



**P.K.UNIVERSITY**  
SHIVPURI (M.P.)

**Faculty of Arts**

**Syllabus**

**for**

**Master of Library and Information Science  
(M.Lib. & I.Sc.)**

**P.K. UNIVERSITY, SHIVPURI (M.P.)**

**P.K. UNIVERSITY, SHIVPURI (M.P.)**  
**Faculty of Arts**  
**Master of Library and Information Science**  
**(M.Lib.& I.Sc.)**  
**(SEMESTER-I)**

| S.No. | Paper Code<br>(T: Theory; ) | Course Title                                 | Credits(L: Lecture ;<br>T: Tutorial;P:Practical |   |   |   | Exam.<br>Marks |            | Total<br>Marks |
|-------|-----------------------------|--|---|---|---|---|----------------|------------|----------------|
|       |                             |  | Credits   | L | T | P | CCE            | UE         |                |
| 1     | MINFOML101                  | Information,<br>Communication and Society    | 6   | 6 | 0 | 0 | 40             | 60         | 100            |
| 2     | MINFOML102                  | Information, Systems and<br>Programmes       | 6   | 6 | 0 | 0 | 40             | 60         | 100            |
| 3     | MINFOML103                  | Information Storage and<br>Retrieval Systems | 6   | 6 | 0 | 0 | 40             | 60         | 100            |
| 4     | MRESEML104                  | Research Methodology                         | 4   | 4 | 0 | 0 | 40             | 60         | 100            |
| 5     | MERESML105                  | E-Resources management                       | 2   | 6 | 0 | 4 | 40             | 60         | 100            |
|       |                             |  | <b>24(C)</b>                                    |   |   |   | <b>200</b>     | <b>300</b> | <b>500</b>     |

**(Semester-II)**

| S.No. | Paper Code<br>(T: Theory; ) | Course Title  | Credits(L: Lecture ;<br>T: Tutorial;P:Practical |   |   |   | Exam.<br>Marks |            | Total<br>Marks |
|-------|-----------------------------|---|---|---|---|---|----------------|------------|----------------|
|       |                             |   | Credits   | L | T | P | CCE            | UE         |                |
| 1     | MINFOML106                  | Information and<br>Communication Technology<br>(Theory)               | 4   | 6 | 0 | 0 | 40             | 60         | 100            |
| 2     | MINFOML107                  | Information, Communication<br>and Technology(Practical)               | 2   | 0 | 0 | 4 | 40             | 60         | 100            |
| 3     | MINFOML108                  | Management and Organisation<br>of Libraries andInformation<br>Centers | 6   | 0 | 0 | 0 | 40             | 60         | 100            |
| 4     | MRESEML109                  | Digital Library   | 6   | 6 | 0 | 0 | 40             | 60         | 100            |
| 5     | MERESML110                  | Content Management  | 6   | 6 | 0 | 0 | 40             | 60         | 100            |
|       |                             |   | <b>24(C)</b>                                    |   |   |   | <b>200</b>     | <b>300</b> | <b>500</b>     |

# **P.K. UNIVERSITY, SHIVPURI (M.P.)**

## **Faculty of Arts**

### **Master of Library and Information Science (M.Lib. & I.Sc.)**

#### **FIRST SEMESTER**

#### **Paper-I : Information, Communication and Society**

##### **Unit – 1 Information and Communication: Concepts**

Information: Characteristics, Nature, Value and its use Conceptual Difference between Data, Information and knowledge Trends in Information communication Generation of Information: Modes and forms Digital Information

##### **Unit – 2 Information Society**

Information Society- Concept, Definition, Characteristics. Role of information Society in Library Profession Policies relating to information, Censorship, Data Security, Right to Information Act, National Knowledge Commission. Changing role of library and information centers in information society.

##### **Unit – 3 Communication**

Communication : concepts and nature.  
Communication and its types : Intra-personal, Inter-personal and Mass Communication.  
Communication process : elements, cycle.  
Communication models - Shannon and Weaver's Lasswell's, Wilbur Schramm's  
Communication channels in information centers - Oral, Written and Visual  
Communication barriers.

##### **Unit – 4 Information Economics**

Information as a Economic resource, as a Marketable Commodity.  
Marketing of information product and services  
Cost analysis and E marketing

## **Unit – 5 Information Management**

Information Management- Concept, Definition, Tools.

Information Explosion, Information Revolution, web Based information, Inflow & Exponential growth.

