

**GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)**  
**(A Central University)**  
**MASTER OF LIBRARY AND INFORMATION SCIENCE**  
**(1-YEAR, 2 - SEMESTER COURSE)**  
**Session: 2014-2015 Onwards**

Paper No.	Subject	MARKS DISTRIBUTION			FM
		External		Internal Assessment	
		Theory	Practical		
I	Information Science & Knowledge Management	60	-	40	100
II	Information Technology: Application (Theory)	60	-	40	100
III	Information Retrieval (Theory)	60	-	40	100
IV	Information Retrieval (Practice)	-	80	20	100
V	Elective - I (a) Technical Writing and Content Development (b) Information Sources, Systems and Programmes (c) Collection Development	60		40	100
<b>TOTAL</b>		<b>240</b>	<b>80</b>	<b>180</b>	<b>500</b>
<b><u>Second Semester</u></b>					
VI	Universe of Knowledge and Research Methods	60	-	40	100
VII	Management of Libraries and Information Centres	60		40	100
VIII	Information Technology : Application (Practice)	-	80	20	100
IX	Information Analysis, Repackaging and Consolidation	60		40	100
X	Elective -II (a) Academic Library and Information System (b) Archival, Museum and Archaeological Information System (c) Agricultural Information System (d) Legal Information System (e) Industrial Information	60		40	100
<b>TOTAL</b>		<b>240</b>	<b>80</b>	<b>180</b>	<b>500</b>
<b>Grand Total</b>					<b>1000</b>

**Note:** *Practical and Viva-voce will be conducted by internal examiners.*

## **First Semester**

### **PAPER - I**

#### **Information Science and Knowledge Management**

**FM 100 (Theory 60 + Internal Assessment 40)**

##### **Unit - 1 Information Science**

- Data: Definition, Scope and Types
- Information: Definition, Scope , Type , Nature and property
- Conceptual difference between Data, Information and Knowledge
- Representation of Information: Sign, Signal, Symbol
- Information Science: Definition Scope and Objectives
- Information Science as a Discipline and its Relationship with other Subject

##### **Unit - 2 Information and Communication**

- Communication Process, Channels, Models and Barriers
- Information Generation: Modes and Forms
- Information Communication: Theories & Models
- Information System: MIS, DSS, Expert System
- Artificial Intelligence and Libraries

##### **Unit - 3 Library, Information and Society**

- Information Society: Genesis, characteristics and Implications
- Changing role of Library and Information Center in Society
- Concepts of Freedom, Censorship, Fair Use. Creative Commons
- Policies Relating to Information: Intellectual Property Rights, Right to Information Act, SHEPRA/RoMEO Project, COPE,

##### **Unit - 4 Information Economics and Information Industry**

- Information as an Economic Resource
- Information Industry: Primary, Secondary etc.
- Marketing of Information.
- LIS Products and Services as a Marketable Commodity

##### **Unit - 5 Knowledge Management**

- Knowledge Management: Concept and Scope
- Information Management Vs Knowledge Management
- Process of Knowledge Management
- Tools of Knowledge Management

## **Paper - II**

### **Information Technology: Application (Theory)**

#### **FM 100 (Theory 60 + Internal Assessment 40)**

##### **Unit -1 Library Automation**

- Planning, Design and Implementation of Library Automation
- Automated housekeeping operation: Acquisition, Cataloguing , Circulation, Serials Control, OPAC, Library Management
- Evaluation of Library Automation Software

##### **Unit - 2 Internet Basics Features and Tools**

- Internet: Definition, application and Tools
- Internet Connectivity: Dialup, Leased Line, ISDN, Digital Subscriber Line (DSL) E-mail and Send mail, POP3
- Internet Protocol: TCP/IP, FTP, HTTP, SMTP, Z39.50, Z39.85
- OSI Network Model and TCP/IP Reference Model

##### **Unit 3: Web Page Designing & Content Management**

- Hypertext and Hyperlink, Hypermedia
- Basic Code of HTML 5, PHP
- Web Based Content Development
- Content Development: Norms and Guidelines,
- Content Development software: JOOMALA / WordPress etc.

