# SYLLABUS FOR PhD ENTRANCE EXAMINATION – 2017
## Library and Information Science

### Unit-I

Information, Information Science, Information Society, Information as a Resource/Commodity Information Transfer Cycle-Generation, Collection, Storage and dissemination Role of information in Planning, Management, Socio-economic Development, Technology transfer. Communication-Channels, barriers. Intellectual Property Rights-Concept, Copyright, Censorship-Print and Non-print Media Library and Information Policy at the National level.

### Unit-I I

Laws of Library Science, Library Resource Sharing and Networking, Library Movement and Library Legislation in India, Library Extension Services Library and Information Science Education in India Library and Information Profession. Library Associations in India, UK and USA-ILA, IASLIC, IATLIS, SIS, LA, ASLIB, SLA and ALA. Library Associations Organizations at International level-FID, IFLA and UNESCO.

### Unit-I II

-Encyclopedias, Dictionaries, Geographical Sources, Biographical Sources, Year-books/Almanacs, Directories, and Handbooks, Statistical(salient features and evaluation) Bibliographical Sources-Bibliographies, Union Catalogues, Indexing and Abstracting Journals (salient features and evaluation) E-Documents, E-books, E-Journals Databases- Bibliographic, Numeric/and Full text-Evaluation

### Unit-IV

Reference and Information services, Referral Service Bibliographic Service, Indexing and Abstracting Service, CAS, SDI, Digest, Service, Trend Report, Online Services, Reprographic Services. Modes of formation of subjects Library Classification-Canons and Principles Organization of knowledge /information

## Unit-V

Library Classification Schemes-DDC, UDC and CC Library Cataloguing-Canons and Principles Library Cataloguing Codes-CCC and AACR-II Bibliographic Records-International standards-ISBDs, MARC and CCF Indexing-Pre-coordinate, Post-coordinate Vocabulary Control-Thesaurus, Lists of Subject Headings Databases-Search Strategies, Boolean Operators Knowledge Management

## Unit-VI

Management-Principles, Functions, Schools of Thought Planning, Organisation Structure Decision making System Study-Analysis, Evaluation and Design Collection Development-Books, Serials, Non-book Materials-Selection, Acquisition, Maintenance; ISBN, ISSN, Cataloguing-in-Publication (CIP) Human resources management-Manpower planning, Job analysis, Job description, Selection, Recruitment, Motivation, Training and Development, Staff Manual, Leadership and Performance Evaluation, Delegation of authority.

Financial Management - Resource generation, Types of budgets, budgeting, Cost and Cost-benefit analysis PERT, CPM Library Buildings and Equipments Performance evaluation of Libraries/Information Centres and Services Marketing information product and services Total Quality Management (TQM)

## Unit-VII

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 Fax, E-Mail, Tele-conferencing/Video-Conferencing, Bulleting Board Service, Teletext, Hypermedia, Multimedia Integrated Services Digital Network (ISDN), Open systems Interconnection (OSI)

## Unit-VIII

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, Search Engines Meta-Data, Digital Object Identifier (DOI) National and International Information systems-NISSAT, NASSDOC, INSDOC, DESIDOC, INIS, AGRIS, MEDLARS, INSPEC

## Unit-IX

Types of Research-Basic, Applied, Interdisciplinary Research Design, Scientific Method, Hypotheses, Data Collection, Sampling Methods of Research-Historical, Descriptive, Case Study, Survey, Comparative and Experimental. Statistical methods, Data Analysis Report writing Research methods in Library and Information Science Citation, Citation Analysis, Bibliometrics and Scientometrics, their laws, applications, limitations, recent trends

## Unit-X

Types of Libraries-National, Public, Academic and Special Objectives, Structure and Functions. Digital Libraries-Concept Virtual Libraries-Concept Types of users, User studies, User education Role of UGC in the growth and development of libraries and information centres in institutions of higher education in India. Role of Raja Rammohan Roy Library Foundation (RRLF)

## PART – B                                                                                Marks 50

### RESEARCH METHODOLOGY

**Research and Types of research:** Meaning of Research- Objectives of Research- Motivation in Research. Research methods *vs* Methodology. Types of research – Descriptive *vs*. Analytical, Applied *vs*. Fundamental, Quantitative *vs*. Qualitative, Conceptual *vs*. Empirical. Research Process. Criteria of good Research.

**Research Formulation** – Defining and formulating the research problem - Selecting the problem - Necessity of defining the problem - Importance of literature review in defining a problem – Literature review – Primary and secondary sources – reviews, treatise, monographs-patents – web as a source – searching the web - Critical literature review – Identifying gap areas from literature review - Development of working hypothesis.

**Data Collection** and analysis: Execution of the research - Observation and Collection of data - Methods of data collection – Modeling, Mathematical Models for research, Sampling Methods- Data processing and Analysis strategies. Data Analysis with Statistical Packages – Hypothesis-testing, Generalization-and-Interpretation.

**Reference Books:**

 1. Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. *An introduction to Research Methodology*, RBSA Publishers.
2. Kothari, C.R., 1990. *Research Methodology: Methods and Techniques*. New Age International. 418p.
3. Sinha, S.C. and Dhiman, A.K., 2002. *Research Methodology*, Ess Ess Publications. 2 volumes.

******