SEMESTER – IV

Paper Code	Title of the Paper	Max. Marks	Internal Assessment	Total Marks	Credits	Teaching Hrs.
	Hard core					
HC 4.1	Technologies for Information Management	75	25	100	4	4 Hrs/week
HC 4.2	Information Analysis, Consolidation, Repackaging and Dissemination	75	25	100	4	4 Hrs/week
HC 4.3	Technical Writing and Communication	75	25	100	4	4Hrs/week
HC4.4	Internet and Electronic Publishing	75	25	100	4	4 Hrs/week
HC 4.5	Internet and Electronic Publishing(Practical)	100	00	100	4	6Hrs/week
	Soft core					
SC 4.1	Project					
	Dissertation Viva – voce	50	00	50		
	Internship	40	00	40	4	
	Education Tour Report	10	00	10		
	Total Credits for fourth semester				24	
	Total Credits first to fourth semester				96	

FOURTH SEMESTER
HARD CORE

HC4.1TECHNOLOGIES FOR INFORMATION MANAGEMENT

(Hours of Teaching:L:T: P=3:1:0)
(Lectures=3 X 16 = 48 hrs)
(Tutorials=1X16=16X2=32hrs)

Objectives:

1. To provide introduction to the concepts and techniques of Computing and other Information Technology.
2. TodevelopbasicInformationTechnologyhandlingskills.

CourseOutcome(CO):
CO1Understandtheconceptof Micrographicstechnologyandtools..
CO2Clearlyunderstandthedatabasesandtheirstructure.
CO3Understandtheimportantdesignanddevelopmentofdatabases,
CO4UnderstandtherelevantOpticalmediabaseddatabasesinscience,socialsciencesand humanities.
CO5KnowthedifferentCommunicationtechnology.

Unit-1: Micrographic Technology: Microforms – Micro card, Microfilm, Microfiche and their Readers and Printers; Multimedia Technology: Concept, Scope and Development, Multimedia PCs, Audio,Video, Image Representation and Manipulation; Hypertext and Hypermedia; Optical Media:Origin, History and Development, Hardware and software requirements,

Unit-2: Database Design, Development and Management: Concept of database and DBMS;Types,Design, Structure, Organization and Development of Database; Data Security; Study of MS-Accessand WINISIS: System Overview, System Installation, Database Construction, Techniques,Menus,Tools and Creation of database

Unit-3: **Optical Media based Databases**: History, Development and Impact, RetrievalSoftware;CD-ROM / DVD-ROM databases in Science and Technology, Social Sciences, Humanities andother fields.

Unit-4: Communication Technology: Fundamentals of Telecommunication Technology; Media,Mode and Components; Tele-fascimile, Teleconferencing; Information Technology: Conceptual andTheoretical Considerations, History and Development, Impact on Libraries andInformationServices

Unit-5 Emerging Technologies : Barcode technology and its application in Libraries andInformation centers, Radio Frequency Identification (RFID): Concept, and Characteristics. Components of an RFID Library Management System,Advantages and Disadvantages of RFID and its application in Libraries, RFIDand Smartcard Technology.

Reference:

Chakravarthy,R.C.andMurthy,P.R.S.(2011).InformationTechnologyandLibrary Science. New Delhi: Pacific Publications.

Chakravarthy,R.C.andMurthy,P.R.S.(2011).InformationTechnologyandLibrary science. New Delhi: Pacific Publications.

Curtin,Dennis andothers(1999).Information Technology:Thebreaking Wave.New Delhi: McGraw Hill Education.

ITLEducationSolutionsLimited(2012).IntroductiontoInformationTechnology.New Delhi: Pearson.

ITL Education Solutions Limited (2012). Introduction to Information Technology. NewDelhi: Pearson.

KulkarniParagandJoshiPrachi.(2015).ArtificialIntelligence:BuildinganIntelligent System. NewDelhi: PHI

Kumar, P. S. G. (2004). Information Technology: Applications (Theory and Practice). New Delhi: B. R. Publishing

HC 4.2 INFORMATION ANALYSIS, CONSOLIDATION, REPACKAGINGAND DISSEMINATION

(Hours of Teaching: L:T:P=3:1:0)

(Lectures = 3 X 16 = 48 hrs)

(Tutorials = 1 X 16 = 16 X 2 = 32hrs)

Objectives:

1.To understand the concept of Indexing and Abstracting.

2.Get acquainted with variety of information services

3.Aware about various Information retrieval systems and disseminating procedures.

COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the features and structures of Information Retrieval Systems.
CO 2	Gain the knowledge of information search and other search strategies.
CO 3	Understand the features and importance of Indexing Languages.
CO 4	Understand the different kinds of Indexing Systems.
CO 5	Anlayse Information Repackaging and Consolidation process.

