

**C.S.J.M.UNIVERSITY , KANPUR**  
**MASTER OF LIBRARY AND INFORMATION SCIENCE**  
**(M.Lib.I.Sc.)**  
**One Year Post Graduate Course**  
**COURSE CONTENTS**

<b>Paper No.</b>	<b>Paper Title</b>	<b>Sessional Marks</b>	<b>Exam Marks</b>	<b>Total</b>
I	Knowledge, Information and Communication	20	80	100
II	Information Storage and Retrieval (Theory)	20	80	100
III	Knowledge Organisation – Practice I (Depth Classification)	20	80	100
IV	Information Processing & Retrieval– Practice II (Advance Cataloguing)	20	80	100
V	Marketing of Information Products and Services	20	80	100
VI	Information Systems and Organisations	20	80	100
VII	Research Methodology and Statistical Techniques	20	80	100
VIII	Information Technology Applications: Theory	20	80	100
IX	Information Technology Applications: Practical	20	80	100

## **PAPER –I**

### **KNOWLEDGE, INFORMATION AND COMMUNICATION**

#### **UNIT –I**

- Information : Nature, Properties, Types and Scope
- Conceptual difference between Data, Information and Knowledge
- Information Generation: Modes and forms
- Information Theory, Information Diffusion Process
- Intellectual Property Rights Act

#### **UNIT –II**

- Knowledge Management: Definition, concept , need, types& models
- Components and process of Knowledge Management
- Types of Knowledge
- Information Management Vs Knowledge Management

#### **UNIT –III**

- Communication :Genesis and Characteristics
- Communication Process, Types and Media
- Communication Channels and Models
- Communication of Information and Barriers to I.C.
- Trends in Scientific Communication

#### **UNIT –IV**

- Information Society: Concept & Definition
- Socio-economic implication of information
- Changing role of Library and Information Centres in Modern Information Society
- Information Industry: An overview

#### **UNIT –V**

- Information Policies: National Programmes and Policies
- National Information Policy (NIP)
- National Policy on Library and Information System (NAPLIS)
- National Knowledge Commission (NKC)
- National Mission on Libraries(NML)

#### **Recommended Books:**

1. Khan, M.T.M. (1998). Information organization and communication. New Delhi: EssEss Publications.
2. Parashar, R.G. (2003). Information and its communication. New Delhi: Medallion Press.
3. Rikowski,R.(2007). Knowledge Management: Social, cultural and theoretical perspective. U.K.: Chandos Publishing.

4. Sharma,S. &Gopal S.(2011). Applications of Knowledge Management in digital era. New Delhi: GNOSIS.

## **PAPER –II**

### **INFORMATION STORAGE AND RETRIEVAL (THEORY)**

#### **UNIT –I**

- IRS: Concept & Definitions
- Objectives, operations and design of information retrieval systems(IRS)
- Compatibility of information retrieval system
- IRS evaluation

#### **UNIT –II**

- Information retrieval tools: classification cataloguing, indexing, abstracting and online retrieval, Universal Bibliographical Control
- Standardization activities of bibliographic description, ISBD, MARC I, MARC II , UNIMARC, CCF,MARC21, DublinCore

#### **UNIT –III**

- History and development of subject indexing,
- Pre-coordinate indexing, Post-coordinate indexing
- Special type of indexing – citation indexing , Key word indexing
- Indexing languages: Thesaurus, Vocabulary control,
- Evaluation of indexing system

#### **UNIT –IV**

- Abstract and Abstracting: Concept & Definitions
- Uses and Techniques of abstracting
- Abstracting services in different disciplines: LISA, ISA, CA, BA
- Indexes in abstracting services: IndexMedicus etc.

#### **UNIT –V**

- Search Process; Search strategies
- Multiple information retrieval process
- Database searching, Internet searching, Meta searching, Data Harvesting

#### **Recommended Books:**

1.Chowdhury, G.G. (2010). Introduction to model information retrieval system (3<sup>rd</sup>ed.). London: Facet Publishing.

2.Lancaster, F.W. (2003). Indexing and abstracting in theory and practice. Urbana: University of Illions.