### **SUGGESTED READINGS:**

1. Agrawal, S.S., Granthalaya and Samaj, Jaipur: RBSA Publisher, 1994.
2. Krishan Kumar, Library organization, Delhi, Har Anand, 1993.
3. Landheer, B., Social functions of libraries. 1957.
4. McColvin, L.R., The chance to read: public libraries of the world. 1956.
5. Sahai, S.N., Library and community. 1973.
6. Sharma, Pandey S.K., Library and society, Ed 2, Delhi: Granth Academy, 1998.
7. Vyas, S.D., Library and society, Jaipur : Panchsheel, 1993
8. Khanna, J.K., Library and Society, 1987.
9. Ranganathan, S.R, Five laws of library science, Ed.2.
10. Unesco : Public libraries, Their Mission, Paris: Unesco, 1961.
11. Vyas, S.D., Library and society, Jaipur : Panchahed, 1993.
12. Hill, Michael W., The impact of information on society : an exa
13. Agarwal,Shyam Sunder, Pustakalaya aur Samaj, Jaipur: R.B.S. Publishres, 1994.
14. Saxena, S.L., Pustakalaya Sangthan tatha Vyavasthapan,Bhopal: MP Hindi Granth Academy, 1988.
15. Khan, MTM, Information: Organization and communication, New–Delhi: ESS ESS Publication.
16. Khanna, J.K., Documentation and information: Services, system and techniques, Agra: Y.K. Publishers, 2000.
17. Sonal Singh, Universe of knowledge: Structure & development, Jaipur: Raj Publishers.

## **Paper- II : Information, Systems and Programmes**

### **Unit – 1 Information systems and organizations**

Information Organisation as a System: Basic Concepts, Types and Characteristics. Kinds of Information Systems: Libraries, Documentation Centers, Information centers, DataCenters, Information Analysis Centers, Referral Centers. Archives and Translation pools: Function and Services

### **Unit – 2 National Information systems**

Planning and Design of an Information System National Information Policy, National Information systems: NISCAIR , DESIDOC , National Digital Library of India (NDL), INFLIBNET, DELNET.

### **Unit – 3 Global Information systems**

Programmes and Activities of UNESCO, UNISIST, INIS , AGRIS, INSPEC and MEDLARS, NISSAT, etc. World Digital Library

### **Unit – 4 Information services**

Information Services - importance, need, types. Internet service - e-mail, facebook, youtube. Resource Sharing, Library Networks and Library Consortia, CSIR E-Journals Consortium, MOOC's, SWAYAM, SWAYAMPABHA, Digital Library Consortium

### **Unit – 5 Information Products**

Documentation Services, Translation Services, Bibliographical services. CAS , SDI, Document Delivery Service, Newsletter, In-house Journal, State of the Art Report, Trend Report. Reprographic service, Indexing and Abstracting.

### **SUGGESTED READINGS:**

1. Atherton, P. (1977). Handbook for information systems and services. Paris: Unesco.
2. Barua, B. P. (1992). National policy on library and information systems and services for India: Perspectives and projections. Bombay: Popular Prakashan.
3. Bawden, D. (1990). User-oriented evaluation of information systems and services. Aldershot: Gower.
4. Chaddha, K. (January 01, 2014). Marketing of Library and Information Products and Services. Chatterjee, Amitabha (2013). Elements of information analysis, consolidation and repackaging (IACR). Kolkata: Prova Prakashani.

5. Checkland, P., & Holwell, S. (1998). *Information, systems, and information systems: Making sense of the field*. Chichester: Wiley.
6. Chowdhury, G. G., & Chowdhury, S. (2011). *Information users and usability in the digital age*. New York: Neal-Schuman Publishers, Inc.
7. Choukhande, V. G. (2008). *Information needs and information seeking behaviour: Library and information science research*. Amravati, India: Shivneri Publisher
8. Cochrane, P. A. (1977). *Handbook for information systems and services*. Paris: Unesco.
9. Guinchat, C., Menou, M., & Unesco. (1983). *General introduction to the techniques of information and documentation work*. Paris: Unesco.
10. Hayes, R. M. (1974). *The national library network: its economic rationale & funding*. Washington: National Commission on Libraries and Information Science. International Atomic Energy Agency. (1979). *Orientation manual for INIS and AGRIS*. Vienna: International Atomic Energy Agency.
11. Kruzas, A. T., & Sullivan, L. V. (1978). *Encyclopedia of information systems and services: A guide to information storage and retrieval services, data base producers and publishers, online vendors*. Detroit: Gale Research Co.
12. Kumar, P. S. G. (2004). *Information analysis, repackaging, consolidation & information retrieval: Paper X and XI of UGC model curriculum*. Delhi: B.R. Publishing Corporation.
13. Lancaster, F. W. (1978). *Guidelines for the evaluation of information systems and services*. Paris: Unesco.
14. Lancaster, F. W. & Smith, L. C. (1983). *Compatibility issues affecting information systems and services*. Paris: Unesco, PGI & UNISIST.
15. Seetharama, S. (1997). *Information consolidation and repackaging: Framework, methodology, planning*. New Delhi: Ess Ess Publications.
16. Singh, Sewa. (2014). *Information analysis, consolidation and repackaging*. New Delhi: Atlantic Publishers & Distributors.