##### **Unit - 4 Open Access to Scholarly Communication**

- Scholarly Communication: Concept and Meaning
- Open Access: Overview, Definitions. Open access publishing (full, hybrids, library as publisher, OA policies)
- People, Organisations (PLoS, SPRAC, Budapest Open Access Initiative), and resources of Open Access
- Open Source Software: Identification, Types and Use,

##### **Unit - 5 Digital Libraries**

- Genesis, Definition, Objectives, Scope of Digital Libraries
- Study of digital Library Software: Greenstone, D-Space
- File Format: Text, Audio, Video and Image
- Software and Hardware for Digital libraries: OCR, Image editing software,
- Input Capture Devices: Scanners, Digital Movie Cameras

## **Paper – III: Information Retrieval (Theory)**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - I Information Storage and Retrieval Systems**

- Concepts, Objectives, Functions and component of ISAR system
- ISAR System: Operation Design
- Compatibility of ISAR System
- Evaluation of ISAR System
- Process of Searching, Common Command Languages,
- Trends in IR Models

#### **Unit - 2 Subjects Indexing: Principle and practices**

- Indexing: Concept, Theories and Methods, Historical Development
- Indexing Language : Type and Characteristics
- Pre and Post coordinate Indexing system, Citation Indexing
- Study of Chain Indexing , PRECIS and POPSI, Uniterm, Keyword Indexing

#### **Unit – 3 Vocabulary Control & Automated Indexing**

- Vocabulary Control: Tools, Need and Scope
- Thesaurus: Structure, Function and Construction
- Trends in Automatic Indexing

#### **Unit - 4 Searching Technique and Information Retrieval**

- Man and Machine Retrieval System
- Search Strategies: Boolean Operations, Proximity Search, Heuristic Search, Navigational Search, etc., Federated Search and Multimedia Databases Search
- Data Mining, Data Harvesting: Dublin Code, OAI/PMH, Semantic Web

#### **Unit - 5 Bibliographic Descriptions and Control**

- Bibliographic Description: An Overview
- Bibliographical Control: Concept and Historical Development, Functional Requirements for Bibliographic Records (FRBR), RDA, RDF
- National and International Bibliographical Control, ISBD
- Role of Computers in Bibliographical Control, MARC 21, UNIMARC

**Paper-IV: Information Retrieval (Practice)**

**FM 100 (Practice 80 + Internal Assessment 20)**

Unit – 1 Preparation of Class Number for Micro-documents using UDC.

Unit – 2 Preparation of Cataloguing entries for Complex Continuing Resources and Non-book Materials.

Unit – 3 Indexing Practice using PRECIS and KWIC

**PAPER - V (Elective- I)**

**a): Technical Writing and Content Development**

**FM 100 (Theory 60 + Internal Assessment 40)**

**Unit- 1 Communication Process**

- Overview of Communication Process
- Characteristic Features of Technical Writing
- Target Group in written Communication
- Reader-writer Relationship
- Linguistic as medium of Expression of Thought

**Unit - 2 Structure and Functions of Technical Communication**

- Structure: Definition, Purpose, Characteristics and Functions
- Collection, Organisation and presentation of data including illustration
- Case Studies: Preparation of short Communication, Review Articles, Technical Reports, Monographs, Dissertation, and House Bulletins

**Unit - 3 Technical Editing and Editing Tools**

- Editor: Function, Qualification and special Skills
- Editorial Process: Evaluation Process, Editor-Author Reference Relationship in Quality control
- Editorial Tools: Dictionary, Marketings etc.

**Unit - 4 Content Analysis**

- Concept and Scope
- Technical Quantitative and Qualitative
- Content Analysis-Applications (generation of Information Services and products)

**Unit - 5 Content Developments**

- Content Development: Context setting, Norms and Guidelines
- Content Development software: JOOMALA
- Information to HTML and XML
- Web Based Content Development
- IPR-Legal and Ethical Issues

## **b): Information Sources, Systems and Programmes**

**FM 100(Theory 60 + Internal Assessment 40)**

### **Unit – 1 Information Sources**

- Physical medium of information
- Print Media, Multimedia (Hypermedia) and Hypertext
- Non – Print Media: Microform, Electronic and Optical Media

