

**Scheme of Examination**  
**Masters of Library and Information Science (M.Lib.I.Sc.)**  
**2-Year Integrated**

(As per Choice Based Credit System w.e.f. the academic year 2016-17)

**Note 1:** The entire course will be of four semesters. Each student should earn minimum 82 credits over the entire course as given below:

- Core course (C): minimum 54
- Discipline specific course (D): minimum 20
- Open elective course (O): minimum 6 credits by opting for one paper in Sem. II and another in Sem. III (3 credits each).
- Foundation course (F): minimum 2 credits by opting one paper in Sem II.

**(Semester I & II)**

In Semester I, there will be 5 core papers (3 theory papers and 2 practical) and in Semester II there will be 3 core paper (2 theory papers and 1 practical) and 1 discipline specific paper. Each Student will opt for at least one foundation course (minimum 2 credits) in II Semester from the pool of foundation courses provided by the university. One open elective course (minimum 3 credits) in Semester II would be chosen by the student from the pool of papers provided by the university (excluding the open elective prepared by the same department). Discipline specific courses will be floated according to the administrative and academic convenience of the department.

Sem	Course Code	Title of Course	Course Type	L-T-P	Marks			Duration	Credits	
					Internal Assessment	Exam. Marks	Total Marks			
I <sup>st</sup>	16LIS21C1	Foundations of Library and Information Science	C	4-0-0	20	80	100	3 Hrs	4	
	16LIS21C2	Knowledge Organization: Classification Theory	C	4-0-0	20	80	100	3 Hrs	4	
	16LIS21C3	Knowledge Organization: Classification Practice	C	0-0-8	00	100	100	3 Hrs	4	
	16LIS21C4	Information Communication Technologies (ICTs) Basics: Theory	C	4-0-0	20	80	100	3 Hrs	4	
	16LIS21C5	Information Communication Technologies (ICTs) Basics: Practice	C	0-0-8	00	100	100	3 Hrs	4	
<b>Credits</b>		<b>C=20</b>					<b>Total Credit: 20</b>			
II <sup>nd</sup>	16LIS22C1	Knowledge Organization: Cataloguing Theory	C	4-0-0	20	80	100	3 Hrs	4	
	16LIS22C2	Knowledge Organization: Cataloguing Practice	C	0-0-8	00	100	100	3 Hrs	4	
	16LIS22C3	Information Sources and Services	C	4-0-0	20	80	100	3 Hrs	4	
	16LIS22C4	Management of Libraries and Information Centres	C	4-0-0	20	80	100	3 Hrs	4	
	<b>Choose any one from the following three papers</b>									
	16LIS22DA1	Library Operations	D	3-1-0	20	80	100	3 Hrs	4	
	16LIS22DA2	Book Publishing			20	80	100	3 Hrs		
16LIS22DA3	Information Systems and Networks	20			80	100	3 Hrs			
<b>Credits</b>		<b>C=16; D=4; O=3; F=2</b>					<b>Total Credit: 25</b>			

**Note:**

- i. All candidates who have passed the 1<sup>st</sup> and 2<sup>nd</sup> semester examination of M.Lib.I.Sc. (2-year Integrated) course shall be awarded Bachelor of Library and Information Science (B.Lib.I.Sc.) Degree. In case the candidate exits the course after 2<sup>nd</sup> Semester, he/she shall be eligible for admission to M.Lib.I.Sc. 3<sup>rd</sup> Semester under lateral entry scheme subject to availability of seats as per university rules.
- ii. The practical examination will be conducted by external examiner and the question paper will be set by him/her in association with internal examiner.

**(Semester III & IV)**

In Semester 3, there will be 3 core papers (3 theory papers) and 3 discipline specific papers and in Semester IV there will be 3 core papers (2 theory papers and 1 practical) and 2 discipline specific papers. One open elective course (minimum 3 credits) in Semester III would be chosen by the student from the pool of papers provided by the university (excluding the open elective prepared by the same department). Discipline specific courses will be floated according to the administrative and academic convenience of the department.

Sem	Course Code	Title of Course	Course Type	L-T-P	Marks			Duration	Credits	
					Internal Assessment	Exam. Marks	Total Marks			
III <sup>rd</sup>	17LIS23C1	Information Communication and Policies	C	4-0-0	20	80	100	3 Hrs	4	
	17LIS23C2	Information Processing and Retrieval	C	4-0-0	20	80	100	3 Hrs	4	
	17LIS23C3	Information Communication Technologies (ICTs) Advanced: Theory	C	4-0-0	20	80	100	3 Hrs	4	
	<b>Choose any one from the following three papers</b>									
	17LIS23DA1	E-Resource Management	D	4-0-0	20	80	100	3 Hrs	4	
	17LIS23DA2	Collection Development			20	80	100	3 Hrs		
	17LIS23DA3	Museology			20	80	100	3 Hrs		
	<b>Choose any one from the following three papers</b>									
	17LIS23DB1	Information Analysis, Consolidation and Repackaging	D	4-0-0	20	80	100	3 Hrs	4	
	17LIS23DB2	Preservation and Conservation			20	80	100	3 Hrs		
	17LIS23DB3	Archive Management			20	80	100	3 Hrs		
	<b>Choose any one from the following three papers</b>									
	17LIS23DC1	Digital Library	D	3-1-0	20	80	100	3 Hrs	4	
	17LIS23DC2	Web Designing			20	80	100	3 Hrs		
	17LIS23DC3	E-learning			20	80	100	3 Hrs		
<b>Credits</b>	<b>C=12; D=12; O=3</b>						<b>Total Credit: 27</b>			
IV <sup>th</sup>	17LIS24C1	Research Methods and Statistical Techniques	C	4-0-0	20	80	100	3 Hrs	4	
	17LIS24C2	Information communication Technologies (ICTs) Advanced: Practice	C	0-0-8	00	100	100	3 Hrs	4	
	17LIS24C3	Technical Writing and Communication Skills	C	3-1-0	20	80	100	3 Hrs	4	
	<b>Choose any one from the following three papers</b>									
	17LIS24DA1	Academic Library System	D	4-0-0	20	80	100	3 Hrs	4	
	17LIS24DA2	Public Library System			20	80	100	3 Hrs		
	17LIS24DA3	Special Library System			20	80	100	3 Hrs		
	<b>Choose any one from the following three papers</b>									
	17LIS24DB1	Information Literacy	D	4-0-0	20	80	100	3 Hrs	4	
	17LIS24DB2	Scientometrics			20	80	100	3 Hrs		
	17LIS24DB3	Information Politics and Economy			20	80	100	3 Hrs		
	<b>Credits</b>	<b>C=12; D=8</b>						<b>Total Credit: 20</b>		

Note: The practical examination will be conducted by external examiner and the question paper will be set by him/her in association with internal examiner

**Total Overall Credit: 92 (C=60; D=24; O=6; F=2)**  
**Minimum Required: 82 (C=54; D=20; O=6; F=2)**

## **FIRST SEMESTER**

### **16LIS21C1: Foundations of Library and Information Science**

Maximum marks: 80

Pass marks: 32

Time: 3hrs.

#### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

#### **Objectives**

- to know the basics of library and information science (LIS), in terms of history, significant developments, major themes, organizations and institutions;
- to examine major conceptual frameworks for LIS practice and theory, the user perspectives and the history of the modern libraries in India;
- to know information about different types of libraries;
- to get awareness of different Indian library legislation acts;
- to be familiar with five laws of library science, profession and professional ethics;
- to check ideas about different accrediting bodies and the role played by international and national level library professional associations.

#### **Outcomes**

After completion of the course the students will learn about libraries with their types, what role those play at social, cultural and intellectual level in the society. The outcomes include the foundational principles which make the librarianship as an intellectual discipline including the profession and professional issues also. Further the course teaches about the role of library associations and organizations both at national and international level.

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#### **Unit-1: Foundational Approach**

- Foundational approach: socio-cultural, intellectual and historical foundations of library as an institution.
- Types of libraries : characteristics, collections, services, staff, objectives, structure and functions
- Growth and development of libraries with special reference to India
- Library and information science education in India: as a discipline and subject, history, level- degree and institution, accreditation
- Role of library in formal and informal education

#### **Unit-2: Laws of Library and Information Science**

- Five laws of library science of S R Ranganathan
- Implications of five laws: general and digital environment

#### **Unit-3: Library Legislation, Acts and Professional Issues**

- Library legislation: need and essential features
- Library legislations in India: history, chronology and features
- Intellectual Property Rights (IPRs): The Indian Copyright Act, 1957- original writings and creativity, history and infringement
- Delivery of Books (Public Libraries) Act 1954
- Profession : attributes; librarianship as a profession, ethics

#### **Unit-4: Professional Associations and Organizations**

- Library associations: National and international associations, need and role in promotional activities
- National associations: Indian Library Association (ILA) & Indian Association of Special Libraries and Information Centres (IASLIC) - history, structure, membership, activities
- International associations: American Library Association (ALA); Chartered Institute of Library and Information Professionals (CILIP); International Federation of Library Associations and Institutions (IFLA)- history, structure, membership, activities
- National level promoters: Raja Ram Mohan Roy Library Foundation, Kolkata (Role, objectives, types of grants)
- International level promoters: UNESCO – specialties, types of book promotion, International Book Day, International Book Fair

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#### **Suggested Readings**

- Bawden, David & Robinson, Lyn (2012). *Introduction to information science*. London: Facet.
- Crowley, Bill (Ed). (2012). *Defending professionalism: a resource for librarians, information specialists, knowledge managers, and archivists*. Santa Barbara: Libraries Unlimited.
- Khanna, J. K. (1987). *Library and society*. Kurukshetra: Research Publications
- Krishan Kumar. (1993). *Library organization*. New Delhi: Vikas.
- Liu, Yan Quan & Cheng, Xiaojun (Eds.) (2008). *International and comparative studies in information and library science*: Lanham; Maryland: Scarecrow Press.
- Ranganathan, S. R. (1969). *Five laws of library science*. 5<sup>th</sup> ed. Bangalore: Sarada Ranganathan Endowment for Library Science, 2006
- Rubin, Richard E. (2010). *Foundations of library and information science*. 3<sup>rd</sup> ed. New York: Neal Schuman.
- Green, Roger C., Grover, Robert J., Fowler, Susan J. (2013). *Introduction to library and information professions*. Santa Barbara: Libraries Unlimited.
- Leckie, Gloria J., Given, Lisa M. & Buschman, John E. (Eds.). (2010). *Critical theory for library and information science: exploring the social from across the discipline*. Santa Barbara: Libraries Unlimited.
- Venkatappaiah, Velage & Madhusudan, M. (2006). *Public library legislation in the new millennium: New model public library acts for the union, states and union territories*. Delhi: Bookwell.

## 16LIS21C2: Knowledge Organization: Classification Theory

Maximum marks: 80

Pass marks: 32

Time: 3Hrs

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to examine why and how to develop knowledge organization systems;
- to know implications of knowledge organization systems and approaches;
- to study theory and practices involved in library classification;
- to acquaint the students with library classification schemes and the new trends in classification;
- to prepare students for work in libraries, information centres and other organizations that organize large bodies of recorded information.

### Outcomes

After completion of the course, the students will understand the importance of knowledge organization and the underlying principles in it, which further facilitates the library classification in libraries to classify large body of recorded knowledge e.g., books and other materials. Further the course teaches the types of classification schemes, their structure and functionality and also about how classification rules are undergoing changes in electronic environment, including the recent researches conducted on these classification principles.

