

Library and Information Science (COPH11)

Note:

- i. There will be one Question Paper which will have 100 questions.
- ii. All questions will be compulsory.
- iii. The Question Paper will have two Parts i.e. Part A and Part B
- iv. Part A will have 50 questions based on Research Methodology
- v. Part B will have 50 questions based on Subject-Specific Knowledge.

Unit – I

- ❖ Data, Information, Knowledge and Wisdom.
- ❖ Information Life Cycle - Generation, Collection, Storage and Dissemination.
- ❖ Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development.
- ❖ Information Science - Relationship with other subjects, Information Society and Knowledge Society.
- ❖ Communication – Concept, Types, Theories, Models, Channels and Barriers; Trends in Scholarly Communication.
- ❖ Information Industry - Generators, Providers and Intermediaries.
- ❖ IPR and Legal Issues - Categories, Conventions, Treaties, Laws.
- ❖ Plagiarism: Concept and Types.
- ❖ Right to Information Act (RTI); Information Technology Act.
- ❖ National Knowledge Commission; National Mission on Libraries.

Unit – II

- ❖ Historical Development of Libraries in India; Committees and Commissions on Libraries in India.
- ❖ Types of Libraries – Academic, Public, Special and National.
- ❖ Library Legislation and Library Acts in Indian States; The Press and Registration of Books Act; The Delivery of Books and Newspapers (Public Libraries) Act.
- ❖ Laws of Library Science.
- ❖ Library and Information Science Profession - Librarianship as a Profession, Professional Skills and Competences; Professional Ethics.
- ❖ 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 Public Relations and Extension Activities.
- ❖ Type of Users - User Studies, User Education.
- ❖ Information Literacy - Areas, Standards, Types and Models; Trends in Information Literacy.

Unit – III

- ❖ Information Sources - Nature, Characteristics, Types and Formats.
- ❖ Sources of Information - Primary, Secondary and Tertiary; Documentary and Non-Documentary.
- ❖ Primary Information Sources (Print and Electronic) - Journals, Conference Proceedings, Patents, Standards, Theses & Dissertations, Trade Literature.
- ❖ Secondary Information Sources (Print and Electronic) - Dictionaries, Encyclopedias, Bibliographies, Indexing & Abstracting, Statistical sources, Handbooks and Manuals.
- ❖ Tertiary Information Sources (Print and Electronic)- Directories, Year Books, Almanacs.
- ❖ 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.
- ❖ Institutional and Human Resources.
- ❖ Evaluation of Reference Sources and Web Resources.

Unit - IV

- ❖ 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, and 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.
- ❖ Web – Scale Discovery Services
- ❖ National Information Systems and Networks: NISCAIR, DESIDOC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National KnowledgeNetwork (NKN), Biotechnology Information System Network
- ❖ International Information Systems and Networks: INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS).
- ❖ Library Resource Sharing and Library Consortia – National and International.

Unit -V

- ❖ 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 - Cansons 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

Unit - VI

- ❖ Management - Principles, Functions and Schools of thought.
- ❖ Library and Information Centers Management - Book Selection Tools and Principles; Library Acquisition, Technical Processing, Circulation, Serial Control, Maintenance and Stock Verification; Preservation and Conservation; Hazards and Control Measures of Library Materials.
- ❖ Human Resource Management – Planning, Job Analysis, Job Description, Job Evaluation, Selection, Recruitment, Motivation, Training and Development, Performance Appraisal; Staff Manual.
- ❖ Financial Management in Libraries - Sources of Finance, Resource Mobilisation, Budgeting Methods; Cost Effective and Cost Benefit Analysis, Annual Reports & Statistics; Library Authority and Committee.
- ❖ Project Management - SWOT, PEST, PERT / CPM.
- ❖ Total Quality Management (TQM) - Concepts, Principles and Techniques, Six Sigma; Evaluation of Services of Libraries and Information Centers.
- ❖ Library Building, Furniture and Equipments; Green Library Building; Information Commons; Makers Space; Security and Safety.
- ❖ Management Information System (MIS), MBO, Change Management, Disaster Management, Crisis Management.
- ❖ Knowledge Management – Principles, Tools, Components and Architecture.
- ❖ Marketing of Library Products and Services – Plan, Research, Strategies, Mix, Segmentation, Pricing and Advertising; Management Consultancy.

Unit - VII

- ❖ Computer Technology - Character Representation (ASCII, ISCII, Unicode); Computer Hardware, Software; Storage Devices; Input and Output Devices.
- ❖ Types of Software - System Software, Application Software.
- ❖ Programming Languages – Object Oriented, Procedural, High Level, Scripting; Web Languages.
- ❖ Telecommunication - Transmission Channels, Mode, and Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols.
- ❖ Wireless Communication – Media, WI-fi, Li-fi, Satellite Communication, Mobile Communication.
- ❖ 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, SHTTP, FTP, SMTP, TCP/IP, URI, URL.
- ❖ Hypertext, Hypermedia, Multimedia, Video conferencing, Virtual Reality, Augmented Technologies.
- ❖ Data Security, Network Security, Firewalls, Cryptographic Techniques, Anti-virus software, Anti-spyware, Intrusion Detection System.

Unit – VIII

- ❖ 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, SHARPA-ROMIO.
- ❖ Content Management Systems – Architecture, Data Integration, CMS Software –Selection, Implementation and Evaluation.
- ❖ Application of Artificial Intelligence, Expert Systems and Robotics in Libraries; Social Mobile Analytics Cloud (SMAC); Cloud Computing.
- ❖ Ontology – Tools (RDF, RDFS, Potege); Semantic Web, Linked Data, Big Data, Data Mining, Data Harvesting.

Unit – IX

- ❖ Research - Concept, Purpose, Functions, Scope and Ethics; 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: Questionnaire, Interview, Observation, Library Records, Scales and Checklist.
- ❖ Data Analysis and Interpretation - Presentation of Data; Statistical Methods/ Techniques.
- ❖ Statistical Packages – Spreadsheet, SPSS, Bibexcel, 'R' Statistics.
- ❖ Research Report Writing and Citation Tools – Structure, Style, Contents, Guidelines; Style Manuals; Online Citation Tools; Reference Style Management Tools; Anti-plagiarism Tools; Evaluation of Research Report.
- ❖ Metric Studies in LIS - Bibliometrics, Scientometric, Webometrics, Altmetrics;
- ❖ Impact Factors – Journal, Institutional and Authors; h-Index, g-Index, i10 Index.
- ❖ Trends in Library and Information Science Research.

Unit –X

- ❖ Academic Library and Information System.
- ❖ Public Library and Information System.
- ❖ Special Library and Information System.
- ❖ Health Science Library and Information System.
- ❖ Corporate Library and Information System.
- ❖ Agricultural Library and Information System.
- ❖ Engineering and Technological Library and Information System.
- ❖ Archive, Museums and Oriental Libraries.
- ❖ Community Information System.
- ❖ Information Services and System for Persons with Disability, Children and Women.