### **Unit – 2 Information Sources for Users**

- Content Analysis and its Correlation to Clientele
- Customised Organisation of Information Sources
- Citation Analysis of Information Sources and their Use
- Aid to information

### **Unit – 3 Information Sources, Systems and Programmes**

- Humanities
- Social Science
- Science and Technology
- Non Disciplinary Studies

### **Unit – 4 Information Experts as Resource Persons**

- Library and Information Personnel
- Science and Technology Information Intermediaries
- Database Designers and Managers
- Media Personnel as Sources of Information

### **Unit – 5 Users and their Needs**

- Information Needs of Users
- Categories and Nature of different Information users
- Information Seeking Pattern
- User Studies/ User Education: Concept, Types and Methods
- Information Literacy Skills: An Introduction

## **c): Collection Development**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - 1 Basics of Collection Development**

- Definition, Need and Function
- Collection Development Policy
- Collection Development Vs Collection Management

#### **Unit - 2 Types of Collection**

- Collection: Importance of collection in library
- Conventional Documents
- Audio-visual Materials
- Electronic Materials

#### **Unit - 3 Document Selections and Acquisition Procedure**

- Acquisition Programme: Objectives and Functions
- Material selection: Principles and Selection Aids
- Allocation of Library Funds: Norms and Standards
- Problems in Acquisition of reading Materials
- Good Office Committee

#### **Unit - 4 Collection Evaluations and Weeding**

- Collection Evaluation: Definition, Need, and Utility
- Techniques/ Methods of collection evaluation
- Weeding: Need and Safeguards
- Electronic Publication and its collection
- Role of document back up Services in Collection Development

#### **Unit - 5 Preservation, Its Impact on Collection Development**

- Preservation: Need, Areas, Limitations and Safeguards
- Preservations: Methods and Remedies
- Impact of IT on Collection Development



## **SECOND SEMESTER**

### **PAPER - VI**

#### **Universe of Knowledge and Research Methods**

**FM 100 (Theory 60 + Internal Assessment 40)**

##### **Unit - 1 Universe of Knowledge**

- Universe of Knowledge: Definition, Source, characteristics and type
- Subject having knowledge as their field of study
- Modes of thinking : Authoritative, Speculative and positivistic modes

##### **Unit - 2 Intellectual Organisation of Knowledge**

- Modes of Formation of Subject: Fission, Fusion, Distillation, Lamination, Loose Assemblage, Agglomeration, etc.
- Mapping of Knowledge in various Classification Schemes: DDC, and UDC
- Salient Features of CC7

##### **Unit - 3 Research Methods**

- Research: Definition, Nature, characteristics, purpose and Kinds
- Research Methods: Historical, Descriptive, Survey and Experimental
- Hypothesis: Concept, Sources and Types, Research Question
- Scientific Methods: Features, Spiral of Scientific Method
- Report writing

##### **Unit - 4 Methods of Data Collection**

- Formulation of Research Design
- Sample and Sampling, Sampling technique, Sampling Error
- Methods of data collection: Questionnaire, Interview and Case Study
- Presentation of Data : Table, Diagram etc.

##### **Unit-5 Statistical Methods -Basics**

- Statistical Methods: Concepts, Definition and Basic steps and factors involved
- Measures central tendency : Mean, Median and Mode
- Measures of Dispersion: Range, Mean Deviation and Standard Deviation
- Measure of Variability and Correlation, t-test, z-test, ANOVA
- Bibliometrics to Webometrics: Meaning, Scope, parameters, Law and their Applications

## **PAPER - VII**

### **Management of Library and Information Centres**

#### **FM 100 (Theory 60 + Internal Assessment 40)**

##### **Unit – 1 Management Perspectives**

- Concepts and schools of Management thought
- Management Information System
- Functions and Principles of Scientific Management
- Total Quality Management, MBO, Risk and Contingency Management
- Change Management: Concept & Method

##### **Unit – 2 Human Resource Management**

- Human Resource Management: Selection, Recruitment, Training, Development, Performance Appraisal
- Organisational Behaviour
- Managerial Quality and Leadership
- Human Resource Planning and Development

##### **Unit – 3 Financial Management**

- Budgetary Control and Techniques
- Costing Techniques
- Cost Analysis
- Resource Mobilization and Outsourcing