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### Unit-1: Library Classification

- Library classification: definition, need and purpose
- Theories of classification: Static and dynamic
- Postulational approach: postulates, facet analysis, fundamental categories, phase analysis, principles of helpful sequence and facet sequence
- Notation and call number: number building process
- Devices in library classification

### Unit-2: Universe of Knowledge and Subjects

- Universe of subjects: definitions and purpose
- Development of subjects: structure and attributes
- Modes of formation of subjects
- Mapping of subjects: Colon Classification (main classes); Dewey Decimal Classification (2<sup>nd</sup> level classes)

### Unit-3: Schemes of Classification

- Species of library classification : enumerative & faceted
- Classification schemes: design, methodology
- Standard schemes of classification and their features: CC, DDC, UDC

### Unit-4: Recent Trends

- Recent trends in classification
  - Thesaurus based: Thesaurofacet, classaurus
  - Automatic classification, Classification in online systems, Web Dewey
  - Role of major organizations: DRTC, CRG, OCLC
  - Ontology-based classification
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**Suggested Readings**

Broughton, Vanda (2015). *Essential classification* (2<sup>nd</sup> ed). London: Facet.

Chaudhary, G. G. & Chaudhary, Sudatta (2007). *Organizing information: From the shelf to the web*. London: Facet.

Dhyani, Pushpa. (2000). *Theory of library classification*. Delhi: Vishwa Prakashan.

Foskett, A. C. (1990). *Subject approach to information* (5<sup>th</sup> ed.). London: Clive Bingley.

Krishan Kumar. (2000). *Theory of classification* (4<sup>th</sup> rev ed.) New Delhi: Vikas Publications.

Ranganathan, S. R. (1967). *Prolegomena to library classification* (3<sup>rd</sup> ed.). Bangalore: Sarada Ranganathan Endowment for Library Science.

Stuart, David (2016). *Practical ontologies for information professionals*. London: Facet.

## 16LIS21C3: Knowledge Organization: Classification Practice

Maximum marks: 100

Pass marks: 40

Time: 3Hrs.

### Note

The paper is divided into 2 parts. Each part carries 50 marks.

### Objectives

- to orient students with the principles of how-to-do methods on building up class numbers;
- to make the learners familiar with the two classification schemes: Dewey Decimal Classification and Colon Classification;
- to monitor and guide the students about the schedules, the rule books and also the number building process;
- to observe, correct, and to check the workouts of the students till arrive at the desired class number;

### Outcomes

The students will be able to classify documents after being oriented with the classifications schemes, the rules of at different stages with the help of Colon Classification and Dewey Decimal Classification. The course teaches practically about the handling of both schemes, finding the desired numbers, rectification process and about overall knowledge on practical classification.

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### Part-I: Classification of documents by latest available edition of DDC

Note: There are fifteen titles. The candidates are required to classify any ten of them.

- Classification of documents representing simple, compound, complex subject and common isolates.

### Part-II: Classification of Documents by Colon Classification (6<sup>th</sup> revised edition)

Note: There are fifteen titles. The candidates are required to classify any ten of them.

- Classification of documents representing simple, compound, complex subject and common isolates.
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### Suggested Readings

Dewey, Melvil & Julianne Beall. (1985). *DDC, Dewey Decimal Classification* (19<sup>th</sup> ed.). Albany, N.Y., U.S.A.: Forest.

Ranganathan, S. R. (1963). *Colon Classification* (6<sup>th</sup> ed.). Bangalore: Sarada Ranganathan Endowment for Library Science.

Ranganathan, S. R. (1990). *Descriptive account of the Colon Classification*. Bangalore: Sarada Ranganathan Endowment for Library Science.

Satiya, M. P. (1995). *Manual for practical Colon Classification* (3<sup>rd</sup> rev ed.). New Delhi: Sterling.

Satiya, M. P. (2007). *The theory and practice of the Dewey Decimal Classification system*. Oxford: Chandos Publishing.

## **16LIS21C4: Information and Communication Technologies (ICTs) Basics: Theory**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to provide knowledge about basic ICT concepts in terms of hardware, software, operating systems;
- to explore the possibilities of ICT in designing library services;
- to know the use of communication and networking technologies in developing library systems and services;
- to take current stock of different library networks operational in India.

### **Outcomes**

By reading this paper students will be able to know the different components of information and communication technologies (ICTs) and its usefulness in designing, developing and disseminating value-added library services and facilities. Further the course informs different communication technologies include the Internet and its working facilities, along with social networking phenomena. The course also updates with different library networks, with its history and functionality which are operational in India

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### **Unit 1: Computer Hardware and Software**

- Information Technology: definition, need, scope, objectives and components
- Computers and computing technology: historical development, generation, classification and components.
- Software: meaning, concept, types – system and application softwares
- Operating systems: Types – single and multi-user; basic features of MS-DOS, MS-Windows and LINUX

### **Unit 2: Computer Applications to Library and Information Services**

- Role of computers in libraries
- Application of computers in library activities: general– MS Word, MS Excel, MS Power Point; professional – housekeeping
- Library automation: definition, need, purpose & objectives
- Library management software: features, modules, selection, recency
- Basic features of SOUL and Libsys

### **Unit 3: Communication Technologies and their Applications**

- Telecommunications: need, purpose and objectives
- Modes – Simplex, half duplex, full duplex and; media – guided, unguided
- Communication tools and techniques: e-mail, teleconferencing/video conferencing, voice mail, social networking

### **Unit 4: Internet and Library Networks**

- Network – concept, need and purpose, types – LAN, MAN, WAN, Topologies
- Library networks : need, purpose, objectives & resource sharing
- National library networks : DELNET, INFLIBNET, NKN
- Internet : concept, definition, origin, need, purpose & services
- Search Strategies – Boolean operator, Wild card, Truncation, etc.



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## Suggested Readings

- Ackermann, Ernest. (1995). *Learning to use the internet: An introduction with examples and experiences*. New Delhi: BPB.
- Bharihoke, Deepak. (2002). *Fundamentals of IT* (2<sup>nd</sup> ed). New Delhi: Excel Books.
- Chowdhury, G. G. and Chowdhury, Sudatta. (2000). *Searching CD-ROM and Online Information Sources*. London: Library Association.
- Chowdhury, G. G. and Chowdhury, Sudatta. (2007). *Organizing information: From the shelf to the Web*. London: Facet .
- Cox, Joyce, Lambert, Joan and Frye, Curtis. (2010). *Microsoft Office Professional 2010 Step by Step*. USA: Microsoft Press.
- Negus, Christopher. (2005). *Linux Bible*. New York: John Wiley.
- Pandian, M. Paul and Jambhekar, Ashok (2001). *Internet for libraries and information centres*. New Delhi: Tat-McGraw-Hill.
- Rajaraman. (2001). *Fundamentals of computers* (3<sup>rd</sup>ed). New Delhi: Prentice Hall of India.
- Rowley, Jennifer. (1993). *Computers for Libraries*. (3<sup>rd</sup> ed). London: Library Association.

## 16LIS21C5: Information and Communication Technologies (ICTs) Basics: Practice

Maximum marks: 100

Pass marks: 40

Time: 3Hrs

### Note

The paper is divided into 4 units. The candidates are required to attempt 4 questions in all out of total 6 questions. All questions carry equal marks.

### Objectives

- to explore the basic ICT tools in a practical manner;
- to learn the usages of system and application software;
- to learn hands-on practice about library management software;
- to acquaint the students in using effective Internet search by learning various search strategies.

### Outcomes

After reading this course students will be able to use various software and Internet effectively. Further they will be able to learn practically, the basic library functioning in automated environment. This course will develop over all awareness among the students to maintain computerized libraries with practical knowledge by the trainers. Through this course, the students will be able to know practical knowledge about software handling in terms of installation, updating, creation through extra features along with Internet knowledge by doing themselves.

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### Unit 1: System Software: WINDOWS (latest) Operating System

- System software: different drives, directories
- Desktop, My Computer, Control Panel, Windows Explorer
- Accessories applets: Calculator and Paint.

### Unit 2: Application Software: MS Word, MS PowerPoint, MS Excel (latest edition)

- MS Word: Standard toolbars, creating, editing and formatting a document, mail merge, printing.
- MS Power Point: Creation and presentation of slides, animation, formatting, slide Show, customizing.
- MS Excel: File creation, editing, inserting characters, formatting & basic formula

### Unit 3: Library Management Software

- Basics of WINSIS/SOUL/LIBSYS
- Installation by the students
- Modules handling , inserting, and updating

### Unit 4: Online and Offline Searching

- Offline search: files and folders
- Online search: Basic and advance
- E-mail: Opening a desired e-mail account, sending email, uploading & downloading, forwarding, storing with folder.

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### Suggested Readings

Amba, Sanjeevi & Raghavan, K. S. (1999). *CDS/ISIS: A primer*. New Delhi: Ess Ess.

- Chowdhury, G. G. & Chowdhury, Sudatta (2007). *Organizing information: From the shelf to the Web*. London: Facet.
- Chowdhury, G. G. & Chowdhury, Sudatta (2000). *Searching CD-ROM and online information sources*. London: Library Association.
- Neelameghan, A. & Lalitha, S. K. (2001). *Tutor+: A learning and teaching package on hypertext link commands in WINISIS*. Bangalore: Sarada Ranganathan Endowment for Library Science.
- Negus, Christopher (2005). *Linux Bible*. New York: John Wiley.
- Simpson, Alan. (2004). *Windows XP Bible*. New York: John Wiley.
- Walkenbach, John, et al. (2007). *Office 2007 Bible*. New York: John Wiley.
- Winship, Ian and McNab, Alison. (2000). *Student's guide to the Internet*. London: Library Association.
- UNESCO. (2004). *CDS/ISIS for Windows: Reference manual version 1.5*. Paris: UNESCO.

## SECOND SEMESTER

### 16LIS22C1: Knowledge Organization: Cataloguing Theory

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

#### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

#### Objectives

- to examine why and how do we develop knowledge organization systems;
- to know implications of knowledge organization systems and approaches;
- to study the principles and theories of library cataloguing;
- to study the cataloguing rules of CCC and AACR;
- to study the various standards available and used in cataloguing.

#### Outcomes

The course makes the students understand the principle of knowledge organization, more specifically cataloguing principles as an element of knowledge organization. The course will teach the lessons on the need and importance of library catalogue, the different entry elements, and subject cataloguing principles. The students will also understand catalogue codes, standards and current trends in cataloguing.