3. Rajan, T.M. (1981). Indexing Systems: concepts, models and techniques. Calcutta: IASLIC.

4. Salton G. & McGill, M.J. (1983). Introduction to modern information retrieval. New York: McGraw-Hill.

### **PAPER III**

#### **KNOWLEDGE ORGANISATION PRACTICE-1( DepthClassification)**

- Classification By UDC(Abridged Rev .English Ed.1961
- Introduction of scheme: History, Structure, Principles
- Introduction to common Auxiliaries and Special Auxiliaries
- Adequate Number of titles From All Disciplines
- Use of common and special Auxiliaries

Candidates will be required to Classify 20 titles in all

### **PAPER IV**

#### **INFORMATION PROCESSING & RETRIEVAL PRACTICE-2(Advance Cataloguing)**

Use of AACR-2 (R) (2002)

- Cataloguing of Multi Volume Books
- Cataloguing of Composite Books
  - With collective Title (Ordinary Composite books)
  - Without Collective Title (Artificial Composite books)
- Cataloguing of documents related to corporate authorship
  - Government Publications
  - Institution publications
  - Conference /congress/seminar /Workshop Publications
- Cataloguing of serial/ journal Publication
- Cataloguing of Non –Book Materials
  - Cartographic Materials
  - Manuscripts
  - Sound Recordings
  - Motion Pictures And Videorecordings
  - Microforms

Library of Congress List of Subject Headings will be followed.

Candidates will be required to catalogue 5 Titles in all.

## **PAPER-V**

### **MARKETING OF INFORMATION PRODUCTS AND SERVICES**

#### UNIT-1

- Marketing: Concept, Definitions, Need, Functions
- Information Products: Concept, Nature, Definitions, Design and Types
- Information Analysis and Consolidation
- Packaging and Repackaging of Information

#### UNIT-2

- Distribution Channels
- Marketing Mix
- Marketing Strategy: SWOT Analysis, PERT/CPM
- Techniques and Tools of Market Analysis
- Content Analysis: Techniques, Methods and Purpose

#### UNIT-3

- Information as a Marketable Commodity
- Demand and Supply of Various Information Services
- Factors affecting Demand and Supply
- Distribution and Marketing of Information

#### UNIT-4

- Information Analysis Centres (IAC)
- Information Centres: Types & their organisation
- Referral Centres: Need & functions
- Data Centres: Concept, Definitions, types and functions
- Planning and Organisation of Information Analysis and Consolidation Centres

#### UNIT-5

- E-Marketing: Concept, strategies, Use, Advantages
- Information Audit: Role, Scope, Methodology
- Market Segmentation.
- Trends in Information Analysis
- Electronic Content Creation

#### **Recommended Books:**

1. Gupta, D. K., et al. (2006). Marketing Library and Information service: International perspectives. Munich: K. G. Saur.

2. Kotter, Philip.(2002). Marketing Management. Delhi: Prentice Hall.
3. Chopra, H.S.(1996). Information marketing. Jaipur: Rawat Pub.
4. Jain, AbhinandanK,et.al.(1999). Marketing information products and services: A primer for libraries and information professionals. New Delhi: Tata Mcgraw Hill.

## **PAPER –VI**

### **INFORMATION SYSTEMS & ORGANISATIONS**

#### Unit-1

- Information Systems: Concept, Definition, Characteristics, Objectives, Types and constraints
- Data Banks, Clearing Houses
- National Information System: Concept, Components, Objectives, Requirements, Planning and Designing

#### Unit-2

- National and International Organizations and Programs: Functions, Features and Services
- CSIR, ICSSR, DRDO, DST, UGC, ICAR, ICMR
- UNESCO, IDRC
- IAEA, ILO

#### Unit 3

- National and International Information Systems: Functions and Features
- NASSDOC, NISCAIR, DESIDOC
- SENDOC, ENVIS, NIC
- AGRIS, INIS, MEDLARS

#### Unit-4

##### Professional Organizations Promoting Information System

- ILA, ALA,SLA
- IASLIC, IFLA
- IATLIS, ASLIB, CILIP

#### Unit-5

- Organisation promoting Information Systems
- UNESCO, UNIDO
- IFLA, FAO, UNISIST
- ICSU, IDRC, OECD

**Recommended Books:**

1. Grassian, E.S. (2005). Learning to lead and manage information literacy instruction. New York: Schuman Publishers.
2. Vickery, B.C. (1987). Information Systems. Washington: Butterworths.
3. Baman,P.(1993).Studies on Information Systems, Services and Programmes in India and abroad. Delhi: Ajnata.
4. Atherton, Pauline.(1997). Handbook of Information System and Services. Paris: UNESCO

## **PAPER –VII**

### **RESEARCH METHODOLOGY AND STATISTICAL TECHNIQUES**

#### **UNIT –I: Introduction to Research**

- Concept, meaning, need and process of Research
- Ethical aspect of research
- Types of research: Fundamental & Applied
- Research Problem and Research Design
- Hypothesis: Definition, Types, Sources and Functions
- Literature search : Print & Non-Print

#### **UNIT –II: Research Methods, Tools and Techniques**

- Research Methods: Scientific Method (Spiral of Scientific Method), Historical Method, Descriptive Methods(Survey and Case Study Methods), Experimental method
- Research Techniques & Tools : Questionnaire, Schedule, Interview, Observation, Scales and check lists
- Sociometric Techniques
- Sampling Techniques

