

# RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

## SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF LIBRARIAN COLLEGE EDUCATION DEPARTMENT

### PAPER – II

#### **Unit – I:**

**Sources, Services and Access of Information** – Types, Evaluation and Use. Reference Sources and Web Resources – Encyclopedias. Dictionaries, Geographical Sources. Biographical Sources. Year-books/Almanacs, Directories and Handbooks. Statistical Sources – Features and evaluations. Bibliographical Sources-Bibliographies, Indexing and Abstracting Journals (Salient features and evaluation). E-documents, E-books, E-Journals. Databases – Bibliographic, Numeric and Full text- Evaluation, Subject Gateways/Portals, Databases, Bulletin Boards, Discussion Group/Forums.

**Reference Services-** Concept, Definition, Kinds and Trends, Reference service v/s Information service. Bibliographic Service, Indexing and Abstracting Service, CAS, SDI Service, Referral, Document delivery service. Translation Services, Reprographic Services. Online Service: Information products, Nature, types, and marketing.

**Online Search Services and Technologies-** Search Engines and Meta Search Engines. Internet Search Techniques. IOT (Internet of things). Introduction to Web Servers: Apache Server and Internet Information Server.

#### **Unit – II:**

**Current Trends and organization of the Web Resources-** Web Dewey and UDC online (Brief Description). Brief Introduction of OCLC Classify, Folksonomy: Basic concept, Tagging and Social Bookmarking. Semantic Web: Concept, need, purpose, and advantages. Simple Knowledge organization System (SKOS), Taxonomies and Ontologies.

**E-Resources: Collection Development-** Types of E-Resources: E-books, E-journals, Databases, Electronic Theses & Dissertations etc., Collection Building Process – Electronic Resource Development Policy; Budgeting, Pricing, Licensing, Ordering and Receiving, Evaluation of e-Resources; Archiving and Preservation of E-Resources.

**E-Resources: Negotiations, Licensing, and Access-** Model Licenses and Guidelines for Collection Building; Negotiations; Copyright in the Digital Environment/Digital Rights Management (DRM) and User Training; Delivery of E-Resources & Access Management and Authentication; Off-campus and Integrated Access.

**E-Resources: Consortia-** Growth and Development of Consortia; Collection Building of e-Resources through Consortia; Consortia: e-Shodh Sindhu, CeRA, NKRC, OCLC.

**E-Resources: Usage-** Usage Statistics, e-Resource Usage Analysis; Standards and Guidelines (COUNTER); Processing, Analysis and Presentation of Data; Discovery based Services; Usage Enhancement Measures.

### **Unit – III:**

**Information Technology-** Components, Impact of IT on Society. Computers- Hardware, Software. Storage Devices. Input/Output Devices, Telecommunication- Transmission media, Switching systems, Bandwidth. Multiplexing, Modulation, Protocols, Wireless Communication, Integrated Services Digital Network (ISDN), Open Systems Interconnection (OSI), Topologies, Types of Networks. Internet - Web browsers, WWW. Internet Protocols and Standards – HTTP, HTTPS, FTP, SMTP, TCP/IP, URI, URL. Hypertext, Hypermedia, Multimedia, Video conferencing, Web Page designing, Bar coding, Cloud Computing, Virtual Reality, Augmented Technologies.

Standards for Library Automation. Barcode, RFID, NFC (Near Field Communication), QR Code, Biometric, Smartcard: Features and Applications.

### **Unit – IV:**

**Library Automation-** Areas of automation, Planning, Hardware and Software Selection, OPAC. Networks-ERNET, NICNET, DELNET, JANET, BLAISE, OCLC, INFLIBNET, INTERNET- Components, Services, Browsing-Web Browsers, Netscape, Navigator and Internet Explorer, Search Engines, Meta-Data, Digital Object Identifier (DOI). National and International Information Systems-NISSAT, NASSDOC, NISCAIR, DESIDOC, INIS, AGRIS, MEDLARS, INSPEC. Institutional Repositories- Dspace, Eprints, Greenstone etc. Open-Source Library Management Softwares – KOHA and others and RDBMS and DBMS with XAMO (Apache, MySQL, PHP).

**Digital Preservation (DP)-** Introduction, Dilemmas and critical challenges. Fundamentals - Concepts, terminology, standards, systems, Integrity, stability, and authenticity, Digital preservation frameworks, Understanding the digital object, Strategies for digital preservation, Preservation planning.

## **Unit –V:**

**Research Data Management-** Types of data and sources. Storing, Curation and Preservation of Research Data: Documentation and Metadata. Data Management Plan and related tools. FAIR Principles. Data Privacy and Ethics.

**Research Data Management Services-** Concept of Research Data Management Services, Need and benefits. Data repositories. Starting Research Data Management Services. Planning and organizing the RDM services. Promoting the RDM services. Evaluating and refining the RDM services.

**Web Technology and Web Based Services-** Web 2.0 and 3.0 - Library 2.0- Concept, Characteristics, Components; Instant Messaging, RSS Feeds, Podcasts, Vodcasts etc.

**Web – Scale Discovery Services. Mobile based Library Services and Tools –** Library Apps, Mobile Library Instructions, SMS Alerts, Geo-Location, Reference Enquiry.

Social Web Networks and Content Management Systems. Collaborative services- Social Networks, Social Tagging. Content Management Systems. Research Information Management System. Research Information Management Tools (IRINS, VIVO).

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### **Note: - Pattern of Question Paper**

1. Objective type paper
2. Maximum Marks: 75
3. Number of Questions: 150
4. Duration of Paper: Three Hours
5. All questions carry equal marks.
6. There will be Negative Marking.
7. Medium of Competitive Exam: Bilingual in English & Hindi.