

## Course Credit Structure

Sem	Course Code	Course Title	Course Type	Credit Pattern			Credit Value	Marks Distribution		
				Lecture (L)	Tutorial (T)	Practice (P)		Semester Examination	Internal Assessment	Total Marks
<b>S E M I</b>	LIS-HC-101	Library, Information and Society	Hard Core	3	1	0	4	80	20	100
	LIS-CC-102	Document Classification (Theory)	Core	1	1	0	2	40	10	50
	LIS-CC-103	Document Cataloguing (Theory)	Core	1	1	0	2	40	10	50
	LIS-HC-104	Library Information Technology (Theory)	Hard Core	1	1	0	2	40	10	50
	LIS-HC-105	Library Information Technology (Practice)	Hard Core	0	0	2	2	40	10	50
	LIS-CC-106	Information Sources, Systems and Services	Core	2	1	1	4	80	20	100

### FIRST SEMESTER

**Course Code: LIS-HC-101**

**Course Type: Hard Core**

**Course Title: LIBRARY, INFORMATION AND SOCIETY**

Credit Structure				Marks Distribution						Objectives
Lecture	Tutorial	Practice	Total Credit	Semester Examination	Internal Assessment				Total Marks	
					CE	PRJ	PRC	Viva		
3	1	0	4	80	10	10	Nil	Nil	100	<ul style="list-style-type: none"> <li>To provide theoretical foundation of the course;</li> <li>To explore the normative principles, legislation and IPR issues related to the discipline; and</li> <li>To study features of information society and knowledge economics.</li> </ul>

- Historical development of Library and Information Science as a discipline.

#### Unit 1: Library as a Social Institution

- Objectives and functions of social institutions with special reference to libraries and information centers (LICs);
- Historical development of LICs, Information resources, Tools, techniques and technologies, Views of eminent thinkers;
- Basic laws and Five laws of Library Science, Modifications of Five laws, IFLA principles relating to bibliographical control, Other normative principles;
- Types of libraries (National and Copyright libraries, Academic libraries, Public libraries, Special libraries and Information centres, Other information agencies);

#### Unit 2: Library Policies, Movements and Legislations

- UNESCO charter of books, IFLA/UNESCO public library manifesto, other IFLA/UNESCO guidelines;
- International, and national programmes and policies (NAPLIS etc), Recommendations of National Knowledge Commission, India; NDLI and NVLI (in India)
- Library movement and development in India with special reference to West Bengal;
- Library legislation – needs, Indian scenario, West Bengal Public Libraries Act, 1979 (including amendments), Comparative study of library legislations in Indian states;

- Laws relating to information with special reference to India, including Press and Registration Act, Delivery of Books and Newspapers (Public Libraries) Act, 1954, Indian Copyright Act, 1957, Intellectual Property Rights, Right to Information, 2005 etc.

### **Unit 3: Profession, Public relations and Extension activities**

- Occupation, Vocation and Profession, Attributes of Profession, Librarianship as a profession in India and abroad, Professional ethics and duties of Library and Information workers, Information ethics;
- Professional associations and their role in library development (Indian and International), IFLA Core activities, Library and Information Science education and research: developments and trends;
- Public relations and extension activities - Definition, facets and programmes;
- Community information services in India and abroad, Local history collection and Area profile;
- Resource sharing and networking, Promoting agencies of library and information services – National and International levels.

### **Unit 4: Information and Society**

- Information Science: Origin and development, scope and coverage, relationship with other disciplines and professions, Information properties;
- Information Communication: Types, Barriers, Models, Process and Theories;

- Information Society: Social implications; Genesis; Changing role of information institutions and information professionals;
- Information Policies: National and International plans, policies and programmes relating to information for development with special reference to India and developing countries;
- Politics of information: Universal data flow, Free flow of information vs. New World Information Communication Order, WSIS, Information poverty, Digital divide.

### **Unit 5: Knowledge Economy and Knowledge Management**

- Knowledge society and Knowledge economics. Knowledge Management: Concepts and tools;
- Document management Vs. Information management Vs. Knowledge management;
- Economics of information: Concept, scope and objectives; Information as a commodity, Information economics vs. Economics of information;
- Theories and Models: Demand and supply of information; Economic principles relevant to information, Production, distribution and consumption of information and knowledge, Machulp's model;
- Information Marketing: Marketing of information product and services, Planning, process and strategies, Economic analysis models, cost-benefit analysis and cost effectiveness, Market research.