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#### Unit-1: Library Catalogue

- Catalogue: definition, need , purpose & objectives
- Types of library catalogue – alphabetical (author, name , title, subject) and classified
- Library Catalogue: physical forms: conventional and non-conventional including OPAC, Web-OPAC, history and development
- Commonness and differences among library catalogue, library records, bibliographies, checklist
- Cooperative cataloguing, centralized cataloguing, cataloguing-in-publication and prenatal cataloguing
- Union catalogue: concept, need, purpose

#### Unit-2: Entry Elements and Filing

- Entries: concept, types – main and added
- Data elements in different types of entries according to CCC and AACR-2
- Filing of entries: concept and need
- ALA filing rules

#### Unit-3: Subject Cataloguing

- Subject cataloguing: definition, need, purpose & principles
- Vocabulary control and controlled vocabularies
- List of subject headings: Sears List
- Chain procedure of S R Ranganathan

#### Unit-4: Cataloguing Standards and Current Trends

- Standardization, description and exchange of information: MARC-21, ISBD, ISO 2709, CCF, Z39.50
- Metadata: Concept, need , purpose and standards (Dublin Core)
- Recent trends: basic concept of FRBR, RDA

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## Suggested Readings

- Bowman, J.H. (2002). *Essential cataloguing: The basics*. London: Facet.
- Chambers, Sally (Ed.) (2013). *Catalogue 2.0: The future of library catalogue*. London: Facet.
- Chaudhary, G. G. & Chaudhary, Sudatta (2007). *Organizing information: From the shelf to the web*. London: Facet .
- Chaudhary, G. G. (1999) *Modern information retrieval theory*. London: Library Association.
- Hunter, E. J. & Bakewell, K.G.B. (1989). *Advanced cataloguing*. London: Clive Bingley.
- Maxwell, Robert L. (2014). *Maxwell's handbook for RDA: Explaining and illustrating RDA: resource description and access using MARC 21*. London: Facet.
- Ranganathan, S. R. (1989). *Classified catalogue code with additional rules for dictionary catalogue code* (5<sup>th</sup> ed with amendments). Bangalore: Sarada Ranganathan Endowment for Library Science.
- Richard, Gartner (2016). *Metadata: knowledge from antiquity to the semantic web*. London: Springer.
- Zeng, Marcia & Qin, Jian (2016). *Metadata*. 2<sup>nd</sup> ed. London: Facet.

## 16LIS22C2: Knowledge Organization: Cataloguing Practice

Maximum marks: 100

Pass marks: 40

Time: 3Hrs

### Note

The paper is divided into 2 Parts. There will be 5 questions (titles) from each part. The candidates have to prepare total 5 entries selecting at least 2 entries from each part. All questions carry equal marks

### Objectives

- to acquaint the students in cataloguing of documents according to AACR-2 and CCC-5<sup>th</sup> ed. ;
- to make aware of students of different rules of entries;
- to bring the notice of the students about rules of cataloguing of books and non-books materials;
- to educate the learners about the rules for personal and corporate authors.

### Outcomes

The students will understand the cataloguing rules and be able to prepare catalogue entries according to AACR 2 and CCC. The students will be allowed to do the cataloguing of documents themselves. The accuracy, error and correctness of entries will be checked by the tutor.

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### Part-I: Cataloguing of Documents by AACR-II R

- Documents having personal author, shared author (s), collaborator (s)- reviewer, editor, reviser, translator
- Edited works
- Documents published under pseudonyms
- Cataloguing of corporate authorship
- Multivolume documents with similar and separate title for each volume
- Serials/ periodicals publication: simple, changed ,merged and split title

(Note: Students will assign subject headings from the *Sear's List of Subject Headings* themselves and mention in the catalogue entry, the tool will be made available at the time examination)

### Part-II: Cataloguing of Documents by Classified Catalogue Code (CCC 5<sup>th</sup> Ed.)

- Documents having personal author, shared author (s), collaborator (s)- reviewer, editor, reviser, translator
- Edited works
- Documents published under pseudonyms
- Cataloguing of corporate authorship
- Multivolume documents with similar and separate title for each volume
- Serials/ periodicals publication: simple, changed , merged and split title

(Note: Students will assign subject headings by S R Ranganathan's *chain procedure* method themselves and mention in the catalogue entry, the tool will be made available at the time examination)

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### Suggested Readings

Allen, C. G. (1999). *A manual of European languages for librarians* (2nd ed). London: Bowker-Saur.

ALA et al. (2006). *Anglo-American Cataloguing Rules: AACR* (2<sup>nd</sup> rev ed). London: Library Association.

Library of Congress. (2011). *Library of Congress Subject Headings* (33<sup>rd</sup> ed). Washington, D.C.: Library of Congress, Cataloging Distribution Service.

Fritz, Deborah A. (2007). *Cataloging with AACR2 & MARC21: For books, electronic resources, sound recordings, videorecordings, and serials*. 2nd ed., Chicago: American Library Association.

- Fritz, Deborah A., & Fritz, Richard J. (2003). *MARC21 for everyone: A practical guide*. Chicago: American Library Association.
- Olson, Nancy B., Bothmann, Robert L. & Schomberg, Jessica J. (2008). *Cataloging of audiovisual materials and other special materials: A manual based on AACR2 and MARC 21* (5th ed). Westport, Conn.: Libraries Unlimited.
- Ranganathan, S. R. (1988). *Classified Catalogue Code (with additional Rules for Dictionary Catalogue Code)* (5<sup>th</sup> ed). Bangalore: SaradaRanganathan Endowment for Library Science.
- Saye, Jerry D., & Vellucci, Sherry L. (1989). *Notes in the catalog record based on AACR2 and LC rule interpretations*. Chicago: American Library Association.
- Sears, Minnie Earl & Lighthall, Lynne Isberg. (2010). *Sears List of Subject Headings* (20<sup>th</sup> ed.). New York: H.W. Wilson.
- Tripathi, S. M. (1992). *Modern bibliographical control, bibliography and documentation*. Agra: Y.K.

## 16LIS22C3: Information Sources and Services

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to understand the basics of information sources and services;
- to learn how to critically analyse and evaluate the information sources;
- to know the users of library, their information requirement and step-by-step process for handling their information queries;
- to get knowledge about various Internet resources in the area of Science and Technology, Social Sciences and Humanities.
- to know the process of retrieving databases and on-line /web information resources in network environment.

### Outcomes

Students will be skilled to know various types of users, their information queries and adequate print and electronic sources of information to satisfy their information requirements pin pointedly. The course teaches about the different information services includes document delivery, both manually and electronically. Also the course provides the knowledge of Internet as source of information, to learn.

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### Unit 1: Information Sources

- Information sources and types: documentary and non-documentary
- Print and Non-print information sources: Primary, secondary & tertiary
- Print and Non-print information sources: Nature, characteristics, utility and evaluation

### Unit 2: Information Services

- Information Services: concept, definition, need and trends
- Information services: anticipatory and on-demand
- Types of information Services: Reference Service- long and short range, bibliographic, referral, document delivery, electronic document delivery, abstracting, indexing, translation, literature search, alerting services (CAS and SDI)

### Unit 3: Information Users

- Types of users: age, profession and experience
- Information need and seeking behavior: concept, methods and models
- User education: concept, need, methods
- Information literacy: meaning, need and concept

### Unit 4: Internet as a source of information

- Internet as a source of information
- Sources: Open and Subscribed
- Open access: virtual library, subject gateways, open courseware
- Subscribed: databases- bibliographic (Medline), citational (Web of Science, Scopus), and full-text (Science Direct, Emerald)

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### Suggested Readings

Foskett, D. J. (1967). *Information service in libraries*. 2<sup>nd</sup> ed. Connecticut: Archon Book Hamden.



- Gates, Jean Key (1988). *Guide to the use of libraries and information sources*, 6<sup>th</sup> ed. New York: McGraw-Hill.
- Katz, William A. (2002). *Introduction to reference work: Basic information services. Introduction to reference work: V1*. 8<sup>th</sup>ed. New York: McGraw-Hill, 2002.
- Krishan Kumar. (2001). *Reference service*. 5<sup>th</sup> rev. ed. New Delhi: Vikas Publications.
- Library Association. (1999). *Guidelines for reference and information service in public libraries*. London: Library Association.
- Ranganathan, S. R. (1989). *Reference service* (2<sup>nd</sup> ed). Bangalore: Sarada Ranganthan Endowment for Library Science.
- Usha Pawan and Gupta, Pawan Kumar. (1994). *Sandarbh Sewa: Saidhantik Avam Kriyatmak*. Jaipur: RBSA.

## **16LIS22C4: Management of Libraries and Information Centres**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Notes**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to describe the term management with its related terminology as applied to libraries and information centres;
- to orient the students with different schools of thought;
- to identify the fundamental components of management, planning, organizing, staffing, directing and control;
- to identify the main approaches to the study of the management of an organization;
- to equip with the skills of managing resources, money, people and time, change and demonstrate management skill in libraries and information centers.

### **Outcomes**

The course provides comprehensive definitions of management as applied to any information centres along with an overview of management schools of thought. It discusses the primary goal in management which is concerned with the human and material resources, activities and task of libraries and information centre an organization, and also the overall objectives of library and information centres management.

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### **Unit-1: Management Basics**

- Management: concept, definition, function and scope
- Principles of management
- Schools of thought: classical- scientific and process manage; neo-classical- human relation, behavioural; modern management era- empirical, social system, decision theory and contingency.
- Change Management : concept, problems of inducing change and techniques
- Tool and techniques: total quality management-definition, concepts and elements; project management- PERT, CPM

### **Unit-2: Man and Materials Management**

- Human Resource (HR): Human Resource Management (HRM): Human Resource Development (HRD)
- Human Resource Planning (HRP): concept and components
- Jobs: Analysis, description and requirement
- Recruitment : advertisement, screening, selection-methods , induction, orientation, performance & evaluation
- Motivation: concept , theories- Maslow's and Hertzberg's
- Library committees: purpose and types
- Materials management: Library infrastructure, Library building-construction, provision, lighting floor management and future considerations

### **Unit-3: Library Financial Management**

- Financial management: concept, scope and objectives
- Library budget and budgetary methods: line item or incremental budget, formula budget, control programme budget, performance budget, planning programming budgeting system (PPBS), zero- based budgeting (ZBB)

- Cost analysis: concept and methods-cost benefit, cost effectiveness
- Outsourcing: concept, definition, need and purpose

#### **Unit-4: Library Collection and Service Management**

- Functions: resources development section- selection principles, collection development & selection tools; policies - print and e-resources; processing; serial control & management; maintenance- conservation, preservation, stock verification & weeding; circulation- charging, discharging, reservation, renewal, overdue and fines; administrative- grant, funding, gift & audit
- Library services: nature, significance and characteristics, factors influencing the growth of services
- Library rules: membership, timing, circulation and user behaviour
- Reports: contents, style & annual reports
- Library statistics: records, data

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#### **Suggested Readings**

- Evans, G. Edward, Ward, Patricia Layzell, & Rugaas, Bendik (2000). *Management basics for information professionals*. New York, Neal-Schuman
- Krishan Kumar. (2007). *Library management in electronic environment*. New Delhi: Har- Anand Publications.
- Mittal, R. L. (2007). *Library administration: Theory and practice*. 5<sup>th</sup> ed. New Delhi: Ess Ess.
- Panwar, B. S. & Vyas, S. D. (1986). *Library management*. Delhi: R. R. Publishing.
- Ranganathan, S. R. (2006). *Library administration*. 2nd ed. New Delhi: Ess Ess.
- Singh, M. (1983). *Library and information management: Theory and practice*. Delhi: IBT.
- Singh, R. S. P. (1990). *Fundamentals of library administration and management*. Delhi: Prabhat Publications.
- Stueart, R. D. & Moran, B. B. (2013). *Libraries and information center management*. 8<sup>th</sup> ed. London: Libraries Unlimited.
- Bryson, J. (1998). *Effective library and information centre management*, Ashgate, London. pp 1-3.

## 16LIS22DA1: Library Operations

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to provide basic understanding to the students about various units and their functioning in the library system;
- to introduce standards, procedures, principles related to various functions of libraries;
- to explore the practical applications of library automation software and standards.

### Outcomes

The course teaches about the various operational principles of a library in terms of its types, activities. Students will be skilled to function with ease in new library set up as they will be introduced with basic operations of libraries in real environment settings.

