GURU Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University)

Master of Library and Information Science

(1-Year, 2 - Semester Course)

Session: 2014-2015 Onwards

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<td>(a) Technical Writing and Content Development</td>
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<td>TOTAL</td>
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**Second Semester**

| 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                                          | 60     | 40       |                  | 100   |
|           | (a) Academic Library and Information System            |        |          |                  |       |
|           | (b) Archival, Museum and Archaeological Information System |      |          |                  |       |
|           | (c) Agricultural Information System                    |        |          |                  |       |
|           | (d) Legal Information System                           |        |          |                  |       |
|           | (e) Industrial Information                             |        |          |                  |       |
| TOTAL     |                                                        | 240    | 80       | 180              | 500   |
| Grand Total|                                                       |                     |                     | 1000  |

**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 - 1 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 POSPI, 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

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, Marketing 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: JOMALA
- 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

- 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
- Professional Associations.
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 rapports 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