

Subjective

Information and Communication

Unit 1 : Information and Communication

- Information: Characteristics, Nature, Value and Use of Information
- Conceptual difference between Data, Information and Knowledge
- Communication of Information: Information generation
- Communication Channels, models and barriers
- Trends in Scientific Communication

Unit 2 : Information Science

- Definition, Scope and Objectives
- Information Science as a discipline and its relationship with other subjects

Unit 3 : Library, Information and Society

- Genesis and Characteristics and Implications of Information Society
- Changing Role of Library and Information Centers in Society
- Information Industry-Generators, Providers and Intermediaries
- Intellectual Property Act, Right to Information Acts
- Concept of freedom, censorship, data security and fair use
- Policies relating to information, Right to Information including Science and Technology, Education
- International and National Programmes and Policies (NAPLIS) IT and Library UAP.
UBC

Unit 4 : Economics of Information, Unit 5 : Information Management

Unit 6 : Knowledge Management

Information Analysis Repackaging and Consolidation and Retrieval

Unit 1 : Abstracting

- Abstracting: Types and guidelines in preparing Abstract

Unit 2 : Repackaging and Consolidation

- Content Analysis
- Repackaging, formatting, consolidation

Unit 3 : Information Products

- Information Products : Nature, Concept, Types, Design; and Development and Marketing

Unit 4 : Trends in Information Analysis, Repackaging and Consolidation, Including Electronic

- Content Creation

Unit 5 : Cataloguing & Subject Indexing : Principles and Practices

- *Principles of Subject Cataloguing : Assigning Subject Headings Using Library of Congress Subject Headings and Sear's List of Subject Headings etc.*
- *Models-Assigned and Derived*
- *Pre & Post Coordinate Indexing Systems and Citation Indexing*
- *Development of Indexing Concept*

Unit 6 : Indexing Language: Types and Characteristics

- *Indexing Language: Types and Characteristics*
- *Vocabulary Control*
- *Tools of Vocabulary Control*
- *Structure and construction of an IR Thesaurus*
- *Trends in Automatic Indexing*

Unit 7 : Information Retrieval

- *IR Models, Search Strategies; Manual/ Machine, Feedback and Refining*
- *Evaluation of Information Retrieval Systems; Project and Parameters*
- ***Trends in IR Models***

Management of Library and Information Center/Retrieval**Unit 1 : Management**

- *Concept; defination and scope;*
- *Management Styles and Approaches*
- *Management Schools of Thought*

Unit 2 : Human Resource Management

- *Organisational Structure*
- *Delegation, Communication and Participation*
- *Job Description and Analysis; Job evaluation*
- *Inter-personal Relations;*
- *Recruitment Procedures*
- *Motivation; Group Dyamics*
- *Training and Development*
- *Disciplines and Grievances*
- *Performance Appraisal*
- *Leadership*

Unit 3 : Financial Management

- *Importance, Sources of Finance*
- *Resource Mobilisation*
- *Cost Effectiveness and Cost Benefit Analysis*
- *Outsourcing*

Unit 4 : System Analysis and design

- *Library as a System*
- *Project Management, PERT/CPM,*
- *Decision Tables*
- *Performance Measurement, Reengineering, Time and Motion Study*
- *Swot (Strength, Wealness, Opertunities, Threat)*
- *DFD (Data Flow Diagram)*

Unit 5 : Total Quality Management (TQM)

- *Definition, Concept, Elements*
- *Quality Audit, Use of Technology*
- *Techniques of Managing*

Unit 6 : Planning

- Concept, Definition, Need and Purpose, Types
- Policies and Procedures, MBO
- Risk Management, Contingency Management
- Planning of Related Infrastructure, Library Standards

Unit 7 : Managing Change

- Concept of Change
- Changes in procedures, Methods, Tools and Techniques
- Problems of Incorporating Change
- Techniques of Managing Change

Unit 8 : Marketing of Information Services

- Marketing: Concept of Marketing (Need of Marketing in Library and Information Science)
- Marketing and Art of Selling
- Planning of Marketing
- Internet and Marketing
- Suggesting's for Successful Marketing
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Information Technology Application (Theory)**Unit 1 : Library Automation**

- Planning of Implementation of Library Automation
- Automation, In - house operations - Acquisition, Cataloguing, Circulation, Serials Control,
- OPAC, Library Management