## **FIRST SEMESTER**

**Course Code: LIS-HC-101**

**Course Type: Hard Core**

**Course Title: LIBRARY, INFORMATION AND SOCIETY**

### **Reading List**

Bell, D. (1980). *The social framework of the information society*. In *Derrouzos M C & Moses, 1 (eds), The computer age: a twenty year view*. Cambridge: MIT Press.

Benjamin, J.B. (1986). *Communication: concept and contexts*. New York: Harper & Row.

- Cornish, Graham P. (2001). *Interpreting the law for libraries, archives and information services* (Rev, 3rd.). London: Facet Publishing.
- Vashisht, C. P. (1994). *Library movement and library development in India*. Delhi: ILA.
- Davis, D. W. (1975). *Public libraries as cultural and social centres*. New York: Scarecrow.
- Delanty, G. (2001). *Challenging knowledge: The university in the knowledge society*. Open Univ Pr.
- Drucker, P. (1998). From capitalism to knowledge society. *The knowledge economy*, 15-34.
- Feather, J. (2000). *The information society*. London: Library Association, IFLA. (1977). *Standards for library service* (2nd ed.). Munich: Verlag.
- India. (1959). *Advisory Committee for Libraries, Report*. Delhi: Manager of Publications.
- Khanna, J. K. (1987). *Library & society*. Kurukshetra: Research Publications.
- Koontz, C., Gubbin, B., & International Federation of Library Associations and Institutions. (2010). *IFLA public library service guidelines*. Berlin: De Gruyter Saur.
- Krishan Kumar (1986). *Library organization*. Delhi: Vikas.
- Kumar, P.S.G. (2001). *Indian encyclopedia of library & information science*. New Delhi: S. Chand.
- Kumar, P.S.G. (2002). *A student's manual of library & information science*. Delhi: BR Publishing House.
- Machlup, F. (1984). *The Economics of information and human capital*. Princeton: Princeton University Press.
- Martin, W. J. (1995). *The global information society*. Brookfield, VT: Gower.
- McGarry, K. J. (1993). *The changing concept of information: an introductory analysis*. (2nd. ed.). London: Facet Publishing.
- Masuda, Y. (1993). *The information society*.
- Mittal, R. L. (1984). *Library administration: theory & practice* (5th ed.). Delhi: Metropolitan.
- Norman, S. (2001). *Practical copyright for information professional*. London: Facet Publishing.
- Pilling, S., & Kenna, S. (2002). *Co-operation in action: Collaborative initiatives in the world of information*. London: Facet Pub.
- Ranganathan, S. R. (1957). *Five laws of library science*. Delhi: UBS.
- Ranganathan, S. R., & Neelameghan, A. (1972). *Public library system*. Bangalore: Sarada Ranganathan Endowment.
- Rao Laxman, S., Vishwa Mohan, & Rao, S. S. (2001). *Changing dimensions of LIS education*. Hyderabad: IATLIS.
- Rout, R. K. (1991). *Library legislation in India*. New Delhi: Reliance.
- Sahai, S. (1973). *Library and community*. New Delhi: Today & Tomorrow.
- Sandy, N. (1999). *Copyright in further and higher education libraries* (4th ed.). London: Facet Publishing.
- Sharma, Pandey S.K. (1987). *Library & society*. New Delhi: Ess Ess Publications.
- Shera, J. H. (1970). *The foundations of education of librarianship*. Bombay: Asia.
- Shera, J. H. (1970). *Sociological foundations of librarianship*. New York: Asia Pub. House.
- SinghaRoy, D. K. (2014). *Knowledge society: New identities in emerging India*. New York: Cambridge University Press.
- Venkatappaiah, V. (1990). *Indian library legislation* (Vol. 2). New Delhi: Daya.
- Withers, F. N. (1974). *Standards for library service: an international survey*. Paris: Unesco.
- Taragowski, A.S. (1998). *Global information infrastructure: the birth, vision and architecture*. Harrisburg: Idea Group.
- UNESCO. (2000). *UNESCO School Library Manifesto: The school library in teaching and learning for all*. The Hague: IFLA Headquarters.
- UNESCO., & International Federation of Library Associations and Institutions. (1995). *Public library manifesto*. The Hague, Netherlands: IFLA.
- Vickery B. C., & Vickery A. (1987). *Information science in theory and practice*. London: Butterworth.

