

Course Code: P24MLS5

Course Name- 1.5: Information Technology in Libraries

Credit Distribution			Total Credits	Internal Marks	Semester Marks	Total Marks
L	T	P	L+T+P	C1	C2	C3
5	-	-	5	25	75	100

Objectives:

1. Help students to learn the basic concepts of Information Technology
2. To train the students in applying Information Technology to library routines and services in Libraries and Information Centers.
3. To understand the concepts of Networking, DBMS and Web Technology

A. Course Outcome (CO)

After completion of the course, students will become familiar with the basic concepts in Library & Information Science.

	Course Outcome	Level	Level
CO 1	Understand the information technology (IT) basics.	Understand	K2
CO 2	Illustrate and explain the computer and its peripherals.	Apply	K3
CO 3	Examine the various operating systems application software.	Analyze	K4
CO 4	To make awareness of the programming languages and their functions.	Analyze	K4
CO 5	Examine and assesses the data representation in computers and file representation.	Create	K6

B. Syllabus

Unit-I: IT Fundamentals

Information Technology: Concept, Definition and Components, Types of Computers ;I/O Devices, IoT Devices, Network Architecture, Client-Server and Web-Clients, Character Representation (ASCII, ISCII, UNICODE).

Unit-II: Emerging Technologies in IT

Introductory level: Cloud computing: Basics - concept and definition; types of cloud services .Data Curation : Basics-concept and definition. Topologies of Computer Networks ,Linked Data, Data Harvesting .Big data: Basics–concept and definition.

Unit–III: Computer Software and Programming

Computer Software: System Software and Application Software; Programming Concepts: Open source and Propriety, Operating Systems: Windows, LINUX and Mobile based Operating System, Web Languages.

Unit–IV: Data Security and Protection

Data Security: Network Security, Firewalls, Cryptographic Techniques, Anti-virus software, Anti spyware, Intrusion Detection System.

Unit–V: Telecommunication and Related Technologies

Telecommunication - Transmission Channels, Mode, and Media, ISDN, PSDN, Multiplexing, Modulation, Standards and Protocols, Virtual reality and Augmented Technologies.

Unit-VI: CURRENT CONTOURS (For Continuous Internal Assessment Only):

Recent Developments in Database Management in Libraries, Mobile Apps in Libraries, AI and ML potential applications in libraries, and Potential Areas of IT Research.

Selected Readings:

1. Arvind Kumar. Ed. Information Technology For All (2 Vols.) New Delhi, Anmol, 2006
2. Bansal, S.K. Information Technology and Globalisation, New Delhi: A.P.H. Publishing corporation, 2005.
3. Basandra, S.K: Computers Today and Globalisation, New Delhi, Glogotia, 2002.
4. Deeson, Eric. Managing with Information Technology, Great Britain, Koganpage Ltd. 2000.
5. Forrester W.H. and Rowlands, J.L. The Online searcher's companion. London, Library Association, 2002.
6. Gupta, Vikas, Rapidix computer course, New Delhi, Pustak Mahal, 2005.
7. Hunter & Shelly: Computers and Common sense, New Delhi, Prentice-Hall, 2002.
8. Kashyap, M.M: Database Systems, New Delhi, Vikas, 2003.
9. ITL Education Solution. Introduction to Information Technology, Pearson Education. Singapore, 2006. (GoogleE-Book)
Rajaraman, V. Introduction to Information Technology, PHI Learning, New Delhi, 2013. (GoogleE-Books)

C. Mapping of COs with POs & PSOs

Mapping of COs with POs & PSOs										
COs	Programme Outcomes					Programme Specific Outcomes				
	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3	3	3	3	3	3
CO2	3	3	3	2	3	3	3	3	3	1
CO3	3	2	3	3	1	3	3	2	3	1
CO4	3	3	3	1	3	3	3	1	3	2
CO5	3	2	3	3	3	3	3	2	3	3