# C.S.J.M.UNIVERSITY , KANPUR MASTER OF LIBRARY AND INFORMATION SCIENCE

## (M.Lib.I.Sc.)

## One Year Post Graduate Course COURSE CONTENTS

Paper No.	Paper Title	Sessional Marks	Exam Marks	Total
1	Knowledge, Information and Communication	20	80	100
П	Information Storage and Retrieval (Theory)	20	80	100
Ш	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)

- 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, MARC 21, 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

- 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. Urabana: 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, typesand 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

- 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 METHODOLGY 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
- 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, WebBrowsers
- · Search Engines, meta search engine, Subject directories, Intranet, Extranet
- · Bar coding Emergingtechnology:RSS, Smart Card, RFID

## UNIT -IV: Database Concept and Components

- · Database: concept, meaning, features, Databasearchitecture
- DBMS: meaning ,Types,merit& demerits
- Databases in LIS: Web of Science, Google scholar, Scopus
- · Dataware house, 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/sproprietary software
- Open sourceSoftware:DSpace,GSDL,KOHA
- Virtual Library: Meaning , Definitions, Objectives, Need and Functions.

- 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  $2^{\text{nd}}$ 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

- 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.