భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Advertisement No. IITH/2023/NF/15 dated 22.10.2023

Post Number	Post Name
16	**Junior Library Information Assistant**

Selection process consists of Written Test and Skill Test

*S*yllabus for Written Test

Information and Communication

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.

Library and Information Science Profession

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.

Information Sources, Services:-

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.

Community Information Services. Reference Service

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. Web – Scale Discovery Services. 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). Library Resource Sharing and Library Consortia – National and International.

Knowledge Organization:- Classification and Cataloguing

Universe of Knowledge - Nature and Attributes; Modes of Formation of Subjects. Knowledge Organization - Classification – Theories, Cannons, and Principles; Simple Knowledge Organization System (SKOS), Taxonomies, Folksonomy, Trends in Classification. Mapping of Subjects in Library Classification Schemes – DDC, UDC and CC. Knowledge Organisation: Cataloguing - Cannons 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.

Management of Library and Information Centres

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 Equipment; 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.

Information Technology:

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.

Library Automation and Digital Library

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. 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.

Research Methodology

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.

Electronic Resource Management

Electronic Resource Management. Electronic Resources: Definition, Emergence, features, advantages and disadvantages, Print vs E-resources. Types of E-Resources: Databases, E-Books, E-Journals, Multimedia objects, Scholarly materials, Subject Guides, Web Search Tools, Subject Gateways. Effective E-Resource Framework, E-Resource Life Cycle. ERMS: Concept, need, features, types, functional requirements, benefits. Application Modules of ERMS. ERM Workflow- Principles and Policies of E-Resource Development, Selection, Licensing, Renewal, Deselection. Acquisition, Technical Services, Delivery, ILL, Marketing and maintenance. Usage, Evaluation- Use Statistics- COUNTER, Citation Studies, Observation Logs, Interviews and Focus Groups. Evaluation of E-Resources: Need, Criteria and Methods

Open Educational Resources

Open Educational Resources. Introduction to OER, Definition, types, features, forms, benefits. OER Platforms in India- SWAYAM, NPTEL, e-PGPathshala. Major International OER Platforms. OER Policy- objective, elements, execution- a few case studies. Introduction to Open Licenses, Need and Purpose. Guide to Open Licensing, Principles, and features. GNU Open License for documents. Creative Common Licenses- features and types

Skill /Trade Test Syllabus for - Junior Library Information Assistant

1. **Cataloging Practical:** Understanding and application of cataloguing rules, with a focus on AACR-II 1988 Rev.. Knowledge of MARC 21 (Machine-Readable Cataloging) standards for bibliographic records.
2. **MS-Office Proficiency:** Practical skills in using MS Word, MS Excel, and MS-PowerPoint for creating, formatting, and presenting documents, spreadsheets, and presentations commonly used in library work.
3. **Full-text and Bibliographic Database Search:** Proficiency in conducting full-text and bibliographic database searches using platforms like Scopus and Web of Science. Efficient search strategies, Boolean operators, and advanced search techniques.
4. **Official Communication:** Written communication skills for interacting with library users and publishers, including email correspondence, official letters, and announcements.

5. **ICT Applications in Libraries:** Understanding of Integrated Library Management Systems (ILMS), e.g., Koha.Familiarity with library software for cataloguing, circulation, and patron management tasks.
6. **Citation Management Tools**: Proficiency in using citation management tools like Zotero and Mendeley for organising and citing references in research and publications.
7. **Research Assessment and Metrics:** Knowledge of research assessment tools and metrics commonly used in libraries, including journal impact factors, h-index, and altmetrics. Familiarity with STEM (Science, Technology, Engineering, and Mathematics) eResources.
8. **Circulation**: Understanding library circulation procedures, including issuing, renewing, and returning library materials. Handling of fines and overdue materials.
9. **Library Books Stack Management:** Skills related to efficiently organising, shelving, and maintaining library book stacks.Weeding, inventory management, and preservation of the physical collection.

Note: The syllabus topics mentioned above are for illustrative purposes only.

*****