Unit 2 : Multi Lingual Bibliographic Databases

- Library Automation Software Packages: Their Study and Composition

Unit 3 : Communication Technology

- Fundamentals of Telecommunication Technology; Media, Mode and Components
- Network Media, UTP Optical Fibre, Ethernet, Network interface card, Hubs, Routers, Modem
- Network Types and Topologies , LAN, WAN, MAN
- Bus, Star, Ring Token Ring, etc.
- Local Area Network - Types and Topologies

Unit 4 : INTERNET : Basic Features and Tools

- Network Base Information Services
- Connectivity: Dialup, Leased lines, ISDN, Digital subscriber lines
- E-Mail, SMTP, Wireless, Send mail, POP3 CK
- Protocols- FTP, HTTP
- Web Serves, Web tools, Search Engines
- Internet Security
- Teleconferencing, Tele-facsimile, Teletex, Videotext

Unit 5 : Digital Libraries

- Ganesis, Definition, Objectives, Scope of Digital Libraries
- Image formats, Audioformation
- Storage media Formats-180-9660 DVD
- Software and Hardware for digital libraries, OCR, Image Editing software
- Input capture devices, for digital libraries
- Data Warehousing, Data Mining and Meta Data

Unit 6 : Artificial Intelligence & Expert Systems

(with reference to Library and Information Science)

Academic Library System**Unit 1. Academic Libraries**

- *Academic Libraries: Definition, Meaning, Importance, Functions, Services and Types of Academic Libraries*

Unit 2. Higher Education and Libraries

- *Higher Education and Libraries.*
- *History and development of Higher education in India.*

Unit 3. User Study and User Education

- *Role of UGC in development of Academic Libraries*
- *Users of Academic Libraries: Types of Users and their needs.*
- *User study : Need, importance and techniques. User Education*

Unit 4. Collection development

- Collection development in Academic Libraries;
- Types and character of Academic Library collection.
- Acquisition of Documents : Selection, Policy and procedures, Maintenance
- User participation in collection development.
- Information Technology Impact.
- Problems of Collection development

Unit 5. Library and Information Services in Academic Libraries

- Reference service
- Bibliographic Service
- Documentation and Information Service
- Current Awareness and SDI Service
- Abstracting and Indexing Services
- Information Product Development Services
- Document Delivery Services

Unit 6. Extension Activities

- Colloquia, Seminars, Exhibitions, Book Talks
- Continuation Education Programmes

Unit 7. Library Cooperation

- Resource Sharing, Networks and Consortia and International and National Scenario

Research Methods and Statistical Techniques

Unit 1 : Research

- Concept , Meaning , Need and process of Research
- Types of Research - Fundamental and Applied
- Including inter disciplinary and multidisciplinary approach
- Research and Development of Scholarship

Unit 2 : Research Design

- Conceptualisation and operationalisation
- Types of Research Design
- Identification and formulation of problem
- Hypothesis; Nominal and Operational definition
- Designing Research Proposal
- Ethical aspects of Research
- Literature search - Print, Non - print and Electronic sources

Unit 3 : Research Methods

- Scientific Method
- Historical Method
- Descriptive Method
- Survey Method and Case Study Method
- Experimental Method and Delphi Method

Unit 4 : Research Techniques and Tools

- Questionnaire
- Schedule
- Interview
- Observation
- Scales and check lists
- Library Records and Reports
- Sampling Techniques

Unit 5 : Data Analysis and Interpretation

- Descriptive Statistics -Measures of Central Tendency
- Mean, Mode, Median
- Tabulation and Generalisation
- Measures of dispersion, variance and covariance
- Standard Deviation
- Graphical presentation of data - bar, Pie- line Graphs, histograms etc.
- Inferential Statistics
- Z-T test - Correlation
- Regression - linear and non - linear
- Chi Square Test
- Sociometry
- Statistical Packages - SPSS
- Statistical Graphics etc.

Unit 6 : Bibliometrics, Scientometrics, and Informetrics

- Concept and Definition
- Bibliometric Laws; Bradford's; Zipf', Lotka
- Bibliographic Coupling
- Obsolescence
- Citation Analysis
- Webometrics
- Citation Studies
- Informetrics
- Scientometrics

Unit 7 : Research Reporting

- Structure, Style, Contents
- Guidelines of Research Reporting
- Style Manuals - Chicago - MLA - APA etc.
- e-Citation and Methods of Research Evaluation
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Unit 8 : Current Trends in Library and Information Science Research