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### Unit-1: Library operations basics

- Library operations: meaning & types – acquisition, technical processing, circulations, maintenance & serial control
- Acquisition: meaning types, functions – book selection, procurement, collection development, problems
- Automated acquisition system

### Unit-2: Technical Processing and Maintenance

- Technical processing: need, role and procedure
- Dealing with books: accessioning, classification and cataloguing: manual and automated – subject description
- Labeling, shelving and display
- Maintenance: weeding and stock verification
- Conservation and preservation

### Unit-3: Circulation

- Circulation: concept need and functions.
- Membership: new and old, updating, deletion
- Circulation system: charging and discharging systems, overdue & reservation
- Automated circulation system: OPAC & Web-OPAC- Features

### Unit-4: Serial Control

- Serials: concept, types & importance
  - Serial control: traditional and automated
  - Periodical: selection and procurement- planning, ordering, problems and issues
  - Vendor and price management
- 

### Suggested Readings

Bryson Jo. (1996). *Effective library and information management*. Bombay: Jaico.

- Beardwell, Ian & Holden, Len (1996). *Human resource management: A contemporary perspectives*. London: Longman.
- Chabhra, T N et. al. (2000). *Management and organisation*. New Delhi: Vikas.
- Drucker Peter F. (2002). *Management challenges for the 21st century*. Oxford: Butterworth Heineman.
- Evans, G. Edward & Layzell, Patricia. (2007). *Management basics for information professionals*, 2<sup>nd</sup> ed. London: Libraries Unlimited.
- Johnson, Peggy. (2009). *Fundamentals of collection development and management*, 2nd ed. ALA
- Smith, Judith Read, Mary Lea Ginn & Kallaus Norman, F. (2010). *Records management*. 7th ed. South-western, Division of Thomson Learning.
- Stueart, Robert D & Moran ,Barbara B. (2007). *Library and information centre management*. 7th ed. London: Libraries Unlimited.
- Bailey, Dorothy C. & Citron, Helen R. (1984). Automated serial control. *The Serials Librarian: From the Printed Page to the Digital Age* 8(3), pp. 43-53, DOI: 10.1300/J123v08n03\_06

## **16LIS22DA2: Book Publishing**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to have overall knowledge about book publishing;
- to explore publishing as a business and art;
- to know acquisition and commissioning of manuscripts;
- to know the process of book publishing;
- to know how to contact with authors;
- to know the skill of choosing a title, chapters and the publishers;
- to find information about book marketing.

### **Outcomes**

After completion of the course the learners will be able to know the basics of book publishing. The process begins from ideas till it gets the shape of a book. The course will also teach about the author commissioning, agreement, the content creation. Further the course will be able to tell the students about the selling, marketing, promotion of the books.

### **Unit 1: Publishing Overview**

- History of Publishing: international & Indian publishing scenario
- Various kinds of publishing
- Structure of a publishing house
- Openings in book publishing

### **Unit 2: Creating the Book**

- Acquisition and evaluation
- Publisher's contract or memorandum of agreement
- Kinds of editors and kinds of editing, editor-author-publisher relationship
- House style and style manuals
- Acquisition and commissioning
- Evaluation and refereeing

### **Unit 3: Internal and External Design**

- Front and back Matter
- Kinds of copy Editing
- Checklist of copy editing
- Proof reading and copy marking
- Cover design

### **Unit 4: Production, Promotion, Marketing, Sales**

- Publisher's agreement
- Materials for mailing, book reviews
- Author's participation, miscellaneous strategies
- Trade fairs, mass distribution, book clubs and subscription books
- Distribution systems

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**Suggested Readings**

Davies, Gill (2004). *Book commissioning and acquisition*. London: Routledge

Davies, Gill & Balkwill, Richard (2011). *The professionals guide to publishing*. New York: Kogan Page.

Baverstock, Alison (2008). *How to market books*. New York: Kogan Books.

Guthrie, Richard (2011). *Publishing: Principles and practice*. New Delhi: Sage.

## 16LIS22DA3: Information Systems and Networks

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objective

- to know what are the components of information systems and networks,
- to examine how information system helps in furthering both information need, facility and user satisfaction,
- to know how different information systems with variety of objectives function in India,
- to look into the aspects of Indian information system through institutional set ups for science, social science and humanities information.

### Outcomes

After studying the course the students will come to know about the role of information systems for fostering of information flow in different discipline. The course will also teach about the different system works for science, social science, and humanities.

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### Unit I: Information Systems

- Information institutions: evolution, growth, function and types
- Information centres: types and their organization
- Information systems: definition, evolution, growth & functions
- Data centres: definition, evolution, growth, types & functions

### Unit II: Information Systems in Sciences

- National Information System for Science and Technology (NISSAT)
- National Informatics Centre (NIC)
- Environmental Information System (ENVIS)
- National Institute of Science Communication and Information Resources (NISCAIR)
- International Nuclear Information System (INIS)
- International Information System on Agricultural Sciences and Technology (AGRIS)

### Unit III: Information Systems in Social Sciences and Humanities

- Indian Council of Social Science Research (ICSSR)
- UGC-Inter University Centre for International Studies
- UGC-Inter University Centre for Humanities and Social Sciences (IUHSS)
- Indira Gandhi National Centre for Arts (IGNCA)
- National Mission for Manuscripts (NMM)
- Indian Council for Cultural Relations (ICCR)
- National Archives of India (NAI)

### Unit IV: Information Networks

- Network - Concept, Components, Topologies and Types: LAN, MAN, WAN, VPN
- Resource Sharing : Concept, Need, Purpose and Objectives
- Library Networks : Need, Purpose and Objectives
- National Library Networks : DELNET, INFLIBNET, NKN



- International Library Networks: OCLC, RLIN

(Note: Unit II and III will be taught in terms of their history, growth and development, functions, structure, objectives, fellowships and recent development)

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#### Suggested Readings

- Rajagopalan, T.S. & Rajan, T.N. (1986). Information institutions: Patterns of growth and development with a perspective of future. In Rajagopalan, T.S. (ed.) *Ranganathan's philosophy: Assessment, impact and relevance*. New Delhi: Vikas. pp. 64-75.
- Agarwal, S. P. (1986). National Information Systems in social sciences: A study in perspectives. In: Gupta, B.M.(et al.) (eds.). *Handbook of libraries, archives and information centres in India*. pp. 179-95. New Delhi: Information Industry Publications. 3(1),.
- Lahiri, Abhijit (1986). National Information System for Science and Technology. In. Gupta, B.M. (et al.) (eds). *Handbook of libraries, archives and information centres in India*. pp. 58-74. New Delhi: Information Industry Publications. 3, pp. 58-74.
- Atherton, Pauline (1977). *Handbook for information systems and services*. Paris: UNESCO.
- Kent, Allen (ed). (1980). *Encyclopaedia of library and information science*. London: Macmillian.
- Khanna, J.K. (2000). *Documentation and information services, systems and techniques*. Agra: Y.K. Publishers.
- Khanna, J.K. (1996). *Handbook of information systems and services*. New Delhi: Beacon Books.
- Harries, Steve (1993). *Networking and telecommunications for information systems: An introduction to information networking*. London: Library Association Publishing.
- Smith. John W.T. (1993), *Networking and the future of libraries*. Westport: Meckler.
- P Balasubramanian (2012). *Library automation and networking*. Deep & Deep.

## THIRD SEMESTER

### 17LIS23C1: Information, Communication and Policies

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

#### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

#### Objectives

- to know about the information and related concept;
- to know how freedom of information prevails in an advanced society to uphold a democracy;
- to know about information science as discipline;
- to make aware about different acts, commissions and policies related to information is available in India

#### Outcomes

The course empowers the learners in great many ways, especially in terms of knowing different concept of information, its flow and barriers. The course further tells us how freedom of information sustains in a democratic society. Further the learners come to know through this paper that different policies, acts and commissions are set up to up hold the free flow of information for India citizen and to justify India a true democracy.

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#### Unit 1: Information and Communication

- Information : definition, characteristics, nature, type, value and use
- Conceptual difference between data, information and knowledge
- Communication of information
- Communication channels, models and barriers

#### Unit 2: Information Science and Information Society

- Information science: definition, scope and objectives
- Information science as a discipline and its relationship with other subjects
- Information society: definition, genesis, characteristics and implications
- Changing role of library and information centres in society
- Information industry: generators, providers and intermediaries
- Knowledge society: definition, genesis, characteristics & implications

#### Unit 3: Laws/Acts and Policies

- Freedom : Freedom of information- concept, censorship, cyber law, data security and fair use policies in relation to information, right to read and write: (un)banning books, *fatwa* on writers
- Acts: IPRs, Right to Information Act 2005, IT Act 2000
- Organization: WIPO
- Policies: International and National Programmes and Policies (NAPLIS)
- Commission: National Knowledge Commission (NKC)

#### Unit 4: Economics of Information and Its Management

- Information is power
- Information as an economic resource
- Information as a commodity

- Information economics
- Marketing of information product and services
- Information/knowledge management: concept and tools

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**Suggested Readings**

Feather, John (2008). *The information society: A study of continuity and change*. 5<sup>th</sup> ed. London: Facet.

Martin, William J. (1988). *The information society*. London: Aslib.

Raja Rammohan Roy Library Foundation and Indian Library Association (1985). *Documents of national policy on library and information system*. Calcutta: The Foundation.

Ranganathan, S. R. (1966). Teaching library science. *Library Science with a Slant to Documentation* 3 pp. 293-388.

Rao, Madan Mohan (2003). *Leading with knowledge: Knowledge management practices in global infotech companies*. New Delhi: McGraw-Hill.

Sharma, Pandey S. K., ed. (2003). *Electronic information environment and library services*. New Delhi: Indian Library Association.

Vickery, Brian C. & Vickery, Alina (1987). *Information science in theory and practice*. London: Butterworths.

## **17LIS23C2: Information Processing and Retrieval**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to understand the dimension of information documentation;
- to understand the organization of information;
- to understand the components of information storage and retrieval system;
- to explore optimization factors for information systems; and
- to evaluate current issues in information storage and retrieval.

### **Outcomes**

After learning the course, the students will be able to know the basic principles and practices of information documentation, organization, storage, retrieval and dissemination. Further the course will help the learners to know, the structure of document surrogates, indexing languages, Controlled vocabularies, thesauri, natural language systems, catalogues and files, information storage media, retrieval systems, evaluations with precision and recall theory.

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### **Unit 1: Information Processing & Retrieval**

- Information Processing: Meaning, concept, need and purpose
- Information Retrieval (IR): definitions, objectives, characteristics, components and functions.
- Indexing: meaning, need, purpose and historical development
- Types: pre-coordinate and post-coordinate indexing.
- Pre-coordinate indexing systems: brief outline of chain procedure, POPSI, PRECIS and keyword indexing; Post-coordinate indexing systems: Uniterm indexing.
- Citation indexing: meaning, importance, different citation indexes: Sheppard's Citations, SCI, SSCI; Auto indexing - techniques and methods.