#### FIRST SEMESTER

**Course Code: LIS-CC-102**

**Course Type: Core**

**Course Title: DOCUMENT CLASSIFICATION (THEORY)**

Credit Structure				Marks Distribution					Objectives	
Lecture	Tutorial	Practice	Total Credit	Semester Examination	Internal Assessment				Total Marks	
					CE	PRJ	PRC	Viva		
1	1	0	2	40	Nil	Nil	10	Nil	50	<ul style="list-style-type: none"> <li>• To provide historical and theoretical foundation of library classification;</li> <li>• To explore the features of traditional library classification schemes; and</li> <li>• To know the methods related to designing depth schedule and to study the use of technologies in library classification.</li> </ul>

### Unit 1: Basic Concepts, Genesis and Schemes of Library Classification

- Meaning, purpose and function of classification, Knowledge classification and Document classification;
- Classification schedule and its components, Kinds of scheme: Enumerative and Faceted;
- Subject and disciplines: Concept and features, Types of subjects, Modes of formation of subjects; Isolates and auxiliaries: Common (ACI and PCI) and special;
- Facets and Facet Analysis, Speciators and their kinds, Phase relations: levels and kinds/nature;
- Schemes of Library Classification and Switching Languages – BSO.

### Unit 2: General Theory of Library Classification

- Normative principles – introduction, Contribution of CRG, FID/CR and DRTC;

- Laws, Canons, Principles and Postulates;
- Three planes of work, Fundamental categories;
- Application of normative principles in DDC, UDC and CC;
- Notational techniques in different classification systems.

### Unit 3: Applications of Classification Theories (Colon Classification 6<sup>th</sup> edition)

- Colon Classification – History, Genesis and Structure;
- Colon Classification – structure and rules;
- Facet analysis – process and steps
- Building of class number - simple subjects;
- Colon Classification – use of index.

## FIRST SEMESTER

**Course Code: LIS-CC-102**

**Course Type: Core**

**Course Title: DOCUMENT CLASSIFICATION (THEORY)**

### Reading List

Broughton, Vanda. (2004). *Essential classification*. London: Facet Publishing.

Batty, C. D. (1966). *An introduction to colon classification*. London: Bingley.

Chan, L. M. (1985). *Cataloguing and classification: an introduction*. New York: McGraw Hill.

Chan, L. M., Richmond, P. A., & Svenonius, E. (1985). *Theory of subject analysis: A sourcebook*. Littleton, Colo: Libraries Unlimited.

Dhiman, A. K. & Yashoda Rani. (2005). *Learn library classification*. New Delhi: Ess Ess.

Dhyani, P. (1998). *Library classification: theory and principles*. New Delhi: Wishwa Prakashan.

Dhyani, P. (1983). *Classification schemes and Indian libraries*. New Delhi: Metropolitan.

