

# Maharana Pratap Polytechnic, Gorakhpur

## Syllabus for Librarian Exam:

Subject	Syllabus
(Library and Information Science)	<p data-bbox="268 315 759 346"><b>Unit 1- Library and Information Society</b></p> <ul data-bbox="302 380 1299 695" style="list-style-type: none"><li>○ Information, Information Science, Information Society.</li><li>○ Information as a Resource/Commodity.</li><li>○ Information Transfer Cycle-Generation , Collection, Storage and Dissemination.</li><li>○ Role of Information in Planning, Management, Socio-economic Development, Technology Transfer.</li><li>○ Communication- Channels, Barriers.</li><li>○ Intellectual Property Rights Concept, Copyright, Censorship Print and Non/Print Media.</li><li>○ Library and Information Policy at the National Level.</li></ul> <p data-bbox="268 730 858 762"><b>Unit-2- Library and Information Management:</b></p> <ul data-bbox="302 800 1353 1073" style="list-style-type: none"><li>○ Management-Principles, Functions, Schools of Thought.</li><li>○ Planning, Organization, Structure.</li><li>○ Decision Making.</li><li>○ System Study-Analysis, Evaluation and Design.</li><li>○ Collection Development-Books, Serials, Non-Book Materials Selection, Acquisition, Maintenance.</li><li>○ Human Resource Management - Manpower Planning, Job Analysis, Job Description, Selection, Recruitment, Staff</li></ul> <p data-bbox="279 1115 372 1146">Manual</p> <ul data-bbox="302 1184 926 1289" style="list-style-type: none"><li>○ Total Quality Management.</li><li>○ Marketing of Information Products and Services.</li><li>○ Library Buildings, Equipment.</li></ul> <p data-bbox="274 1325 698 1356"><b>Unit 3- Knowledge Organization :</b></p> <ul data-bbox="302 1394 976 1709" style="list-style-type: none"><li>○ Organization of Knowledge/Information.</li><li>○ Modes of Formation of Subjects.</li><li>○ Library Classification-Canons and Principles.</li><li>○ Library Classification Schemes-DDC, UDC and CC.</li><li>○ Library Cataloging-Canons and Principles.</li><li>○ Library Cataloging Codes-CCC and AACR II</li><li>○ Indexing-Pre-Coordinate, Post-Coordinate.</li><li>○ Databases-Search Strategies, Boolean Operators.</li><li>○ Knowledge Management.</li></ul>

#### **Unit 4- Professional Aspects of Library and Information Science:**

- Historical Development of Libraries in India.
- Committees and Commissions of Libraries in India.
- Library Legislation and Library Acts in Indian States.
- Laws of Library Science.
- Professional Associations Local, National and International.
- Role of agencies such as UGC, RRRLF and UNESCO in the promotion and development of Libraries in India.
- Library and Information Science Education-Problems and Prospects in India.
- Public Relations and Extension Activities for Library and Information Professionals.

#### **Unit 5- Information Sources:**

- Information Sources- Nature, Characteristics, Types and Formats.
- Sources of Information- Primary, Secondary, and Tertiary, Documentary and Non-Documentary.
- Reference Sources-Bibliographical, Biographical, Educational, Language, Geographical and Current.
- Electronic Information Resources-Subject Gateways, Web Portals, Bulletin Boards, Discussion Forums.
- Social Media- Facebook, Twitter, Instagram, Youtube, Etc.
- Databases-Bibliographic, Numeric, Full Text, Multimedia; Open Access Databases, Etc.
- Institutional and Human Resources.

#### **Unit 6- Information Systems, Products and Services:**

- National Information Systems and Networks: NISCAIR, DESIDC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National Knowledge Network (NKN), Biotechnology Information System (BIS) and others.
- International Information Systems and networks: INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS) and others.
- Library Resource Sharing and Library Consortia-National, International, Institutional.
- Alerting Services-CAS, SDI, Inter Library Loan and Document Delivery Services.
- Web Based Library and Information Services and Tools.

#### **Unit 7- Types of Libraries and Information Systems:**

- Academic Library and Information System.
- Public Library and Information System.
- Special Library and Information System.
- Health Science Library and Information System.
- Agricultural Library and Information System.
- Engineering and Technological Library and Information System.
- Archive, Museums and Oriental Libraries.
- Information Services and Systems for Persons such as Children, Women, and Differently Abled Persons.

## **Unit 8- Use of Information Technology in Libraries and Information Centers:**

- Computer Technology :- Hardware, Software, Storage Devices, Input and Output Devices.
- Types of Software :- System, Application.
- Programming Languages:- Object Oriented, Procedural, High Level, Scripting, Web Languages.
- Telecommunications :- Transmission Channels, Mode, 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 Protocols and Standards - HTTP, SHTTP, FTP, SMTP, TCP/IP, URI, URL.
- Hypertext, Hypermedia, Multimedia, Video Conferencing, Virtual Reality.
- Data Security, Network Security, Firewalls, Cryptographic Techniques, Anti-virus Software, Anti Spyware, Intrusion Detection System.

## **Unit 9- Library Automation and Digital Libraries:**

- 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.
- Digital Preservation :- Need and Purpose, Standards, Methods, Techniques, Projects (National and International).
- Institutional Repositories:- Need, Purpose, Types and tools, Institutional Repositories in India.
- Application of Artificial Intelligence, Expert Systems and Robotics in Libraries; Social Mobile Analytics Cloud (SMAC); Cloud Computing. 8- Ontology-Tools (RDF, RDFS); Semantic Web., Linked Data, Data Mining, Data Harvesting.

## **Unit 10- Research Methodology:**

- Types of Research - Basic, Applied, Interdisciplinary.
- Research Design.
- Scientific Method, Hypothesis, Data Collection, Sampling Techniques.
- Methods of Research-Historical, Descriptive, Case Study, Survey, Comparative and Experimental.
- Statistical Methods, Data Analysis.
- Report Writing.
- Research Methods in Library and Information Science and Services.
- Bibliometrics, Scientometrics, Webometrics.