### **Unit 2: Vocabulary Control and Controlled Vocabularies**

- Vocabulary control: meaning and importance
- Controlled vocabularies: dictionary, subject heading lists, thesauri, thesaurofacet, classarus, indexing language
- Thesaurus construction techniques
- Case study – ERIC , INSPEC & Cranfield

### **Unit 3: IR models**

- Concept of ranking
- Structural models
- Boolean model
- Probabilistic retrieval model
- Vector space model

### **Unit 4: Evaluation & Trends of IRS**

- Evaluation criteria
- Design of evaluation programmes

- Steps of evaluation; evaluation experiments
  - Trends in IRS: developments, searching and retrieval, full text retrieval, user interfaces, IR standards and protocols.
- 

#### **Suggested Readings**

Atchison, J. & Alan G. A. (1972). *Thesaurus construction: a practical manual*. London: Aslib

Chowdhry, G.G. (2003). *Introduction to modern information retrieval*. 2<sup>nd</sup> ed. London, Facet Publishing.

Ghosh, S.B. & Biswas, S.C. (1998). *Subject indexing systems: Concepts, methods and techniques*. Rev. ed. Calcutta: IASLIC.

Seetharama, S. (1997). *Information consolidation and repackaging*. New Delhi: ESS ESS.

Vickery, B.C. (1970). *Techniques of information retrieval*. London: Butterworths

## **17LIS23C3: Information and Communication Technologies (ICTs) Advanced: Theory**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to develop an advance understanding about implementation of library automation software and in achieving library security with the use of latest ICTs technique;
- to acquaint the students in the use of communication and networking technologies;
- to provide them knowledge about database management, data ware housing, data mining and other artificial intelligence technologies.

### **Outcome**

Students will be acquainted with the latest tools and technologies available for maintaining library databases, communication flow within library, data warehousing, data mining and for ensuring library security so that they can implement all such tools in future libraries.

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### **Unit 1:Library Automation**

- Planning, implementation and evaluation of library automation
- Automation of in-house operations: acquisition, cataloguing, circulation, serials control system, OPAC and its features, library management
- Library automation softwares: proprietary (LIBSYS), Free (WINISIS), Open source (KOHA)
- Library security technology: RFID, CCTV, biometrics

### **Unit 2: Database Management**

- Database: concept, need and types
- DBMS: concept & features
- RDBMS: concept, definition, features and need
- Database design, development, evaluation, query language
- Database architecture and models

### **Unit 3:Data Communication Technology**

- Data communication: concept, definition
- Internet connectivity: dialup, leased line, ISDN, wireless
- Protocols and standards: TCP/IP, FTP, HTTP, OSI
- Web servers and Internet security
- Use of social networking tools for library services: RSS, Podcasting, Blogs

### **Unit 4:Artificial Intelligence**

- Artificial intelligence: concept, definition and features
- Expert systems: concept, definition and features

- Data warehousing
- Data mining

### **Suggested Readings**

- Ackermann, Ernest. (1995). *Learning to use the Internet: An introduction with examples and experiences*. New Delhi: BPB.
- Chellis, James, Perkins, Charles & Strebe, Mathew (1997). *MCSE: Networking essential study guide*. New Delhi: BPB.
- Chowdhury, G. G. & Chowdhury, Sudatta (2007). *Organizing information: From the shelf to the Web*. London: Facet.
- Chowdhury, G. G. & Chowdhury, Sudatta. (2000) *Searching CD-ROM and online information sources*. London: Library Association.
- Cooke, Alison. (2008). *A guide to finding quality information on the Internet: Selection and evaluation strategies*. 2<sup>nd</sup> ed. London: Facet.
- Cooper, Michael D. (1996). *Design of library automation systems: File structures, data structures and tools*. New York: John Wiley.
- Haravu, L. J. (2004). *Library automation design: Principles and practice*. New Delhi: Allied.
- Falk, Bennett. (1995). *The Internet basic reference from A to Z*. Singapore: Tech. Pub.
- Forouzan, Behrouz A, Coombs, Catherine & Fegan, Sophia Chung. (2000). *Data communication and networking* (2<sup>nd</sup> ed). New Delhi: Tata McGraw-Hill.
- Kashyap, M. M. (1993). *Database system: Design and development*. New Delhi: Sterling.
- Leon, Alexis & Leon, Mathews. (1993). *Fundamentals of IT*. Chennai: Leon TechWorld.
- Panda, K. C. & Gautam, J. N. (1999). *Information technology on the cross road: From abacus to internet*. Agra: Y. K.
- Pandian, M. Paul & Jambhekar, Ashok. (2001). *Internet for libraries and information centres*. New Delhi: Tata-McGraw Hill.
- Patterson, Dan W. (2000). *Introduction to artificial intelligence and expert systems*. New Delhi: Prentice-Hall of India.

## **17LIS23DA1: E-Resource Management**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to know the meaning, definition and types of electronic resources;
- to study electronic resources and their life cycles;
- to get awareness about collection development of e-resources;
- to study the activities involved in developing collection and providing access to electronic resources.

### **Outcomes**

Through the knowledge acquired in this course, the students will be able to have better knowledge to manage electronic resources in libraries. Further the course empowers the students about the collection development of e-resources, developing through different channels, and also to learn usage statistics.

---

### **Unit 1: Electronic Resources**

- Electronic resources: concept, need, characteristics, benefits and drawbacks
- E-Resource life cycle
- Types of e-resources
- Electronic publishing

### **Unit 2: Collection Development**

- Collection building process: formulating policy, budgeting, evaluation of e-resources, pricing, licensing, ordering and receiving
- Model licenses and guidelines
- Negotiation: concept and need
- Consortia: concept, need, purpose & limitations
- National consortia: Shodhsindhu

### **Unit 3: Access Management**

- Access management of e-resources
- Authentication and Authorization
- Access channels
- Preventing misuse
- e-resource publicity
- Preservation of e-resources
- User training and awareness

### **Unit 4: Usage Statistics and ERMS**

- Usage statistics of e-resources
  - Standards and guidelines (COUNTER, SUSHI)
  - ERMS: concept, need, features
  - Salient features of some ERMS (ExLibris Verde)
-



## **Suggested Readings**

- Conger, Joan E. (2004). *Collaborative electronic resource management: From acquisitions to Assessment*. Westport: Libraries Unlimited.
- Cole, Jim et. al. (2003). *E-serials Collection Management: Transition, Trends and Technicalities*. London: CRC Press.
- Curtis, Donnelyn. (2005). *E-journals: How to do it Manual for Building, Managing and Supporting Electronic Journal Collection*. London: Facet Publishing.
- Fecko, Mary Beth. (1997). *Electronic Resources: Access and Issues*. London: Bowker-Saur.
- Hanson, Ardis & Levin, B. L. (2002). *Building a Virtual Library*. Hershey, P.A.: Information Science Publishing.
- Jones, Wayne, ed. (2009). *E-Journal Access and Management*. New York: Routledge.
- Katz, Linda S. (2003). *Collection Development Policies: New Dimension for Changing Collections*. London: Routledge Kegan Paul.
- Katz, Linda S. (2005). *Managing Digital Resources in Libraries*. London: Routledge Kegan Paul.
- Kemp, Rebecca. (2008). *E-resource Evaluation and Usage Statistics: Selector's Choices*. Saarbrücken: VDM Verlag.
- Lee, Stuart D. & Boyle, Frances. (2004). *Building an Electronic Resource Collection: A Practical Guide* (2<sup>nd</sup> ed). London: Facet Publishing.
- Lee, Sul H. (2003). *Electronic Resources and Collection Development*. London: Routledge Kegan Paul.
- Mitchell, Anne M & Surrat, Brain E. (2005). *Cataloguing and Organizing Digital Resources: A How to do it Manual for Librarians*. London: Facet Publishing.
- Yu, Holly & Breivold, Scott. (2008). *Electronic Resource Management in Libraries: Research and Practice*. Information Science Reference.

## **17LIS23DA2: Collection Development**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to examine the methods of materials acquisitions, covering various formats and library types;
- to become familiar with the varied selection resources that provide bibliographic and evaluative support for collection development work;
- to learn about issues surrounding collection development, including budgeting, policies, user communities, and collection management;
- to discuss expectations for and of selectors in an ever-evolving profession;
- most importantly, to provide you with real-life situations you will encounter and skills you will need to tackle those collections (and other) situations in your professional life.

### **Outcomes**

This course will cover methods of developing and managing library collections in academic, public, and school libraries. Discussions will include acquisition methods, budgeting, collection development policies, selection criteria, selector responsibilities, collection evaluation, and challenges to materials. These components of collection development and management will be discussed in the context of the ongoing changes in the world of publishing and accessing information

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### **Unit 1: Collection Development Principles**

- Collection development: concept; goals and methods
- Principles of collection development by Ranganathan; Drury; Dewey;
- Library of Congress and American Library Association
- Collection development policies: concepts and types
- Planning for collection development : committees; staffing; budgeting;
- Implementation and evaluation

### **Unit 2: Selection Tools**

- Selection tools : Types: bibliographies; publishers' catalogues and book reviews (with examples)
- Evaluation of selection tools
- Stock verification and rectification
- Preservation of collection : print and non-print; concepts; goals and methods

### **Unit 3: Developing Print Collection**

- Newly start libraries: collection holding of other libraries
- Demanded books from the circulation data
- List recommended text in syllabi

### **Unit 4: Developing Collection of e-Resources**

- Collection building process : formulating policy, budgeting, evaluation of e-resources, pricing, licensing, ordering and receiving
- Model licenses and guidelines
- Negotiation : concept and need
- Consortia : concept, need and purpose

- Collection building of e-resources through consortia
- National consortia in India: UGC-Infonet, INDEST

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**Suggested Readings**

Alabaster, Carol. (2002). *Developing an outstanding core Collection: A guide for libraries*. Chicago: American Library Association

Bonk, W. J., & Magrill, R.M. (1979). *Building library collections* (5th ed.). Metuchen, NJ: The Scarecrow Press.

Cassell, M. K., & Greene, G.W. (1991). *Collection development in the small library: Small libraries Publications, no. 17*. Chicago: American Library Association.

Evans, G. E. (1995). *Developing library and information center collections*, (3rd ed.): Library Science Text Series. Englewood, CO: Libraries Unlimited.

Gabriel, M. R. (1995). *Collection Development and Collection Evaluation: A sourcebook*. Metuchen, NJ: The Scarecrow Press.

## 17LIS23DA3: Museology

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to know about objectives and functions of a museum ;
- to identify the impact of museum and its artifacts;
- to get awareness about the materials and its built-up ;
- to identify museum materials;
- to know museum communications.

### Outcomes

This course provides a broad introduction to the museum world. In the course we focus on what a museum is, and examines the various types of museum: art, history, natural history, science. Further the course investigates the various jobs and responsibilities that people have within museums as they work on exhibitions, education, research, collection management, and conservation.

---

### Unit-1: The Museum: Critical Perspectives

- Museum: meaning, concept and definition
- Museum studies and related aspects
- Museum, society, culture and human civilization

### Unit -2: Managing Museums

- Collections curatorship
- Conservation in practice: preventive conservation
- Collection and material development

### Unit- 3: Collections Management and Care

- Issues in Conservation: Context of Conservation
- Issues in Conservation: Understanding Objects
- Oral History from Creation to Curation

### Unit- 4: Museum Communications

- Antiquities and the law
- Cultural memory
- Exhibition project
- Heritage, globalization and development

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### Suggested Readings

Carbonell, B. (ed.) (2004). *Museum studies: An anthology of contexts*. Oxford: Blackwell.

Henning, M. (2006). *Museums, media and cultural theory*. Maidenhead: Open University Press.

Karp, I. et al (eds.) (2006). *Museum frictions: Public cultures/global transformations*. Durham, NC: Duke University Press.