##### **Unit – 4 System Analysis and Design**

- Library Planning: Basic Concepts, Types and Procedures,
- System Approach
- Work Flow and Organisational Routine
- Monitoring and Control Techniques,
- Performance Measurement and Evaluation Techniques: PERT, CPM
- SWOT, DFD

##### **Unit – 5 Library & Information Science as Profession**

- Librarianship as a Profession : Attributes and core professional ethics
- Library Profession on Digital Era

## **PAPER – VIII**

### **Information Technology: Application (Practice)**

#### **FM 100(Practice 80 + Internal Assessment 20)**

##### **Unit-1 Library Automation Software: CDS/ISIS and/or Winisis**

- Software Installation/uninstallation
- Creation of Worksheet, Data entry Fields, FST, FDT
- Searching Through WINSIS or CDS/ISIS
- Display of Search Results

##### **Unit-2 Integrated Library Management Software**

- Integrated Library Software packages: SOUL, NewGenLib.
- Modules such as Acquisitions, Cataloguing, Circulation, Serial Control, Administration and OPAC
- Installation of ILMS Software

##### **Unit-3 Digital Library Software**

- Overview of Digital Library Software: D-Space, Greenstone, e-print
- Creation of Digital Repository through D-Space and/or Greenstone

##### **Unit – 4 Web Designing**

- Syntax of HTML Document, Create a new page
- Formatting of Document: Format text (font size, color, etc.), Creating internal and external links,
- Creating lists using bullets or numbers
- Creating Tables and organizing information
- Background color and images
- Introduction to Front Page and publisher for web publishing
- Creation of a website

##### **Unit 5: Content Management Software**

- Function and use of any Content Management Software

## **PAPER - IX**

### **Information Analysis, Repackaging and Consolidation**

**F'M 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - 1 Abstracting**

- Different Types of Abstracts
- Guidelines in Preparing Abstracts
- Canons of Abstracting
- Information Scientist / Subject Expert as an Abstractor

#### **Unit - 2 Repackaging and Consolidation**

- Packaging and Re-Packaging: Concept, Need, Purpose and Criteria
- Content Analysis
- Information Consolidation Products: Concept, Types, Design and Development
- Information Intermediaries

#### **Unit - 3 Information Analysis and Consolidation Centres**

- Genesis of Information Analysis and Consolidation (IAC) Centres
- Planning and Management of IAC centres
- Data centre and Referral Centre
- IAC Centres in India

#### **Unit - 4 Information Products**

- Nature Concept and Type
- Design and Development
- Information Newsletter, House Bulletin, In - House communications, Trade Reports, Technical Digest

#### **Unit - 5 Trends in Information Analysis, Repackaging and Consolidation**

- Electronic Content Creation
- Database Support Services - Types and Use of Database , Database Intermediaries
- Online Information System and Information Networks
- International standards for Database Design and Development

**PAPER – X**

**(Elective – II)**

**a): Academic Library and Information System**

**FM 100(Theory 60 + Internal Assessment 40)**

**Unit – 1 Academic Library**

- History and Development of Libraries with special reference to India
- Role of Academic Library in Education
- Academic Library as a support System for Education

**Unit – 2 Development of Academic Library**

- Role of UGC in Promoting Academic Libraries, University College and other Institutions
- Role of library authorities of the Institutions in Promoting Library Resources
- Development of Library Services
- Financial Management of Academic Libraries

**Unit – 3 Collection Developments**

- Collection Development Policy, Weeding policy
- Problems in Collection Organization in an Academic Library
- Collection Development Programmes, Allocation of Funds to Collection Procurement, Curriculum and Collection Development
- Library Committees and their Role in Collection Development

**Unit – 4 Staffing and Staff Development for Academic Library**

- Norms and Patterns for Staffing in University, College and School Libraries
- Continuing Education Programmes for Academic Library Development
- Personal Management in Academic Library

**Unit – 5 Resource Sharing Programmes**

- Resource Sharing Services – its Objectives, Organization and Development
- INFLIBNET and its Implications to Library Resource Sharing
- Regional and City Network of Libraries and their Importance

## **b): Archival, Museum and Archaeological Information System**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - 1 History and Development**

- History and Development and types of Archival Centers
- Kind and identification of Archival material

