

Syllabus

Information and Communication:

Data, Information, Knowledge and Wisdom - Role of Information in Planning, Management, Socio-economic, Cultural, Educational and Technological Development -Information Science-Communication - Concept, Types, Theories, Models, Channels and Barriers; Trends in Scholarly Communication - Information Industry - Generators, Providers and Intermediaries - IPR - Plagiarism.

Library and Library and Information Science Profession

Types of Libraries - Historical Development of Libraries in India - Library Legislation and Library Acts in India - Laws of Library Science - Library and Information Science Profession - Librarianship as a Profession - Professional Skills and Competences -Professional Ethics - Library and Information Science Education in India - Library Professional Associations and agencies related to libraries

Information Sources, Services and Users:

Information Sources -Types and Formats - Sources of Information - Primary Information Sources - Secondary Information Sources - Tertiary Information Sources - Reference Sources - Electronic Information Resources - Databases - Institutional and Human Resources -Type of Users - User Studies, User Education - Information Literacy - Areas, Standards, Types and Models; Trends in Information Literacy - Community Information Services - Reference Service - Referral Services Alerting Services - CAS, SDI, Inter Library Loan and Document Delivery - Mobile based Library Services and Tools - Web 2.0 and 3.0 - Library 2.0 – Web - Scale Discovery Services - National and International Information Systems and Networks - Library Consortia - National and International.

Knowledge Organization:

Modes of Formation of Subjects - Knowledge Organisation -Trends in Classification -Mapping of Subjects in Library Classification Schemes - Cataloguing - Cannons and Principles - Library Cataloguing Codes - Standards of Bibliographic Record Formats and Description - Standards for Bibliographic Information Interchange & Communication-Metadata Standards - Indexing Systems and Techniques - Vocabulary Control –Abstracting - Information Retrieval System

Management of Library and Information Centres:

Management - Principles, Functions and Schools of thought - Book Selection Tools and Principles - Acquisition and Technical Processing - Circulation-Management of e-resources - Stock Verification; Preservation and Conservation; Hazards and Control Measures of Library Materials - Human Resource Management - Financial Management in Libraries Library Authority and Committee - SWOT, PEST, PERT / CPM - Total Quality Management (TQM) - Evaluation of Services of Libraries and Information Centers - Library Building-Furniture and Equipments - Green Library Building - Information Commons - Makers Space - Management Information System (MIS), MBO, Change Management, Disaster Management, Crisis Management - Knowledge Management-Marketing of Library Products and Services.

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-Computer Networks - Topologies, Types of Networks – Internet - Search Engines, Meta and Entity Search engines - Internet Protocols and Standards - 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

Library Automation - Standards for Library Automation-Digitization - Planning, Selection of Materials, Hardware, Software, Process, Issues - Digital Library - Digital Preservation - Digital Library Initiatives - National and International - Institutional Repositories - Content Management Systems - Application of Artificial Intelligence, Expert Systems and Robotics in Libraries; Social Mobile Analytics Cloud (SMAC); Cloud Computing – Ontology - Semantic Web, Linked Data, Big Data, Data Mining, Data Harvesting.

Research Methodology

Research - Types of Research - Research Methods - Research Design - Data Collection-Data Analysis and Interpretation - Presentation of Data-Statistical Methods/ Techniques -Research Report Writing and Citation Tools - Metric Studies in LIS - Bibliometrics, Scientometrics, Webometrics, Altmetrics - Impact Factors - Journal, Institutional and Authors -Trends in Library and Information Science Research.

Library Information Systems

Different Types of Library and Information Systems - Archive, Museums and Oriental Libraries - Community Information System - Information Services and System for Persons with Disability, Children and Women.