Kreps, C.F. (2003). *Liberating culture: Cross cultural perspectives on museums, curation and heritage preservation*. London: Routledge.

Macdonald, S. (ed.) (2006). *A companion to museum studies*. Oxford: Blackwell

## 17LIS23DB1: Information Analysis, Consolidation and Repackaging

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to have overall knowledge about usefulness of information;
- to explore why information analysis is needed;
- to know and practice of information consolidation;
- to know the need of repackaging.

### Outcomes

The course makes the learners aware about the information and its abundance and also problem of searching the right information. The can help the students learn the process of information analysis and it can be broken into fragments for better utilization. Overall skill learning of information consolidation and repackaging is prime outcomes.

---

### Unit 1: Information Analysis, Consolidation and Repackaging

- Information analysis, consolidation and repackaging: concept, definitions, need, purpose and techniques
- Methodology for information analysis and consolidation: pre-requisites and steps
- Role of library and information professionals in information analysis, consolidation and repackaging process
- Trends in Information analysis, repackaging and consolidation including electronic content creation

### Unit 2: Content Analysis and Abstracting

- Content analysis: concept, need, purpose and type – Quantitative and qualitative
- Content analysis: applications (Generation of Information Services and Products)
- Abstracting: types and guidelines for preparing abstracts
- Use of abstracts and abstracting in consolidation

### Unit 3: Information Products

- Information products: concept, nature, types- newsletter, house journals, trade and Product-bulletin, technical digest, review, state-of-the-art-report, trend reports, etc.
- Evaluation of Information products: Criteria and steps
- Marketing of information products

### Unit-4: Information Analysis and Consolidation Centres

- IAC centres: genesis, function and activities
  - Information analysis and consolidation centres: NISCAIR, TERI
  - Planning and management of information analysis and consolidation centres
- 

### Suggested Readings

Seetharama, S. "Modes of Presentation of Information in Information Consolidation products." *Library Science with a Slant to Documentation*, V.22 (1985).

Saracevic, T. and Wood, J. S. *Consolidation of Information: A Handbook of Evaluation, Restructuring and*

*Repackaging of Scientific and Technical Information*. Paris: Unesco, 1981.

Atherton, Pauline. *Handbook for Information Systems and Services*. Paris: Unesco, 1977.

Seetharama, S. *Information Consolidation and Repackaging*. New Delhi: EssEss Publications, 1997.

## **17LIS23DB2: Preservation and Conservation**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- examine the various components of a preservation program;
- differentiate between conservation and preservation of library materials;
- identify various factors of deterioration of library materials;
- design effective security and disaster planning program;
- assess strategies for devising a mission statement and developing a preservation policy;
- analyze the methods for selecting collections for preservation and assessing institution's preservation needs; and
- Identify resources that will increase your knowledge of preservation

### **Outcomes**

This course will introduce the students to everyday care of library materials, storage and handling of library materials, collection management, principles for preservation and conservation of library materials, factors of deterioration (environmental, biological, chemical, mechanical or human and disasters factors), preservative and conservative measures (books, archival materials, paper and digital preservation), preservation policy, reformatting, library binding, in-house repair, security and disaster planning, common preservation problems and solutions. It will also give students the tools to build an effective preservation program in any library.

---

### **Unit 1 Introduction**

- Introduction to concepts of archiving, preservation and conservation.
- Need and significance of
- Archiving, preservation and conservation of information resources.
- Evolution of writing materials: clay, papyrus, metallic plates, skin, parchment, vellum, palm leaves; history, nature, use as writing materials and their preservation. history of paper making, different types of paper and their nature.

### **Unit 2 Materials**

- Different types of library materials, their preservation and maintenance: paper based materials
- Book and non Book materials, library binding, binding standards.
- Other materials: Magnetic plates, tapes & diskettes, microforms, optical media, magneto optical discs.

### **Unit 3 Hazards and Safeguard**

- Hazards to library materials and their preservation: environmental hazards, biological hazards and human being as an enemy of library materials; disaster prevention and recovery.
- To study various national archival initiatives of different countries: NARA of US,

Australian

- National initiatives, public archives of Canada

#### **Unit 4 Digitization and record management**

- Records management: concepts and issues involved
- Electronic resource management; code of Ethics for archivists.
- Digital preservation

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#### **Suggested Readings**

Balloffet, N., Hille, J., & Reed, J. A. (2005). *Preservation and conservation for libraries and archives*. Chicago: American Library Association.

Henderson, K. L. (1983). *Conserving and preserving library materials*. Urbana-Champaign, Ill.: University of Illinois, Graduate School of Library and Information Science.

Johnson, P. (2009). *Fundamentals of collection development and management*, 2nd ed. Chicago: American Library Association.



## 17LIS23DB3: Archive Management

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to know about archive as an institution;
- to identify the key objectives;
- to get awareness conservation and preservation of materials;
- to know and accesses and service policies;

### Outcomes

The archive management aims to follow the process of technological evolution in the area, and to offer high quality education in organization and management of archive information in any media. The planning, implementation and operation of intermediate and permanent files, scanning techniques, electronic document management, technological application for the preservation and conservation such as microfilming and scanning in hybrid systems, and media and multimedia convergence shall be addressed.

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### Unit 1: Archives management

- Principles and practices
- Arrangement, classification and description
- Access, reference and advocacy

### Unit 2: Legal and ethical implications

- Legal rights; ethical considerations

### Unit 3: Preservations and conservation

- Preservation issues
- Policies, strategies and standards
- Preservation activities
- Conservation issues
- Reformatting materials: digitization process and projects

### Unit 4: Archive administration and services

- Policies for archive professionals
  - Recruitment, education and promotion
- 

### Suggested Readings

- Williams, Cariline (2006). *Managing archives and practice: Foundations, principles and practice*. Oxford: Chandos.
- Mohit, Gupta (2008). *Archives and record management*. New Delhi: Global India Publications.
- Miller, Laura (2010). *Archive: Principle and practice*. London: Facet.
- Kennedy, J. & Schauder, G. (1998). *Records management: a guide for corporate record keeping*. Melbourne: Longman.

Penn, I., Pennix, G., and Caulson, J. (1994). *Records management handbook*. 2nd.ed. Hampshire: Gower.  
Yeo, G. & Shepherd, E. (2003). *Managing records: a handbook of principles and practice*. London: Facet.

## 17LIS23DC1: Digital Library

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- To provide basic concepts related to digital library system;
- To introduce standards, hardware and software related to digital library;
- To explore the applications of software and standards in developing digital library systems;
- To learn the use of content management system, web 2.0 and semantic web technologies in digital library systems;
- To provide hands on experience in creation of digital libraries;
- To know the concept of institutional repositories and their usages in library and institutional settings.

### Outcomes

Students will be acquainted with the latest tools and technologies available for maintaining digital library, so that they can implement all such tools in future libraries.

---

### Unit 1: Digital Library

- Digital Library (DL): concept, definition, need, objectives and characteristics
- Evolution of digital libraries
- Digital library initiatives: national and international
- Design and development of digital library: planning, design, implementation, evaluation and management

### Unit 2: Digitization

- Digitization: concept, need and methods
- Digitization file formats, tools and process
- Compression: types and methods

### Unit 3: Digital Library Creation

- DL software: Greenstone Digital Library Software, Dspace
- DL hardware: input capture devices: scanners, digital cameras
- Digital preservation, conservation and archival management: problems and prospects

### Unit 4: Institutional repository

- Institutional repository: concept, definition, need, objectives and characteristics
- Design and development of IR
- IR initiatives: national and international

(Note: Viva-voce for unit-3 shall be conducted with assessor comprising of at least two members other than the teacher concerned)

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### Suggested Readings

Amjad, Ali. (2004). *Reference service and the digital sources of information*. New Delhi: Ess Ess.

Bishop, A. P. et al. (eds.). (2005). *Digital library use: Social practice in design and evaluation*. Delhi: Ane Books.

Chowdhury, G. G. & Chowdhury, Sudatta. (2003). *Introduction to digital libraries*. London: Facet.

- Deegan, Marilyn & Tanner, S. (2006). *Digital preservation*. London: Facet Publishing.
- Jones, Richard et al. (2006). *The institutional repository*. Oxford: Chandos Publishing.
- Judith, Andrews & Derek, Law. (2004). *Digital libraries*. Hants: Ashgate.
- Krishan Gopal. (2005). *Intellectual freedom in digital libraries*. Delhi: Authors Press.
- Lakshmi, Vijay & Jindal, S. C. (eds.). (2004). *Digital libraries*. Delhi: Isha Books.
- Mitchell, Anne M. & Surratt, Brian E. (2005). *Cataloguing and organizing digital sources*. London: Facet.
- Pandey, V. C. (2004). *Digital technologies and teaching strategies*. Delhi: Isha Books.
- Rajagopalan, A. (2006). *Library of the digital age: Issues and challenges*. Delhi: SBS Publishers.

## 17LIS23DC2: Web Designing

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to introduce the students with design, creation, and maintenance of web pages and websites;
- to learn critical evaluation of website quality and maintenance of quality web pages;
- to acquaint students with web design standards, their importance and how to manipulate images as per requirements.

### Outcome

Students will be acquainted with the latest tools and technologies and standards available for creating websites. After successful completion of this course they will be skilled to critically evaluate website quality and will learn how to create and maintain quality web pages based on design standards and will learn to create and manipulate images.

---

### Unit 1: Web Design Basics

- Introduction to the Internet
- World Wide Web : History, concept, need and definition
- Website: Concept, Need and Definition
- World Wide Web Standards
- Requirement Analysis

### Unit 2: Web Design Principles

- Basic Principles involved in Developing a Web Site
- Planning Process
- Golden Rules of Web Designing
- Design Concept
- Designing Navigation Bar
- Page Design
- Home Page Layout

### Unit 3: Introduction to Markup Languages & CSS

- HTML – Concept, Definition, Elements and Tags
- CSS – Concept & Styling
- Creating a Basic Web Page Using HTML

### Unit 4: Creation of Website

- Introduction to Dreamweaver
- Creation of Website using Dreamweaver
- Publishing Websites

(Note: Internal assessment will be in practice form)

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## Suggested Readings

- Cederholm, Dan. (2015). *CSS3 for web designers*. A Book Apart.
- Clark, Joe. (2002). *Building accessible websites*. New Riders Publishing.
- Coombs, Norman. (2010). *Making online teaching accessible*. Jossey-Bass.
- Cunningham, Katie. (2012). *The accessibility handbook*. O'Reilly Media.
- Duckett, Jon. (2005). *Accessible XHTML and CSS Web sites problem design solution*. Wrox.
- Felke-Morris. (2013). *Basics of Web design: HTML5 & CSS3* (2nd ed). Addison-Wesley.
- Horton, Sarah and Quesenbery, Whitney (2014). *Universal design for Web accessibility*. Rosenfeld Media.
- Horton, Sarah and Quesenbery, Whitney. (2012). *A Web for everyone*. Rosenfeld Media.
- Horton, Sarah. (2005). *Access by design: A guide to universal usability for web designers*. New Riders Publishing.
- Hricko, Mary (Ed.) (2002). *Design and implementation of Web-enabled teaching tools*. Idea Group Publishing.
- Kirkpatrick, Andrew et al. (2006). *Web accessibility: Web standards and regulatory compliance*. Friends of ED.
- Meiert, Jens Oliver. (2015). *Little book of HTML/CSS coding guidelines*. O'Reilly.