- F.I.D. (1993). *Universal Decimal Classification*. IME.
- Forest Press. (2002). *WebDewey*. Dublin, Ohio: OCLC Forest Press.
- Foskett, D. J. (1974). *Classification and indexing in social sciences*. London: Aslib.
- Foskett, A. C. (1996). *The subject approach to information*. (5th ed.). London: Clive Bingley.
- Halgamuge, S. K., & Wang, L. (2005). *Classification and clustering for knowledge discovery*. Berlin: Springer.
- Hunter, E. J. (1988). *Classification made simple*. Aldershot: Gower,.
- Husain, Sabahat. (2004). *Library Classification: Facets and Analysis*. Delhi: B. R. Publishing.
- Jennex, Murray E. (2008). *Knowledge management: concepts, methodologies, tools and applications*. New York: Information Science Reference.
- King, B., & Reinold, K. (2008). *Finding the Concept, Not Just the Word: A Librarian's Guide to Ontologies and Semantics*. Burlington: Elsevier Science.
- Krishan Kumar. (1980). *Theory of classification*. New Delhi: Vikas.
- Kumbhar, R. (2011). *Library classification trends in the 21st century*. Burlington: Elsevier Science.
- Lim, E. H. Y., Liu, J. N. K., & Lee, R. S. T. (2011). *Knowledge seeker: Ontology modelling for information search and management : a compendium*. Berlin: Springer.
- Maltby, A. (1975). *Sayers' manual of classification for librarians*. (5th ed.). London: Andre Deutsch.
- Mukhopadhyay, A. (1976). *Guide to colon classification practical*. New Delhi: Metropolitan Book.
- Navalani, K., & Gidwani, N. N. (1981). *A practical guide to colon classification*. New Delhi: Oxford & IBH Pub. Co.
- Needham, C. D. (1971). *Organizing knowledge in libraries*. (2nd ed.). London: Andre Deutsch,.
- Pathak, L. P. (2000). *Sociological terminology and classification schemes*. New Delhi: Mittal Publications.
- Raju, A. A. N. (1984). *Decimal, Universal Decimal and Colon Classification: a study in comparison*. Delhi: Ajanta.
- Ranganathan, S. R. (2006). *Philosophy of library classification*. Bangalore: Ess Ess.
- Ranganathan, S.R. (1966). *Elements of library classification* (2nd ed.). Bombay: UBS.
- Ranganathan, S.R. (1967). *Prolegomena to library classification* (3rd ed.). Bombay: UBS.
- Ranganathan, S. R. (1987). *Colon classification*. Bangalore: SRELS.
- Satija, M. P. (2011). *A guide to the theory and practice of colon classification*. New Delhi: Ess Ess Publications.
- Sood, S. P. (1998). *Universe of knowledge and universe of subjects*. Jaipur: G. Star Printers.
- Taylor, A. G. (2007). *Introduction to cataloguing and classification* (10th ed.). New Delhi: Atlantic.
- Vickery, B. C. (1968). *Faceted classification: a guide to construction and use of special schemes*. London: Aslib.
- Wynar, B. S. (1985). *Introduction to cataloguing and classification*. (7th ed.). New York: Libraries Unlimited.

## FIRST SEMESTER

**Course Code: LIS-CC-103**

**Course Type: Core**

**Course Title: DOCUMENT CATALOGUING (THEORY)**

Credit Structure				Marks Distribution						Objectives
Lecture	Tutorial	Practice	Total Credit	Semester Examination	Internal Assessment				Total Marks	
					CE	PRJ	PRC	Viva		
1	1	0	2	40	10	Nil	Nil	Nil	50	<ul style="list-style-type: none"> <li>To provide historical and theoretical foundation of library cataloguing;</li> <li>To help in understanding normative principles and cataloguing codes; and</li> <li>To know the authority data management and to study the initiatives and trends of library cataloguing.</li> </ul>

**Unit 1: Basic Concepts and Genesis**

- Library catalogue – historical and theoretical foundations, Difference of Library catalogue from Library Accession Register, Shelf List and Bibliography;
- Objectives (objectives propounded by Cutter, Osborn, Lubetzky, Svenonius and FRBR) and Functions of library catalogue;
- Cataloguing rule base – need, types and applications;
- Physical forms – book, sheaf, card and machine-readable (including OPAC) forms – their advantages and disadvantages and suitability in different types of libraries, Inner forms – dictionary, classified and alphabetico-classed forms and their comparative studies;
- Entries – types, formats and their functions, Filing of entries – rules and tools.

**Unit 2: Principles and Rules**

- Normative principles – objectives, scope and applications;
- Normative principles – History and time line of development, International Conference on Cataloguing Principles (ICCP), 1961;

- Canons and principles of cataloguing as propounded by Ranganathan;
- IME/ICC principles;
- Standardization of Bibliographic Description – ISBDs, Consolidated ISBD, Revised ISBDs, FRBRized ISBDs.

