(Master of Library and Information Science) (Library and Information Science)
(MLISc) (Library and Information Science) Semester II

Course Code	PA02ELIB51	Title of the Course	Information Technology
Total Credits of the Course	5	Hours per Week	5

Course Objectives:	1. Students explain the concept of Database and Database Management Systems 2. Students explain Metadata 3. Students demonstrate data mining 4. Students illustrate data warehousing 5. Students explain World Wide Web Consortium 6. Students recognise the concept of electronic / digital information 7. Students illustrate digitization process and summarise various problems 8. Students recognise various input devices such as OCR and Scanners and explain its use in libraries and information centres 9. Students illustrate different file formats 10. Students classify various types of E-documents and explain their benefits 11. To introduce communication tools and techniques. 12. To provide the students basic knowledge electronic information. 13. To illustrate the Internet and explain about data security. 14. To develop familiarity with use of Internet in libraries. 15. To recognize various publications of government and to explore possibility to develop a model to organize documents published in vernacular language.

Course Content		
Unit	Description	Weightage* (%)
1.	**Database & Database Management System:** Meta data	25

	Data Mining Data Warehousing World Wide Web Consortium	
2.	**Electronic / Digital Information:** Meaning and Concept Digitization : Concept, Procedures and Problems Input devices : OCR, Scanners Formats : JPEG, GIF/BMP, Audio Formats MPEG, MP3, WAV E - Documents : Concept of E - Books and E – Journals Government Digital Information Management Impact of Libraries and Information Centers and Users	25
3.	**Communication : An overview of Tools and Techniques:** E-Mail, Videotext, Tele Conferencing, Video Conferencing, VOIP [Voice Over IP], Hyper Media, Bulletin Board Service Markup Languages : HTML, XML, DHTML, SGML Protocols: Definition, Concept, Types: General, TCP/IP, OSI, SMTP, Telnet, FTP, HTTP, and Z39.50.	25
4.	**Internet Communication:** Internet as a Communication Tool, Facilities for Communication Internet Connectivity: Dial up, Leased, ISDN, Digital Subscriber Lines (DSL) Data Security: Concept, Need, Purpose Virus - Definition, Effect Security methods: Firewall, Anti-Virus Software SPAM Web 2.0, Lib 2.0 : Overview	25

Teaching-Learning Methodology	Classroom Discussion; Practical Work in Computer Lab; Study Tour; Internship; Field Work at University Library (Bhaikaka Library)

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce,	15%

	Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Distinguish the concept of Database and Database Management Systems
2.	Demonstrate various types of metadata
3.	Elaborate various models of Data mining
4.	Explain the components, characteristics and architecture of datawarehouse
5.	Carry out digitization process and illustrate various problems
6.	Explain the practical application of various input devices such as OCR and Scanners
7.	Explore various file formats and distinguish them based on characteristics
8.	Demonstrate various e-documents such as E-Book and E-Journals
9.	Extend basic concept of computer networks and use of Internet in libraries.
10.	Interpret the role of digital libraries and process of digitization.
11.	Classify communication tools and techniques.
12.	Comprehend the concept of ICT and its application in libraries.
13	Develop a model to organise various documents of government published in vernacular language

Suggested References:

Sr. No.	References
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5.	Black, U. (1994). Emerging communication technologies. New Delhi: Prentice-Hall India.
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9.	Caro, Susanne (2016). Digitizing your collection: public library success stories. American Library Association (Accessible through Bhaikaka Library at SPU only)
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19.	Mishra, P. N. (2010). Database management systems and digital libraries. New

	Delhi: Alfa Publication.
20.	Prasanna, Kumar H.E., and Mudhol, Mahesh V. (2002), Multimedia: Its application in Library and Information Science, New Delhi: Ess Ess Publication
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26.	Sooryanarayana, P.S. and Mudhol Mahesh V., (2000), Communication Technology: Its Impact on Library and Information Sceience. New Delhi: Ess Ess Publications
27.	Tanenbaum, Andrew S., (2009), Computer Networks, New Delhi: Pearson Education
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33.	शर्मा, बी.के. और ठाकुर, यु.एम., (2008), *पुस्तकालय, सूचना विज्ञान एवं सूचना प्रौद्योगिकीः*

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37.	**ગજ્જર, પ્રિતેશ, *ઈન્ટરનેટ*, અમદાવાદઃ કમ્પ્યુટર વલ્ડ.**
38.	**ચૌધરી, બિસ્વરૂપ રાય અને મિન્હાસ, દેવન્દિર સિંહ (૨૦૧૦), *ડાયનેમિક મેમરી કોમ્પ્યુટર કોર્સ*, ન્યુ દિલ્હીઃ ફ્યુઝન બુક્સ.**
39.	**પટેલ, સતિષ, (૨૦૧૫), *કમ્પ્યુટર નેટવર્ક*, કુડાસણઃ સતીષ પટેલ.**
40.	**શુક્લ, સતીષ પ્રકાશ અને પાઠક, કલ્પેશ, (૨૦૦૯), *કમ્પ્યુટર શિક્ષણ*, અમદાવાદઃ વારિષેણ પ્રકાશન.**

On-line resources to be used if available as reference material
On-line Resources
BAOU Study Materials (for Gujarati only) (https://baou.edu.in/syllabus-slm-e-books)
Egyankosh of IGNOU (http://egyankosh.ac.in/)
EPGPathshala (http://epgp.inflibnet.ac.in/)
National Digital Library (https://ndl.iitkgp.ac.in/)

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