## 17LIS23DC3: E-learning

Maximum marks: 80

Pass marks: 32

Time: 3Hrs

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to build relevant, pedagogically sound educational materials and programs for the Internet using the latest developments in online educational theories and technology;
- to integrate a variety of multimedia technology tools to develop engaging, effective eLearning;
- to apply the components of effective eLearning instructional design, development, implementation, and evaluation to creating projects and programs that meet the immediate classroom needs and goals;
- to track, measure, and evaluate the effectiveness of eLearning training.

### Outcomes

After getting oriented with the course, the students will come to know the meaning, definition and the concept of e-learning and the use of technology. Various stages of getting ready with instruction will come to know especially different formats of technology. Also the course is benefitted in using modern social networking for mass reading programme.

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### Unit 1: Introduction: New Learning Concepts

- E-learning: meaning, definition and concept
- Learning with technology
- Six C's framework of e-learning
- Computer-mediated communication

### Unit 2: Managing e-learning

- Changing learning ecology
- Role of students and instructor
- Computer-mediated communication

### Unit 3: E-Learning Delivery, Assessment and Evaluation

- Defining and locating community
- Collaboration and community
- Creating, promoting e-learning community
- Managing social and technical mix in e-learning

### Unit 4: e-Inclusion and Exclusion

- Digital divide
- Digital spectrum
- Cross-cultural issues

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### Suggested Readings

Allen, Michael. (2003) *Michael Allen's guide to e-learning: Building interactive, fun, and effective learning programs for any company*. New Jersey: Wiley.

- [Arshavskiy](#), Marina (2013). *Instructional design for e-learning: Essential guide to creating successful e-learning courses*. London: Create Space.
- Haythornthwaite, Caroline & Andrews, Richard (2011). *E-learning: Theory and practice*. London: Sage.
- Khan, Badrul (2005). *Managing e-learning strategies: design, delivery and implementation and evaluation*. Pteorshey: Information Science Publishing.



## **FOURTH SEMESTER**

### **17LIS24C1: Research Methods and Statistical Techniques**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

#### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

#### **Objectives**

- to introduce the different methods and techniques of research;
- to familiarize in the use of data collection tools, organization and representation of data;
- to introduce different data analysis techniques;
- to guide in preparing research report.

#### **Outcomes**

The course will enable the students to learn the basics of research and research methodology in terms of types, forms and formulation research questions including objectives, hypotheses. Further the students will also be benefited through the data collection methods and analyzing through different statistical techniques.

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#### **Unit 1: Research Basics**

- Research: definition, concept, objectives, types
- Scientific enquiry and scientific method: validity, reliability, objectivity and subjectivity
- Research problem: theoretical and applied; research problem identification.
- Literature search and review: purpose, objectives and style
- Research Proposal: how to write an effective research proposal
- Current trends in LIS research

#### **Unit 2: Research Design**

- Research design: concept, need and purpose
- Research approach: qualitative- narrative, phenomenology, ethnography, discourse; quantitative-experimental and non-experimental (survey, historical, descriptive)
- Identification and formulation of problem
- Research objectives, questions and hypotheses: meaning, concept types and narrating style

#### **Unit 3: Research Tools and Techniques**

- Data world: population and sample - concept, meaning and sampling techniques
- Data collection methods: questionnaire, schedule, interview, observation
- Library records and reports

#### **Unit 4: Data Analysis, Interpretation & Reporting**

- Data processing- analysis, interpretation, presentation: concept, need and purpose
- Descriptive statistics and inferential statistic
- Measures of central tendency: mean, median, mode

- Dispersion, correlations, linear Regression, standard deviation- non-parametric & parametric (chi-square test, t-test)
- SPSS and Web-based statistical analysis tools: basics
- Research report writing

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### **Suggested Readings**

Charles, Busha H. and Harter, Stephen P. (1980). *Research methods in librarianship: Techniques and interpretations*. USA: Academic Press.

Fowler, Floyd J. (2001). *Survey research methods*. 3<sup>rd</sup> ed. California: Sage.

John W. Creswell (2013). *Research design: Qualitative, quantitative, and mixed methods approach*. 4<sup>th</sup> ed . New Delhi: Sage.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. 2<sup>nd</sup> rev ed. New Delhi: New Age .

Krishan Kumar (1992). *Research methods in library and information Science*. New Delhi: Vikas.

Powell, Ronald R. & Connaway, Lynn Silipigni (2010). *Basic research methods for librarians*. 5<sup>th</sup> ed. New York: Libraries Unlimited.

Rao, I. K. Ravichandra (1983). *Quantitative methods in library and information science*. New Delhi: Wiley Eastern.

Young, P. V. (1982). *Scientific social survey and research*. New Delhi. Prentice Hall.

Menter, Ian et al (2011). *A guide to practitioner research in education*. Los Angeles: Sage.

## 17LIS24C2: Information and Communication Technologies (ICTs) Advanced: Practice

Maximum marks: 100

Pass marks: 40

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 4 questions in all out of total 6 questions. All questions carry equal marks.

### Objectives

- to train the students practically in designing and developing library database, library website and blog;
- to provide hand-on training on library automation software and data migration from one system to another system.

### Outcome

Students will be practically acquainted with the latest tools and technologies available for maintaining library databases, library automation software (Koha), communication flow within and outside the library, design and development of library website and blog. They will be skilled in practical implementation of ICT in libraries.

---

### Unit 1: Library Management Software

- Library management software- KOHA

### Unit 2: Use of Internet

- Designing and developing library blog

### Unit 3: Digital Library Practice

- Hands on practice of scanner, digital camera and OCR
- Hands on practice of DL creation using Greenstone

### Unit 4: Website Designing and Navigational Tools

- Designing library websites (HTML/Dreamweaver, etc.)
- Image creation/editing using Paint/Photoshop/Office Picture Management Tools, etc.

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### Suggested Readings

Ackermann, Ernest. (1995). *Learning to Use the Internet: An Introduction with Examples and Experiences*. New Delhi: BPB.

Bradley, Phil. (2004). *Advanced Internet Searcher's Handbook*. Facet Publishing.

Chowdhury, G. G. and Chowdhury, Sudatta. (2000). *Searching CD-ROM and Online Information Sources*. London: Library Association.

Falk, Bennett. (1995). *The Internet Basic Reference from A to Z*. Singapore: Tech. Pub.

McCoy, John. (1996). *Mastering Web Design*. New Delhi: BPB.

Neelameghan, A. & Lalitha, S. K. (2001). *Tutor+: A Learning and Teaching Package on Hypertext Link Commands in WINISIS*. Bangalore: Sarada Ranganathan Endowment for Library Science.

Negus, Christopher. (2005). *Linux Bible*. New York: John Wiley.

Simpson, Alan. (2004). *Windows XP Bible*. New York: John Wiley, 2004.

Walkenbach, John, et al. (2007). *Office 2007 Bible*. New York: John Wiley.

Winship, Ian & McNab, Alison. (2000). *Student's Guide to the Internet*. London: Library Association.

## 17LIS24C3: Technical Writing and Communication Skills

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to know about technical writing;
- to identify difference between general and technical writings;
- to get awareness about writings with specific purpose;
- to identify different forms of oral presentation;
- to find information about the benefits and demerits of seminar, group discussion and other form of oral presentation.

### Outcomes

After learning the course students will identify the different forms of private and official letters and their purpose also. The students will also be benefitted from the course in terms of specific documents with purpose, oral presentations with its different forms and its suitability in different contexts.

---

### Unit 1: Technical Writing

- Technical & non-technical writings: meaning, definition and difference
- Forms of technical writings: theses, technical papers, reviews, manuals
- Parts of theses: objectives & sequence
- Citation Style: objectives, style manuals
- APA documentation: note taking, listing sources: references and bibliography
- APA style (In-text: superscription and parenthetical)

### Unit 2: Specific Documents

- Private and official correspondence: important characteristics
- Workplace letters: guidelines, parts, formats and design; audience and purpose; letter tone- polite, tactful, plain English and ethical consideration
- Resume, interview and resignation

### Unit 3: Writing Process

- Writing process: objectives, purpose, context, language and tone
- Grammar and usage: parts of speech
- Mechanics of writing: abbreviation, hyphenation, capitalization, use of numbers, spelling & punctuations
- Editing and proof reading: basics of editing and proofreading marks

### Unit 4: Oral Communication

- Oral communication: objectives, advantages, pitfalls and avoidance
- Considerations: languages, diction, sentence structure and thematic wind up
- Personal presentation: seminar, extempore; personal interview; story telling
- Group presentation: group discussion, brainstorming session

(Note: One of internal assessments shall be in the form of group discussion (GD) from unit-4 with assessor comprising of at least two members other than the teacher concern)

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### **Suggested Readings**

*Chicago Manual of Styles*. 16<sup>th</sup> ed. New Delhi: Prentice Hall of India, 2010.

Gilbadi, Joseph. *MLA handbook for writers of research papers*. 7<sup>th</sup> ed. New Delhi: Affiliated East- West Press, 2010.

Gordon, H. M. and Walter J. A. *Technical writing*. 5<sup>th</sup> ed. London: Holt, 1986.

Hornby, A. S. *Oxford Advanced Learners Dictionary of Current English*. 8<sup>th</sup> ed. New Delhi: Oxford University Press, 2009.

James, H. S. *Handbook of technical writing*. NTC Business Books, 2010.

Mohan, K. *Speaking english effectively*. New Delhi: Macmillan, 2005.

Richard, W. S. *Technical writing*. New York: Barnes and Noble, 2008.

Lannon, John M. (1997). *Technical writing*. 7<sup>th</sup> ed. New York: Longman.

Lannon, John M. & Gurak, Laura J. (2014). *Technical communication*. 3<sup>rd</sup> ed. Boston: Pearson.

Basu, B. N. (2007). *Technical writing*. New Delhi: Prentice Hall of India.

## 17LIS24DA1: Academic Library System

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to acquaint the students with the present set up of academic library system in India;
- to make aware the students about growth and role of academic libraries;
- to examine the issues related with collection development;
- to look into the meaning, concept and technique of resource sharing

### Outcomes

The students will be able to understand better manage resources and services in academic libraries in terms of growth, role of academic libraries. The course will teach us about the library organization, collection development issues and also lessons about resource sharing.

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### Unit 1: Academic Libraries

- Academic libraries : meaning, definition, need and purpose
- Types and functions of academic libraries
- Growth and development of academic libraries
- Role of academic libraries in formal and informal system of education
- UGC and its role in the development of academic libraries

### Unit 2: Organization and Management

- Library authority: concept and Role
- Staffing norms and patterns
- HRM in academic libraries
- Sources of finance, types of budget, methods of financial estimation
- Planning and design of academic library buildings
- Library equipments, furniture, lighting and fitting

### Unit 3: Collection Development

- Collection development: concept, meaning, importance and problems
- Collection development policy: print and non-print
- Selection principles and tools
- Library committee and their role in collection development
- Weeding policy, stock verification

### Unit 4: Resource Sharing and Information Services

- Resource sharing: concept, need and purpose
  - Resource sharing networks in India
  - Role of INFLIBNET in development of academic libraries
  - Planning and development of information services
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### Suggested Readings

American Association of School Librarians. (1969). *Standards for school library programmes*. Chicago: ALA.

American Library Association. (1978). *Personnel organization and procedure: A manual suggested for use in*

*college and university libraries*. 2<sup>nd</sup> ed. Chicago: ALA.