**Unit 3: Cataloguing Codes**

- Cataloguing codes – definition, objectives, scope, need, components;
- Cataloguing codes - historical development;
- Features of Anglo-American Cataloguing Rules (AACR 2);
- Features of Classified Catalogue Code (CCC 5<sup>th</sup> edition);
- Features of RDA (Resource Description and Access).

## FIRST SEMESTER

**Course Code: LIS-CC-103**

**Course Type: Core**

**Course Title: DOCUMENT CATALOGUING (THEORY)**

### Reading List

ALA (1968). *ALA Rules for filing Catalog Cards*. Chicago: ALA.

Bean, C.A., & Green, R. (2001). *Relationships in organization of knowledge*. London: Kluwer.

Bowman, J. H. (2003). *Essential cataloguing*. London: Facet Publishing.

Chan, L. M. (1994). *Cataloging and classification: An introduction*. New York: McGraw-Hill.

Chapman, Liz. (1984). *How to catalogue: a practical handbook*. London: Clive Bingley.

Delsey, T. (1999). *The logical structure of AACR – Part I & Part II*. Retrieved from <http://www.nlc-bnc.ca/jsc/aacrdel.htm>

Girja Kumar & Krishan Kumar (1988). *Theory of cataloguing* (5th ed.). New Delhi: Vikas.

Heaney, M. (1995). Object-oriented cataloguing. *Information Technology and Libraries*, 14(3), 135–153.

Horner, J. (1975). *Cataloguing*. London: AAL.

Hunter, E. J. (1986). *Computerised cataloguing*. London: Clive Bingley.

Hunter, E. J., & Blackwell, KGB. (1983). *Cataloguing*. London: Clive Bingley.

IFLA. (1998). *IFLA: Functional requirements for bibliographic records: final report*. Munich: K.G. Saur.

International Conference on the Principles and Future Development of AACR, & Weihs, J. R. (1998). *The principles and future of AACR: Proceedings of the International Conference on the Principles and Future Development of AACR, Toronto, Ontario, Canada, October 23-25, 1997*. Ottawa: Canadian Library Association.

JISC (2006). *RDA online*. Retrieved from <http://www.rdaonline.org>

Krishan Kumar. (1993). *Cataloguing*. New Delhi: Har Anand.

Le, B. P. (2005). *Functional requirements for bibliographic records (FRBR): Hype or cure-all?*. Binghamton, NY: Haworth Information Press.

Livingston, E. D. (1982). *Rudiments of library cataloguing: Theory and practice*. Hyderabad: Andhra Pradesh Public Library Association.

Nanda, M. (2006). *Library cataloguing*. New Delhi, India: Anmol Publications.

Needham, C. D. (1971). *Organisation of knowledge and libraries: an introduction to classification and cataloguing* (2nd ed.). London: Andre Deutsch.

Olding, R.K. (1967). *Readings in library cataloguing*. New Delhi: Lakshmi.

Oliver, C., & American Library Association. (2010). *Introducing RDA: a guide to the basics*. Chicago: American Library Association.

Patton, G. E., & International Federation of Library Associations and Institutions. (2009). *Functional requirements for authority data: a conceptual model*. München: K.G. Saur.

Ranganathan, S. R. (1955). *Headings and canons: comparative study of five catalogue codes*. Madras: Viswanathan.

Sayers., W. B. (1985). *Introduction to cataloguing and classification* (7th ed.). Littleton: Libraries Unlimited.

Sengupta, B. (1975). *Cataloguing: its theory and practice* (3rd ed.). Calcutta: World Press.

Svenonius, E. (1989). *The conceptual foundations of descriptive cataloguing*. San Diego: Academic Press.

Svenonius, E. (2000). *The intellectual foundations of information organization*. Cambridge, Mass: MIT Press.

Tillett, B. B., Cristán, A. L., De, K. T., & Van, . W. H. (2008). *IFLA cataloguing principles*. Berlin: Walter de Gruyter, Inc.

Tripathy, S. M. (1978). *Modern cataloguing theory and practice* (2nd ed.). Agra: Shivalal Agarwal & Co.

Vishwanathan, C. G. (1983). *Cataloguing: theory and practice*. Lucknow: Print House.

Welsh, A., & Batley, S. (2012). *Practical cataloguing: AACR, RDA and MARC 21*. Chicago: Neal-Schuman, an imprint of the American Library Association.