#### **Unit-2 Organisation and Management of Archival and Manuscripts**

- Acquisition, Classification, Cataloguing and Indexing of Archival material
- Source material on Archival , Manuscripts
- Machine Readable and Microfilm of Archival records
- Database and Digitization of Archives
- Role of UNESCO and other agencies

#### **Unit -3 Environment Control**

- Building Design
- Planning and furniture and Fillings
- Use of Copy Right to information in relation to archives

#### **Unit - 4 Preservation of Archives**

- Objective and Purpose
- Cause of Deterioration
- Environmental Pollution : Physical , Chemical and Atmospheric
- Biological enemies of materials : Mould , Fungi , Insect and Rodents

#### **Unit - 5 Rehabilitation of Documents**

- Cleaning, removal of Stains
- Fuming and deacidification
- Repair and restoration techniques
- Lamination
- Standards for Storage Conditions

## **c) : Agricultural Information System**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - 1 Agriculture Education and Agriculture Libraries**

- Growth and development of Agriculture education and research in India
- Role of Library in Agricultural education, research and Extension
- Development of Agriculture Library in India

#### **Unit - 2 Information Source and Services in Agriculture**

- Specialized Collection and Information Sources
- Information Service and products in Agricultural Science and Technology with Special reference to India
- Agriculture Information Centers - National and International

#### **Unit-3 Organization and Management of Resources**

- General Principle of Information Management
- Information Organization , Processing and Dissemination
- Developing need based and on Demand Specialized Services

#### **Unit - 4 Information Needs**

- Identifying special need of Agricultural faculty & research Staff
- User Studies of Local Agriculture Libraries

#### **Unit - 5 Agriculture Information System and Networks**

- Current Trends in agricultural System and Networks
- Resource Sharing and Networking in Agricultural Libraries in India
- International Agricultural Database
- ProfessionalAssociations.

## **d) : Legal Information System**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit- 1 Law Librarianship**

- Growth and Development of legal Institutional in India
- Nature Principle and Characteristics of legal Information and Law Libraries
- Type of Law Library

#### **Unit - 2 Information Source Collections**

- Special Information Sources : Bills , Acts , Books , Serials , Law Court notice , Law case amendments
- Tribunal Report, Law Digests , Legal Judgment, Delegation Legislation
- Rules and orders , Legal information Sources and Lexicons

#### **Unit - 3 Organizations and Management of Resources**

- Information Processing : Classification, Cataloguing and Indexing
- Developing special skills and Techniques to handle legal information ( personnel )
- Managing finance : Funds & Fund Generation

#### **Unit - 4 Information need and services**

- Special needs of lawyers and legal Professionals
- Study of Law Information Centers ( Local )
- Special Services, Planning and design
- Preparation of rappers on Law Libraries ( Local )
- Dissemination methods and techniques

#### **Unit - 5 Legal Information System & Networks**

- Legal information System :National and International
- Structure and their services
- Legal Database and Digital Libraries
- Resource and Networks of Legal Information



## **e) : Industrial Information System**

### **FM 100 (Theory 60 + Internal Assessment 40)**

#### **Unit - 1 Growth and Development of Industries & Industrialization Libraries**

- Industrial Growth in India
- Type of Industries: Government and Non-Government.
- Role of Libraries and Information Center in Industries
- Categories of Industrial Libraries

#### **Unit - 2 Industrial Information Resource Collections**

- Tread Literature
- Patents
- Standards
- Technical Reports Bulletins

#### **Unit - 3 Organizations and Management of Industrial Information**

- Special Classification Scheme and Indexing System
- Planning and Designing Specialized information services and Products
- System approach to Planning and Design and Implementation
- Managing personal Skills and Finance

#### **Unit - 4 Information needs and Services of Industrial Libraries**

- Special Classification Schemes and Indexing System
- Case Studies and field Experience of local Industries
- Preparation of Report of an Industrial Library Survey (Local )
- Marketing of Information
- Computerized Information Service

#### **Unit - 5 Industrial Information System and Network**

- Industrial Information Centers and Networks National and International (SENDOC)
- Structure and their services
- Industrial Databases
- Resource Sharing and Networking of Industrial Information Centers in India