#### **UNIT –III: Data Analysis and Interpretation**

- Descriptive Statistics :Measures of central tendency- mean, median, mode
- Tabulation and Generalization
- Measures of dispersion, Standard Deviation
- Graphical presentation of data – bar, pie, line graph, histograms
- Inferential statistics: Correlation, Regression- linear & non linear, chi-square test,
- Statistical package: SPSS

#### **UNIT – IV: Bibliometrics, Scientometrics&Informetrics**

- Concept and definition,
- Bibliometric laws (Bradford, Zipfs, Lotka ), Bibliographic coupling, Citation analysis, Impact factor
- Webometrics
- Informetrics
- Scientometrics

#### **UNIT –V: Research Reporting & Style Manuals**

- Structure, Style, contents, guidelines for research reporting
- Style Manuals: Chicago, MLA, APA

#### **Recommended Books:**

1. Alvesson, M & Skoldberg, K. (2009). Reflexing Methodology: new vistas in qualitative research (2<sup>nd</sup> rev. ed.). London: Sage Publications.

2. Devrajan, G. (2011). Prolegomena to Research Methodology. New Delhi: EssEss Publishing.
3. Das,S. (2012). Research Methodology: methods, tools & techniques. Jaipur: Yking books.
4. Sharma, C.K. & Jain, M.K. (2009). Research Methodology. New Delhi: Shree Publishers.

## PAPER VIII

### INFORMATION TECHNOLOGY APPLICATION ( Theory)

#### **UNIT - I: Information Technology**

- Information Technology: genesis, definition, need and objectives.
- Computer Technology : Processor Technology, Storage technology,
- Software: Meaning, definition Types, operating system Windows all version, Linux, Number system, Electronic Publishing: E-Journals, E- Books

#### **UNIT -II: Network and Communication Technology**

- Network: concept, meaning, Types of Network: LAN, MAN, WAN
- Modes of Communication: Simplex, Half Duplex, Full Duplex
- Network Topologies: Bus, Ring, Star, Hybrid
- Transmission Media: Twisted Pair, Coaxial cable, Optical fibers, Microwave, communication Satellite etc.
- Switching Techniques: Circuit switching, Message switching, Packet switching.
- Open system inter connection (OSI) model of networking, OPAC, Web OPAC

#### **UNIT -III: Internet and Its services**

- Internet: Origin, meaning, development and services
- Internet Protocols : Meaning, Different protocols-TCP/IP; FTP; HTTP; Z39.50
- Internet working tools: Bridges, Routers, Gateways, Web Browsers
- Search Engines, meta search engine, Subject directories, Intranet, Extranet
- Bar coding Emerging technology: RSS, Smart Card, RFID

#### **UNIT -IV: Database Concept and Components**

- Database : concept, meaning, features, Database architecture
- DBMS: meaning, Types, merit & demerits
- Databases in LIS: Web of Science, Google scholar, Scopus
- Data warehouse, Dublin core metadata

#### **UNIT -V: Digitization and Library Automation**

- Digital Library: Concept, Meaning, Definition, Objectives, Need and Functions
- Digitization: concept, needs and steps of digitization.
- Open source software v/s proprietary software
- Open source Software: DSpace, GSDL, KOHA
- Virtual Library: Meaning, Definitions, Objectives, Need and Functions.

#### **Recommended Books:**

1. Singh, Prem and Khanna, JK. (1994). Information technology in the Libraries. Delhi: Pragati
2. Frye, Curtis. (2002). Microsoft Access Version 2002. Delhi: Prentice Hall.

3. Parashar,R.G.(1991). Indian Library in IT environment. Ludhiana:Medallian press.
4. Blake.U Computer network:protocols, standard and interfaces 2<sup>nd</sup> edition, New Delhi: Prentice hall
5. Kresh,D.(2000).The Whole Digital Library:Handbook. New Delhi: Indiana Publishing.

## **PAPER – IX**

### **INFORMATION TECHNOLOGY APPLICATION: PRACTICE**

- HTML programming: Web Page Creation
- Library Automation Softwares : KOHA, SOUL, Greenstone
- Content Management System :Joomla

#### **Recommended Books:**

1. Powell, Thomas A. (2001). HTML: The Complete Reference. USA: McGraw-Hill.
2. Mishra, L. &Srivastava V. (2008). Automation and Networking of Libraries: A Manual of Library Management Software and Application of Computer Technology in Libraries. New Delhi: New Age International Pub.
3. Lynch, P.J. & Horton, S. (2009). Web style guide: basic design principles for creating web sites. London: Yale University Press.