Yee, M.M. & Layne., S.S. (1998). *Improving online public access catalogue*. Chicago: ALA.

Zeng, M. L., Žumer, M., Salaba, A., & IFLA Working Group on the Functional Requirements for Subject Authority Records (FRSAR). (2011). *Functional requirements for subject authority data (FRSAD): a conceptual model*. Berlin: De Gruyter Saur.

Zeng, M. L., & Žumer, M. (January 01, 2010). Introducing FRSAD and mapping it with SKOS and other models. *International cataloguing and bibliographic control*, 39, 3, 53-56.

### FIRST SEMESTER

**Course Code: LIS-HC-104**

**Course Type: Hard Core**

**Course Title: LIBRARY INFORMATION TECHNOLOGY (THEORY)**

Credit Structure				Marks Distribution						Objectives
Lecture	Tutorial	Practice	Total Credit	Semester Examination	Internal Assessment				Total Marks	
					CE	PRJ	PRC	Viva		
1	1	0	2	40	10	Nil	Nil	Nil	50	<ul style="list-style-type: none"> <li>To provide basic ICT concepts;</li> <li>To explore the possibilities of ICT in designing library services; and</li> <li>To know the use of database and networking technologies in developing library systems and services.</li> </ul>

### Unit 1: Physical and Logical Units of ICT

- Data, information and knowledge, ICT – definition, scope, application in human activities, social implication, Application of ICT in activities of library and information centres;
- Hardware and Devices related to ICT; Data Representation in Computer
- System software, Appalchian software, Operating Systems, Open source software and open standards
- Computer programing languages – classification, generations, program development tool and programing process
- Overview of popular high-level languages – C, C++, Java etc.

### Unit 2: Computer Networks and Distributed Information System

- Computer networks – definition, scope, purpose, features and advantages, Types of network – LAN, MAN and WAN;
- Internet – origin, development, architecture, connection options; Internet in India – GIAS, ISPs and connection options; Internet addressing system – IP address and domain name system, Internet, Intranet and Extranet;

- Internet resource access tools – Telnet, FTP, Gopher, Archie, Mosaic and WWW;
- Web retrieval tools – subject directories, search engines and meta search engines;
- Distributed information system and library – Web 2.0, Library 2.0, Linked data, Cloud computing, Semantic Web.

### Unit 3: Database Management System (DBMS)

- Concept, scope, purpose and advantages of DBMS;
- Entity, attributes and properties, Field, record and database;
- Data models – hierarchical, network and relational, Basics of RDBMS;
- WINISIS as bibliographic database management system;
- Bibliographic databases, Search strategy and techniques of data retrieval, CDROM database searching.

## FIRST SEMESTER

Course Code: LIS-HC-104

Course Type: Hard Core

Course Title: LIBRARY INFORMATION TECHNOLOGY (THEORY)

### Reading List

- Basandra, Suresh K. (2002). *Computers today*. New Delhi: Galgotia
- Bob, W., & McKellen, M. (1995). *A beginner's guide to the PC*. Delhi: Affiliated East West Press,.
- Botto, Francis. (1993). *Multimedia, CD-ROM and compact disc: a guide for users and developers*. New Delhi: Galgotia.
- Bradley, P. (2007). *How to use Web 2.0 in your library*. London: Facet.

- Bradley, P. (1999). *Internet power searching: the advanced manual*. New York: Neal-Schuman Publishers.
- Bradley, P., & Aslib. (2000). *World Wide Web: how to design and construct web pages*. London: ASLIB.
- Chowdhury, G. G., & Chowdhury, S. (2001). *Searching CD-ROM and online information sources*. London: Facet Publishing.