Baker, David, ed. (2006). *Resource management in academic libraries*. London: Library Associations.

Brophy, Peter. (2008). *The academic library*. London: Library Association.

Chapman, Liz. (2001). *Managing acquisitions in library and information services*. London: Library Association.

Gelfand, M. A. (2001). *University libraries for developing countries*. Paris: UNESCO.

Jordan, Peter. (1998). *The academic library and its users*. London: Gower.

Line, Maurice B., ed. (1990). *Academic library management*. London: Library Association.

## **17LIS24DA2: Public Library System**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- To acquaint the students with the present set up of public library system in India

### **Outcomes**

The students will be able to better manage resources and services in public libraries.

### **Unit 1: Growth and Role of Public Libraries**

- Public Library: Nature, meaning and concept
- History and development: history and development of public libraries with special reference to India
- Type and functions of public libraries
- Role of public libraries in formal and informal education and society
- Public libraries and national development
- Agencies and their role in promotion and development of public libraries in India

### **Unit 2: Library Organization and Administration**

- Library organization and administration
- Administrative organization of library, staff manual, library surveys, statistics, work measurement and standards
- Personnel management
- Sources of Finance; types of budget, methods of financial estimation, budget preparation
- Planning, basic elements in the design of public library buildings
- Furniture and library equipment
- Lighting and fittings

### **Unit 3: Collection Development**

- Principles of collection development
- Selection principles, tools and problems of collection development
- Collection development of print material: books, periodicals, grey literature, patents, standards, government publications
- Electronic documents
- Weeding policy

### **Unit 4: Resource Sharing and Information Services**

- Resource sharing: concept, need and purpose
- Resource sharing networks in India
- Planning and development of information services



### **Suggested Readings**

- Bhatt, R. K. (1995). *History and development of libraries in India*. New Delhi: Mittal Publications.
- Ekbote, Gopala Rao. (1987). *Public libraries system*. Hyderabad: Ekbote Brothers.
- Hage, Christine Lind. (2004). *The public library start-up guide*. Chicago: American Library Association.
- Jain, M. K. (2000). *50 years of library and information services in India (1947-98)*. Delhi: Shipra.
- Kalia, D. R. (1990) *Guidelines for public library services and systems*. Calcutta: Raja Rammohan Roy Library Foundation.
- Liu, Lewis-Guodo, ed. (2001). *The role and impact of the Internet on library and information services*. Westport: Greenwood Press.
- Rath, Pravakar. (1996). *Public library finance*. New Delhi: Ess Ess.
- Thomas, V. K. (2005). *Public libraries in India: Development and finance*. New Delhi: Vikas.
- Totterdell, Anne. (2005). *An Introduction to library and information work*. London: Facet.

## **17LIS24DA3: Special Library System**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- To define the basic objectives of special libraries, their types and functions;
- to understand the growth of special libraries in India;
- to understand the fundamental of special library administration and management such as staffing, collection development, financial management and personnel management, etc.;
- to understand the concept of resource sharing and its importance in special libraries;
- to recognize new qualitative changes in library service due to introduction of ICT;

### **Outcomes**

This course will enable the students to get awareness about the nature and practice of special libraries and their working patterns along with its growth history. Further this will guide the students in constitution of a library governing body, staffing norms, development good collection, building and furniture, consortia purchase and resource sharing, etc.

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### **Unit 1: Growth and Role of Special Libraries**

- History and development of special libraries with special reference to India
- Type and functions of special libraries
- Role of special libraries

### **Unit 2: Library Organization, Administration and Management**

- Library organization and administration
- Administrative organization of library, staff manual, library surveys, statistics, work measurement and standards
- Personnel management in special libraries
- Sources of finance, types of budget, methods of financial estimation, budget preparation
- Planning, basic elements in the design of special library buildings
- Furniture and library equipment
- Lighting and fittings

### **Unit 3: Collection Development**

- Principles of collection development
- Selection principles, tools and problems of collection development
- Collection development of print material: books, periodicals, grey literature, patents, standards, govt. publications
- Electronic documents
- Weeding policy

### **Unit 4: Resource Sharing and Information Services**

- Resource sharing: concept, need and purpose
- Resource sharing networks in India
- Resource sharing networks: RLIN, OCLC
- Planning and development of information services

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### **Suggested Readings**

- Auger, C. P. (1998). *Information sources in grey literature*. 4<sup>th</sup> ed. London: Bowker.
- Buckett, J. and Morgan, T.S., ed. (1963). *Special materials in the libraries*. London: Aslib.
- Chapman, Liz. (2001). *Managing acquisitions in library and information services*. London: Library Association.
- Clapp, V. W. (2010). *Features of the research library*. Urbana: University of Illinois.
- Grenfell, D. (1965). *Periodicals and serials: Their treatment in special libraries*. 2<sup>nd</sup> ed. London: Aslib.
- Grogan, N. (1982). *Science and technology: An introduction to the literature*. 4<sup>th</sup> ed. London: Clive Bingley.
- Hernon, Peter & Whitman, John R. (2001). *Delivering satisfaction and Service quality: A customer-based approach for libraries*. Chicago: American Library Association.
- Raitt, David, ed. (1997). *Libraries for the new millennium*. London: Library Association.
- Scammell, A.W., ed. (1997). *Handbook of special librarianship and information Work*. 7<sup>th</sup> ed. London: Aslib.
- Singh S. P. (2005). *Special libraries in the electronic environment*. New Delhi: Bookwell.
- Wilkie, Chris. (2009). *Managing film and video collections*. London: Aslib.

## **17LIS24DB1: Information Literacy**

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### **Note**

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### **Objectives**

- to know about scope of Information Literacy.
- to develop new skills for design of Information Literacy Programmes
- to creates and promote Information Literacy Programme

### **Outcomes**

Interdisciplinary nature of this course, students grappled not only Information literacy benefits but also recognize gaps inherent in knowledge acquisition and gives snapshot of multidisciplinary subject.

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### **Unit1: Information Literacy**

- Information literacy: concept, definition, scope and importance
- Types of literacy
- Library 2.0 and information literacy
- Standards of information literacy
- Information literacy and lifelong learning

### **Unit2: Information Literacy Programmes**

- Scope of information literacy programme
- National programmes in information literacy
- International programmes in information literacy

### **Unit3: Methodology of Information Literacy**

- Information literacy products: library brochure, database brochure, web-based
- Designing of information literacy programme
- Implementation of information literacy programmes

### **Unit4: Application of Information Literacy in Library And Information Centres**

- Information literacy for individuals
  - Information literacy for professionals
  - Information literacy for research and development
  - Case studies of information literacy
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### **Suggested Readings**

- Andretta, S. (2012). *Ways of experiencing information literacy: Making the case for a relational approach*. Oxford: Chandos.
- Godwin, P & Parker, J. (2009). *Information literacy meets library 2.0*. Santa Barbara: Facet.
- Mackey, T.P & Jacobson, T.E. (2011). *Teaching information literacy online*. London: Neal- Schuman.

## 17LIS24DB2: Scientometrics

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to know about academic integrity;
  - to identify instances and types of plagiarism;
  - to get awareness about plagiarism;
  - to identify "fair use" applications to the use of someone else's materials;
  - to find information about the correct way to cite a reference;
  - to begin to develop your personal philosophy on academic integrity;
  - to be cautious enough to have deterrence strategies of plagiarism.
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### Outcomes

The course enables the students to get awareness about the nature and practice of academic integrity and its advantages. Further the completion of the course will guide the students and others to have deterrence policies and strategies to get away from plagiarism activities. After completion of the course, the learners will come to know, how citations are made properly. Over all awareness will be developed to maintain academic honesty with practical examples by the trainers.

### Unit 1: Foundation of Scientometric

- Scientometric: definition, scope and evolution
- Bibliometric, informatics and scientometric
- Sociology of science and scientometric
- Organization engaged in scientometrics and informatics studies

### Unit 2: Elements and Applications

- Laws of scientific productivity
- Growth and obsolescence of literature
- Science indicators
- Mapping of science
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### Unit 3: Techniques and Modeling

- Elements of statistics
- Probability distributions and their application
- Regression analysis
- Cluster analysis and factor analysis
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### Unit 4: An emerging discipline

- A discipline with content
- As a research methods
- Use of scientometrics by library and other professionals
- Evidence of authorship, publication studies

(Note: for unit 4, examples from difference publications (five PhD theses on Scientometrics and five journal articles)

### **Suggested Readings**

- Anderes, A. (2009). *Measuring academic research: How to undertake a bibliometric study*. Oxford: Chandos.
- Arkhipov, D. B. (1999). Scientometric analysis of nature, the journal. *Scientometric* 46. 1, pp. 51-72
- Borgman, C.L. (1990). *Scholarly communication and bibliometrics*: Sage Publications.
- De Bellis, N. (2009). *Bibliometrics and citation analysis: From the science citation index to cybermetrics*.  
Lanham: Scarecrow Press
- Devarajan, G. (1997). *Bibliometric studies*: Ess Ess Publications.
- Swain, Nirmal Kumar (2009). The scientometric portrait of Professor M. P. Satija. In *Library & Information Science in Digital Age: Essays in Honour of Prof. M.P. Satija*. pp. 11-21. Jagtar Singh, I V Malhan and Trishanjit Kaur (Eds).New Delhi: Ess Ess.
- Vinkler, P. (2010). *The Evaluation of Research by Scientometric Indicators*. Oxford: Chandos.
- Whitley, R., & Gläser, J. (2007). *The changing governance of the sciences: the advent of research evaluation systems*: Springer.

## 17LIS24DB3: Information Politics and Economy

Maximum marks: 80

Pass marks: 32

Time: 3Hrs.

### Note

The paper is divided into 4 units. The candidates are required to attempt 5 questions in all, selecting 1 question from each unit, out of two internal choices. Question 1 is compulsory consisting of 8 short answer type questions, spread over the whole syllabus. All questions carry equal marks.

### Objectives

- to know about power of information;
- to know how information access creates information poor and rich;
- to get awareness about digital divide;
- to identify different theories associated with power politics ;
- to find information about as a power commodity.

### Outcomes

The course enables the students a new way of thinking about the social and economic implications of the revolution in information and communication technologies (ICTs). Further it enables the learners to know, how access to information makes people empowered and creates information haves and have-nots, information rich and poor and digital divide.

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### Unit 1: Information and Power

- Information : meaning , definition, scope
- Information access and infrastructure
- Information is power

### Unit 2: Information and Politics

- Digital culture
- Digitally powerful countries: Europe and USA and African and Asian countries

### Unit 3: Information Economy

- Information as a commodity
- Information , technical know-how and global power
- Better infrastructure, better products and better money and economy

### Unit 4: Theories

- Digital divide
- Eurocentric and non-eurocentric
- Michel Foucault and Jürgen Habermas with their power politics theories

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### Suggested Readings

Jordan, Tim. (2015). *Information politics: Liberation and exploitation in the digital society*. London: Pluto Press.

Rogers, Richard (2004). *Information politics on the Web*. Cambridge: MIT Press.

Dutton, William H., Peltu, Malcolm & Bruce, Margaret (1999). *Society of line: Information politics in the digital age*. Oxford: Oxford University Press.

Keen, Andrew (2009). Information politics: the defining issue of our age. *The Telegraph*, Sept 23, 2009, London <http://www.telegraph.co.uk/technology/6222604/Information-politics-the-defining-issue-of-our-age.html>