Tamil Nadu Public Service Commission

Syllabus

Library and Information Science
(PG Degree Standard)

Code: 267

Unit I: Information and Communication (18 Questions)

(i) Data, Information and Knowledge; Information – Notions; Information Theories
(ii) Library – Social relevance; Types; Functions, Legislation.
(iii) Information Transfer Cycle; Diffusion pattern; Communication – Theories and Models; Channels and Barriers to Communication
(iv) Information / Memory institution of different kinds: Libraries, Archives, Documentation Centers, Information Analysis Centers, Museums and respective roles and functions.
(v) Professional bodies and Association – UNESCO, IFLA, ALA, CILIP, ILA, IASLIC, IATLIS, etc

Unit II: Management of Information Centres (22 Questions)

(i) Management - Concept, Definition; Schools of Management Thought, functions of Management (POSDCORB).
(ii) Human Resource Management – Organisation models; job description and job Analysis; selection, recruitment, training
(iii) Financial Management: Planning and Control; Resource generation; Budget and Budgeting; Budgetary control techniques; Cost Benefit, Cost Effective analysis
(iv) Materials Management: Collection development Policy; Issues – selection, acquisition; Library routines, Circulation, Preservation and conservation, Physical facilities - building and equipments, Marketing of information.
(v) Planning – Concept, Definition Types; Systems Analysis and Design; Knowledge Management, total quality management, MBO and MIS

Unit III: Knowledge Organisation (22 Questions)

(i) Universe of Subjects; Modes of formation of Subjects; Knowledge Organization
(ii) Classification - Various Schemes of Classification - CC, UDC, LC and DDC – Overview; BSO; General theory of classification; CRG; Cannons and Principles - Idea, Verbal and Notation planes; Facet analysis;
(iii) Cataloguing - Purpose, Structure, Types – Inner and Physical forms; Normative Principles, Canons & Laws; Standards – ISBDs, AACR, RDA; FRBR
(iv) Subject Cataloguing – Principles; Subject heading lists; Thesauri and Vocabulary control
(v) Bibliographic formats – International Standards - ISO 2709, MARC21, UNIMARC, CCF and National formats. Metadata – Standards: Dublin Core, Mark up languages – HTML, XML, RDF

Unit IV: Information Sources (20 Questions)

(i) Information Sources – Types – Documentary and Non documentary; Primary, Secondary and Tertiary; Electronic Sources of Information; Human and Institutional Sources; Invisible Colleges; Technological Gatekeepers

(ii) Reference Sources - Ready Reference Sources – Types - Dictionaries, Encyclopedias, Annuals, Biographical sources, Handbooks and Manuals, Geographical Sources.

(iii) Bibliographical Sources – Bibliographies; Union Catalogues; Indexing and Abstracting sources; News summaries;

(iv) Web Resources - Subject Gateways and Portals; Databases – Bibliographical, Abstracting and Indexing; Full-text databases; Citation Databases

(v) Evaluation of Information sources - Print and Web Resources; Multimedia; Open Access Resources

Unit V: Information System, Products and Services (24 Questions)

(i) Information Systems - Concept, Purpose, and Types; Global & National Information Systems; MEDLARS, INIS, AGRIS, INSPEC, OCLC, ERONAT, NISCAIR, NASSDOC, Library Networks: INFLIBNET, DELNET,
etc.

(ii) Information Services - Users Education and Information Literacy; Documents Delivery, Translation; Current Awareness, SDI, E-Alert & Web- based Services

(iii) Users of Information - Understanding the users; Categories of users and their needs; Information use contexts; Information seeking behaviour of users; Theories of Information seeking behaviour.

(iv) Information Analysis and Consolidation Products and Services.

(v) Use Studies; Methods of Users studies; Major information users and use studies and their findings

Unit VI: Information Storage and Retrieval (22 Questions)

(i) Information Retrieval System – Concept, Definition, and Components

(ii) Indexing systems – Pre-coordinate and Post-coordinate; General Theory of Subject Indexing; Keyword Indexing; Citation Indexing

(iii) Information Retrieval Models – Boolean, Probabilistic, Cognitive and Vector Models; Alternative IR Models: algebraic and probabilistic models (Bayesian networks)

(iv) Search and Searching - Search Process; Search strategies; Search engines

(v) Evaluation of Information Retrieval Systems -Purpose, Criteria – Recall and Precision; Major Evaluation Studies – MEDLARS; SMART Retrieval; STAIRS, Project TREC.

Unit VII: Research Methods (16 Questions)

(i) Research - Concept, Definition, Objectives and Significance; Types;
Research Problems

(ii) Research Design – Definition, Need; Sampling; Hypothesis – Types and Testing

(iii) Methods and Tools - Data collection - Survey, Experimental, Case-study, Observation, Questionnaire, Interview schedules.

(iv) Introduction to Statistics; definition of statistical terms - population, sample, data and variables; frequency distributions; scales of measurement; presentation of data - graphical and tabular; frequency tables, histogram, frequency curves; correlation and regression analysis; measures of central tendency.

(v) Report Writing – Components of a Research Report; Style manuals – MLA, APA, Chicago, Turabian.

Unit VIII: Information Technology (It) and Library Automation (20 Questions)

(i) Information Technology – Concept – Definition - Evolution of Digital Computers; Introduction to Telecommunications; Number Systems: Binary, Octal, Hexadecimal, Representation of Numbers in Computers; Character Representation: ASCII, ISCII and UNICODE; File formats

(ii) Basic components of a Computer – Arithmetic Logic Unit; Control Unit; Memory Unit – Static and Dynamic RAM, ROM, Cache memory; Input / Output devices

(iii) Operating System - Linux, Windows; Fundamentals of Programming; Introduction to Cprogramming; Object Oriented programming; Java,PHP

(iv) Database Management System – Concepts, Functions; Integrity and Security issues

(v) Library Automation - Overview of library automation software; Criteria for selection of software; and Hardware (including differently-abled); Open and Commercial LMS

Unit IX: Digital Libraries (16 Questions)

(i) Digital Libraries – Concept and Definition; Historical development of Digital Libraries. Copyright and license issues.

(ii) Digitization Process -Software, Hardware and Best practices; Scanners and Scanner types; OCR and OCR software

(iii) Technology for DLs –Open source software – Open Standards and File formats; Harvesting metadata, OAI-PMH and DL Interoperability;

(iv) Digital Library Architecture – Grid architecture; Open URL integration;

(v) Digital Resources Management – Digital Preservation – Persistent identifiers – DOI and CNRI Handles; Multilingual digital repositories and Cross- language information retrieval

Unit X: Quantitative Techniques and Informetrics (20 Questions)

(i) Informetrics - Genesis, Scope and Definition; Librametry, Bibliometrics, Scientometrics and Webometrics

(ii) Classical Bibliometrics laws - Zip's Law, Lotka's Law, Bradford's Law of Scattering; Generalized Bibliometrics distributions. 80-20 rule, Price's Law relating to scientific productivity; Analysis of use statistics.

(iii) Growth and Obsolescence of literature - Various growth models; Aging factor and half-life: real vs. apparent; synchronous vs. diachronous.

(iv) Citation analysis – Bibliographic Coupling and Co-citation Analysis

(v) Bibliometric indicators: Impact factor, h-index, g-index, i-10; Mapping of Science; Citation Index.

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