- Deenadayalu, R. (1990). *Computer science* (Vol. 2). New Delhi: TMH.
- Engard, N. C. (2009). *Library mashups: Exploring new ways to deliver library data*. Medford, N.J: Information Today, Inc.
- Engard, N. C. (2010). *Practical open source software for libraries*. Oxford: Chandos Publishing.
- Gorman, M. (2003). *The enduring library: technology, tradition, and the quest for balance*. Chicago: American Library Association.
- Hagler, R. (1997). *The bibliographic record and information technology*. Chicago: American Library Association.
- Jacso, P., & Lancaster, F. W. (1999). *Build your own database*. Chicago: American Library Association.
- Jean, G. (2011). *Digital library*. New Delhi: World Technologies.
- Kam, D. (2009). *Role and policy implications of ICT in India*. New Delhi: Shree Publishers & Distributors.
- Kernighan, B. W., & Ritchie, D. M. (1988). *The C programming language*. Englewood Cliffs, N.J: Prentice Hall.
- Leon, A. & Mathews, L. (2004.). *Fundamentals of information technology* (Latest edition.). Chennai: Leon Tech World.
- Library Association., & Library Information Technology Centre. (1996). *Library technology*. London: Published jointly by the Library Association and the Library Information Technology Centre.
- Chartered Institute of Library and Information Professionals (Great Britain). (1998). *Multimedia information & technology: MmIT*. London, England: Multimedia Groups of Aslib.
- Library of Congress. (1988). *Advances in library information technology*. Washington, D.C: Cataloging Distribution Service, Library of Congress.
- Matthews, J. R. (1980). *Choosing an automated library system: A planning guide*. Chicago: American Library Association.
- Mukhopadhyay, P. (2013). *Course of action: Library information technology*. Kolkata: Prova Prakashani.
- Mukhopadhyay, P. (2014). *Course of action: Automated library system*. Kolkata: Prova Prakashani.
- Satyanarayana, N. R. (1995). *A manual of computerisation in libraries*. New Delhi: Wishwa Prakashan.
- Rajaraman, V. (1995). *Fundamentals of computers*. New Delhi: PHI.
- Rajasekharan, K., & Nafala, K. M. (2007). *Creation of digital document archives with Winisis*. Kerala Institute of Local Administration.
- Scott, M. L. (2006). *Programming language pragmatics*. San Francisco, CA: Morgan Kaufmann Pub.
- Sinha, P. K. (1992). *Computer fundamentals: concept, systems and applications* (2nd ed.). Delhi: BPB Publications.
- Tanenbaum, A. S. (1996). *Computer networks*. Upper Saddle River, N.J: Prentice Hall PTR.
- Tanenbaum, A. S. (1984). *Structured computer organization*. Englewood Cliffs, N.J: Prentice-Hall.
- Vaughan, J., & ALA TechSource. (2011). *Web scale discovery services*. Chicago, Ill: ALA TechSource.
- Viswanathan, T. (1992). *Telecommunication switching systems and networks*. New Delhi: Prentice Hall of India Private Ltd.
- Walsh, T. (2005). *Introducing ICT: Basic to intermediate*. Dublin: Gill & Macmillan.
- Williams, H. E., & Lane, D. (2002). *Web database applications with PHP & MySQL*. Beijing: O'Reilly.

## FIRST SEMESTER

**Course Code: LIS-HC-105**

**Course Type: Hard Core**

**Course Title: LIBRARY INFORMATION TECHNOLOGY (PRACTICE)**

Credit Structure				Marks Distribution			Objectives
Lecture	Tutorial	Practice	Total	Semester	Internal Assessment	Total	
							<ul style="list-style-type: none"> <li>● To provide basic ICT concepts:</li> </ul>

			Credit	Examination	CE	PRJ	PRC	Viva	Marks
0	0	2	2	40	Nil	Nil	10	Nil	50

- To explore the possibilities of ICT in designing library services; and
- To know the use of database and networking technologies in developing library systems and services.

#### Unit 1: Operating Systems, Unix-like OS (including Office Management Software)

- MSDOS and Windows OS;
- Unix-like OS;
- Multiuser OS and related tools – telnet, ftp, ssh, http;
- LAMP architecture;
- Office management software.

#### Unit 2: Programming language – Basic tasks and problem solving

- C programming language – Use of GCC in Unix-like OS;
- C programming language – Basic tasks;
- C programming language – Loop and Array;

- Markup language – HTML, XML;
- Scripting language – PERL/PHP.

#### Unit 3: DBMS – Multipurpose DBMS and Bibliographic DBMS

- MySQL – Basic tasks;
- Use of MySQL GUI, Backup and Restoration;
- WINISIS – Basic level;
- WINISIS – Advanced level;
- Database search and retrieval.

