographic Information Interchange & Communication - ISO 2709, Z39.50, Z39.71. • Metadata Standards: Dublin Core; MARC21, METS, MODES, EAD. • Indexing Systems and Techniques: Assigned - Pre-coordinate; Post-Coordinate; Derived- Title-based; Vocabulary Control. • Abstracting – Types and Guidelines. • Information Retrieval System – Features, Components, Models and Evaluation. • Ontology – Tools (RDF, RDFS, Protege). 	10	15	15
6	<ul style="list-style-type: none"> • Computer Technology - Character Representation (ASCII, ISCII, Unicode); • Computer Hardware, Software; Storage Devices; Input and Output Devices. • Types of Software - System Software, Application Software. • Telecommunication - Transmission Channels, Mode, and Media, ISDN, PSDN, • Computer Networks - Topologies, Types of Networks – LAN, MAN, WAN. • Internet - Web browsers, WWW, E-mail; Search Engines, Meta and Entity Search engines. • Internet Protocols and Standards – HTTP, FTP, SMTP, TCP/IP, URI, URL. • Hypertext, Hypermedia, Multimedia, Video conferencing, Virtual Reality. • Cloud Computing • Semantic Web, Linked Data, Big Data, Data Mining, Data Harvesting 	10	15	10

7	<ul style="list-style-type: none"> • Library Automation – Areas, Planning, Selection of Hardware and Software, • Implementation and Evaluation; Standards for Library Automation. • Barcode, RFID, QR Code, Biometric, Smartcard: Features and Applications. • Digitization – Planning, Selection of Materials, Hardware, Software, Process, Issues. • Digital Library: Genesis, Characteristics, Types, Architecture; Standards, Formats and Protocols, DOI. • Digital Preservation - Need, Purpose, Standards, Methods, Techniques, Projects (National and International) • Digital Library Initiatives – National and International. • Institutional Repositories - Need, Purpose, Types and Tools; Institutional Repositories in India; ROAR, DOAR, SHERPA-ROMEO. • Content Management Systems – Architecture, Data Integration, CMS Software – • Selection, Implementation and Evaluation. 	10	15	15
8	<ul style="list-style-type: none"> • Research • Types of Research – Basic and Applied, Interdisciplinary and Multidisciplinary. • Research Methods: Historical, Descriptive, Experimental and Delphi. • Research Design - Selection of Research Problem, Review of Literature; Formulation of Research Problem; Hypothesis – Formulation, Types and Testing; Sampling Techniques. • Methods of Data Collection • Data Analysis and Interpretation • Plagiarism: Concept and Types. • Statistical Packages – Spreadsheet, SPSS, Bibexcel, ‘R’ Statistics. • Research Report Writing and Citation Tools – Structure, Style, Contents, Guidelines; • Style Manuals; Online Citation Tools; Reference Management Tools; Evaluation of Research Report. • Metric Studies in LIS - Bibliometrics, Scientometric, Webometrics, Altmetrics; • Impact Factors – Journal, h-Index, g-Index, i10 Index. • Trends in Library and Information Science Research. 	10	10	15
9	General Aptitude / Awareness/Knowledge about INFLIBNET	20	10	10