Unit-1: Information Retrieval System:

Concept, Meaning, Definition, Objectives,

Characteristics, Components and Functions of IRS.

- Information Retrieval Models: Models Based on Input / Output; Models Based on Theories and Tools;Probabilistic Retrieval Model, Linguistic Model, Mathematical Model, Psychological Model, Economic Model and Hypertext Linkage Model.Purpose and criteria for evaluation.

Unit-2: Information Retrieval Process

Objective and feature of Information search,

Search techniques, Search strategies, pre search interview, search logic.

Steps in query formulation, Tools of Internet Search, Search engines,

Multiple database searching, Voice search, Image search, Video search engines.

Unit-3: Indexing and Abstracting

Concept, Need and purpose of Indexing Languages.

Types and Characteristics, - Vocabulary Control, Thesauri and subject headings,

Pre-Coordinate and Post –Coordinating Indexing, Chain Indexing,
Citation indexing, Automatic Indexing.

Abstracting: Concept, Meaning and definitions, Types and Uses.
Abstracting agencies and services.

Unit-4: Current Trends in IRS:

Developments, Searching and retrieval, Full text retrieval, User interfaces, IR standards and protocols.

Unit-5: Information Repackaging and Consolidation:

Concept, meaning and utility of repackaging and consolidation of Information products. Types of Repackaging and Information consolidation of products, Agencies dealing with repackaging, Document delivery and Reprography techniques. - Translation Centers,

Reference:

Chowdhruy, G. G. Introduction to Modern Information Retrieval. 2nd edn. London, Facet Publishing, 2003.

Cleaveland, D. B., Cleveland, A. D. Introduction to Indexing and Abstracting. 2001 3rd Ed. Englewood Colo.: Libraries Unlimited.

Crawford, M. J. (1988). Information broking: a new career in information work. London: Facet publishing.

Lancaster, F. W. (1968). Information retrieval systems, characteristics, testing and evaluation.1968, London: Facet publishing

Lancaster, F.W. (2003). Indexing and abstracting in theory and practice. London: Facet publishing.

Seetharama, S. Information consolidation and repackaging.1997, New Delhi: EssEss

HC 4.3: TECHNICAL WRITING AND COMMUNICATION

(Hours of Teaching:L:T:P = 3:1:0)

(Lectures = 3 X 16=48hrs)

(Tutorials = 1 X 16 =16 X 2 = 32hrs)

Objectives:

1. To impart written communication skills
2. To build confidence relating to effective communication skills

Unit-1: Technical writing:

Technical writing: Definition, Overview, Purpose, Types, Characteristics, Functions

Target groups and their requirements

Planning, drafting editing, finishing and producing the document

Use of editorial tools viz., Dictionaries, Style Manuals, Standards and specifications

Unit-2: Language and technical skills:

Language and technical skills, styles, Semantics, Syntax, Diction, Sentence structure, Readability and aberrations , Information searching and gathering skills , Designing pages: Elements of page design, basic design guidelines, developing a style sheet , Using Visual aids: Tables, Line graphs, Bar graphs, Pie charts, Charts, and Illustrations , Defining,

Describing, and providing set of instructions including footnotes and end notes, Summarizing

Unit-3: Structure and format:

Structure and format of journal articles, seminar/ conference papers, review articles, technical reports, informal and formal reports, recommendation and feasibility reports, research proposals, monographs, dissertations/theses

Unit-4: Use of Softwares for Technical Communication:

Use of Adobe PageMaker and Microsoft Publisher for the preparation, production and presentation of scientific and technical communication, Preparation and use of multimedia facilities for presentation, Info graphics.

Unit-5: Trends in Technical writing:

Marketing Communication – company white papers, reference manuals, user manuals, online help files, application notes, data sheet, errata, newsletters; Documentation support to software products; Business tools to technical writers – Robo help, on-line help, Adobe Frame work and its allied products .

Reference:

Anderson, Paul V and Brockamn, R John and Miller, Carolyn (ed) (1997). New essays in Technical and scientific communication: Research, theory and Pracice. Farmingdale: NY, Baywood

Day, Robert A (1989). Writing scientific papers in English Ed 2. Philadelphia: ISI

Joshi, Yateendra (2003). Commnicating in style. New Delhi: TERI

Riodarn, Daniel G and Pauley, Steven E (2004). Technical report writing today. Ed 8. New Deli: Biztantra

Society for Technical Communication (1998). Code for communicators. Washington D C. STC

Staples, Catherine and Ornatowski, Cezar (Ed) (1997). Foundations for teaching technical Communications: Theory, Practice and Program Design. Greenwich, CT: Ablex

Xerox Publishing standards (1988). A manual of style and design. New York: Xerox press.