### FIRST SEMESTER

Course Code: LIS-HC-105

Course Type: Hard Core

Course Title: LIBRARY INFORMATION TECHNOLOGY (PRACTICE)

#### Reading List

- Beukes-Amiss, C. M., & Beukes-Amiss, CM. (2013). *Information storage and retrieval software: WinISIS*.
- Bob, W., & McKellen, M. (1995). *A beginner's guide to the PC*. Delhi: Affiliated East West Press,.
- Botto, Francis. (1993). *Multimedia, CD-ROM and compact disc: a guide for users and developers*. New Delhi: Galgotia.
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## FIRST SEMESTER

**Course Code: LIS-CC-106**

**Course Type: Core**

**Course Title: INFORMATION SOURCES, SYSTEMS AND SERVICES**

Credit Structure				Marks Distribution			Objectives
Lecture	Tutorial	Practice	Total	Semester	Internal Assessment	Total	
							<ul style="list-style-type: none"> <li>To help in understanding the tvnes and scopes of information resources</li> </ul>

			Credit	Examination	CE	PRJ	PRC	Viva	Marks
2	1	1	4	80	10	10	Nil	Nil	100

- To know features of different forms and sources of information; and
- To know the process of retrieving databases and on-line /web information resources in network environment.

### Unit 1: Information Sources

- Information Sources – categories and features, Information sources vs. resources, Organization of information sources;
- Documentary Sources: Primary, Secondary and Tertiary, Institutional and Human Sources;
- Non print materials including digital information sources, Traditional Vs. Digital sources of information;
- Reference Books: Meaning, Differences with traditional book, Categories of reference books, Indian reference sources;
- Evaluation of Reference and Information Sources.

### Unit 2: Reference and Information Services

- Concept, definition, scope and types;
- Reference Referral, Documentation and Information Services: Definition, Need, Characteristics and Differences;
- Theories of reference services, Reference Process: Search strategy and techniques, Reference Questions and Reference Interview;
- Alerting Services – Newspaper clippings and News brief services, CAS and SDI services, Abstracting and Indexing Services;
- Translation Services: Tools and Pools, Document Delivery Services, Reference services – advancements and trends.

### Unit 3: Information Products

- Information products: Meaning and objectives, Techniques of production and Design issues;
- Abstract and Abstracting: Types and Guidelines for preparation of Abstract;
- In-house Communications: Newsletters, House bulletins and other In-house communications;

- Trade and Product bulletins, Reports, Reviews and related products;
- Information Analysis, Packaging and Repackaging of Information. Packaging media and formats; Methodology for preparation of IA+C Products.

### Unit 4: Electronic Information Products and Services

- Electronic information sources and services – Conceptual foundations, Types and characteristics, Traditional Vs. Digital information sources;
- Bibliographic databases, Citation databases, Full-text databases, Portals, Vortals and Gateways, Multimedia based information products, Open access knowledge system: products and services;
- Alerting services (CAS & e-CAS, SDI & e-SDI, RSS based services), Bibliographic, Referral, Literature search, Electronic document delivery and machine translation services;
- Virtual Reference Services: Tools and Techniques (Publishers based services – Xrefer, Credo etc, Library based services – QuestionPoint, VRD etc, Use of asynchronous and synchronous virtual communication tools);
- Trends and future.

### Unit 5: Components and Users of Information Systems

- Information Institutions: Evolution, growth, types and role in information transfer cycle; Information centres: types, activities and their organization; Data Centres & Data Banks: Activities and services; Referral Centres and Clearing Houses, Information Analysis Centres: Activities, services and products;
- Information System: General System Theory, Design issues and principles, Information Systems and Networking: Meaning, Importance and Structure, Design and development of information systems – theories, models and steps;
- Structure and Services of Global, Regional and National Information Systems
- Library Networks and Consortia
- Users' Study : Types and Techniques; Information need analysis.

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**Course Code: LIS-CC-106**

**Course Type: Core**

**Course Title: INFORMATION SOURCES, SYSTEMS AND SERVICES**

### Reading List

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