HC 4.4: INTERNET AND ELECTRONIC PUBLISHING

(Hours of Teaching: L:T:P= 3:1:0)

(Lectures = 3 X 16 = 48 hrs)

(Tutorials = 1 X 16 = 16 X 2 = 32hrs)

Objectives:

1. Students can understand history and basic concepts of Internet.
2. To introduce various applications of internet in LISc

Unit-1: Internet Technology:

Meaning and Definitions

History and Development of Internet

Internet Technology: Tools and Protocols- TCP/IP and others.

Internet, Extranet and Intranet.

Web Browsers: Types, Software, Book Marking, Caching, etc.

Internet security: Firewall and Proxy servers

Unit-2: Internet Services:

E-mail, File Transfer Protocol (FTP), Remote Login, WWW, Teleconferences, Video conferencing.

Bulletin Board Services and e-Document Delivery Service.

Data Mining and Data Warehousing.

Trends in Networking

Unit-3:Electronic Publishing:

Electronic Publishing:,Meaning, Definition, Significance, Origin, History

DTP vs E-Publishing

Types of E-publishing

Digital copyright issues

Open Access movement and its impact on Scholarly Communication

Concept and Evolution of Authoring Tools; Page Description Format(PDF); Multimedia Content Creation: Data Compression Techniques: Multimedia Files and Formats – JPEJ, MPEG,GIF,TIEF

Unit-4:Electronic Content creation:

E-Publishing and scholarly communication, E-journals and e-books Digital Preservation, Conservation and Archival Management – Problems and prospects

Unit 5: Design and Development of Websites: Concept of Web page, Planning of Web pages and Web sites; Study of SGML,HTML,XML and UML; digital Signatures, Digital Certificates, Electronic Contracts, Cyber Laws: Information Technology Bill 1999 (Govt. of India) and Its Amendments

Reference:

Andrew Cox (2010). Introduction to Digital Library Management. London: Facet Publishing.

Bradley, Phil. The advanced Internet Searcher's Handbook Ed2. London: LA, 2002

Chowdhury, G.G: Introduction to Digital Libraries. London: Facet Publishing, 2003.

ICADL: Tutorials on Digital Libraries. Bangalore, 2001.

.Karen S. W. Marilynn B, Stone, T. A. (2003). Electronic publishing: The definitive guide. UK: Hard Shell Word Factory.

.Leona Carpenter, Simon Shaw & Andrew Prescott: Towards the Digital Library. London: LA, 1998.

Lee, Stuart D: Digital imaging: A practical handbook. 2000.

Malwad, N.M. and others (1992): Digital Libraries: Conference papers. Marilyn Deegan and Simon Tanner (2010). Digital Futures Strategies for the information age. London: Facet Publishing.

Jenny Craven (2010). Web Accessibility Practical advice for the library and information professional. London: Facet Publishing.

David Nicholas and Ian Rowlands (2010). Digital Consumers reshaping the information professions. London: Facet Publishing.

HC 4.5: INTERNET AND ELECTRONIC PUBLISHING-II
(PRACTICALS)

(Hours of Teaching : L:T:P= 0:0:4)

(Practicals = 4 X 16 = 64 X 2 = 128 hrs)

Acquaintance and hands on experience in using Internet – Hardware, Software – Internet Explorer, Text Editors, and Add –on- Softwares and its Resources and Services Including JCCC @UGC Infonet and Emerald Resources (www.emeraldinsight.co).

Acquaintance and Hands on experience in using Search Engines- General Meta and SpecializedSearch Engines – Features, simple and Advance Search; Acquaintance and Hands on experience in Web Page Design and Development using HTML

Acquaintance and Hands on experience in design and development of a website using Web Design Softarwe: Dreamweaver.

(Each Student shall compulsorily maintain practical record and submit the same at the time of practical examination)

SOFTCORE (ANY ONE)
SC 4.1: PROJECT

(Hours of Teaching: L:T:P = 0: 0:4)

(Guidance = 4 X 16 = 64 X 2 = 128 hrs)

Objectives:

1.To impart the skills of conducting project and preparing project report.

Each Student shall Prepare a Project on an approved topic in the field of Library and Information Science under the guidance and supervision of a faculty member.

INTERNSHIP (ONE MONTH)

Objectives:

1.To provide hands-on exposure to students of the functions of different sections of the Libraries.

There shall be an internship for a period of one month after the Completion of Fourth Semester Theory and practical examinations. Each student has to compulsorily undergo internship program in any one of the reputed libraries attached to institutions of higher learning, R & D Institutions, Industries, approved by the BOS in Library and Information Science for the Partial Fulfillment of MLISc degree. Each student shall submit the Internship completion certificate from the concerned institutions immediately after the completion of training.