## **Paper-III : Information Storage and Retrieval System**

### **Unit – 1 Fundamental OF Information Retrieval System**

Information Retrieval System: Concepts, Purpose, Function, Component and Feature of IRS  
Information Retrieval Process and Search Strategy, Vocabulary Control Tools: Classification  
Schedules, Subject Heading Lists and Thesaurus Need, Structure and Construction of  
Thesaurus

### **Unit – 2 Indexing**

Indexing: Concept and Need, Concept of Indexing System: Pre and Post Co-ordinate Indexing  
System. Study of Pre Co-ordinate Indexing System : PRECIS, POPSI, Chain indexing. Study of  
Post co-ordinate indexing System: UNITERM indexing System Keyword Indexing System: KWIC,  
KWOC, Citation Indexing: Online citation Indexing system

### **Unit – 3 Bibliographic Descriptions**

Bibliographic Description: Concept, Definition and role. Study of ISBD, ISBN and ISSN,  
Standards for Bibliographic Record Formats Metadata Concept, Metadata Standards: Dublin Core,  
MARC 21 etc World Cat, Indcat

### **Unit – 4 Search Techniques and Information Retrieval**

Information Search Process, Search Strategies : Boolean Operations, Proximity Search, heuristic  
Search, Navigational Search etc., Internet Searching and Meta Search Engines Data Mining,  
Semantic Web, Ontology

### **Unit – 5 Abstracting**

Abstracting : Introduction, Types, Canners. Major International Abstracting Services. Web  
based abstract, Indian Science Abstract

## SUGGESTED READINGS:

1. Choudhary, G.G., Introduction to modern information retrieval, Ed.2, London : Facet Publishing, 2003.
2. Guha, B., Documentation and information: Services, techniques and systems, Calcutta: World Press, 1983.
3. Chakraborty, A.R. and Chakraborty, Bhubaneswar, Indexing : Principles, processes and products, Calcutta : World Press, 1984.
2. Fosket, A.C., Subject approach to information, Ed.5, London:Clive Bingley, 1996.
3. Varma, A.K., Trends in Subject indexing, Delhi: Mittal:Publication, 1984.
5. Tripathi,S.M., Pralekhan avam suchna sevayein tatha Networks, Agra: Y.K. Publishers, 1997.
6. Brown,A.G.,Introduction to subject indexing , Ed.2,London : Clive Bingley ,1982.
7. Chakraborty,A.R and Chakraborty, Bhubaneswar,Indexing principles processes and product,Calcutta : World Press, 1984.
8. Foskett, A.C.,The subject approach to information, Ed.5 , London : Library Association publishing ,1966.
9. Khanna, J.K., Documentation and information services : System and technology .Agra : Y.K.Publishers , 2000.
10. Varma,A.K., Trends in Subject indexing ,Delhi : Mittal Publication ,1984.
11. Austin,D.,PRECIS : A manual of concept analysis, Ed. 2, London : The British Library, 1984.
12. Bhattacharyya, G.,Elements of POPSI, In : Rajan, T.N., Subject indexing system Calcutta : IASLIC 1981
13. Chokraborty,A.R.,and Chakraborty ,Bhubaneswer, indexing principles : Processes and Products Calcutta : World Press 1984
14. Fosket , A.C., Subject approach to information Ed. 5 London : Clive Bingley 1996
15. Neelameghan, A.,D Subject heading as a system Annual Suminar Banglore , DRTC; Paper.K.,1971
7. Varma,A.K.,Trend in subject indexing Delhi : Mittal Publications 1984



## **Paper- IV : Research Methodology**

### **Unit – 1 Research**

Research: Concept, Need, Process and Types.  
Research Design  
Research Proposal  
Hypothesis  
Research Ethics  
Research report writing- Structure and Style

### **Unit – 2 Research Methods**

Scientific Method  
Historical Method  
Descriptive Method  
Survey Method  
Case Study Method  
Experimental Method

### **Unit – 3 Research Techniques**

Sampling Techniques  
Data collection methods : Questionnaire, Schedule, Interview, Observation.

### **Unit – 4 Data Analysis and Interpretation**

Measures of Central Tendency : Mean, Median, Mode, Dispersion, Correlations, linear regression, Chi-Square test, t-test z-test, f-test  
Presentation of Data : Tabular, Graphic, Bar Diagram and Pie Chart  
Report Writing : Style, Structure.  
Statistical Data Analysis – Use of Statistical Packages (SPSS and others).  
Plagiarism: Definition and Concepts.  
Plagiarism Software: URKUND, TURNTIN etc.

### **Unit – 5 Metric Studies and Style manuals**

Bibliometrics, Scientometrics, Informetrics, Webometrics, Librametry.  
Bibliographical Reference, Reference Citation, Bibliography, Footnotes, Quotation etc.  
Reference Management Tools.  
Reference Styles, MLA, APA, Chicago

## SUGGESTED READINGS:

1. Boyce, R.R., Meadow, C.T. & Kraft, D.H. (1994). *Measurement in information science*. San Diego, CA: Academic Press.
2. Busha, Charles A, & Harter, Stephen P. (1980). *Research methods in librarianship: techniques and interpretations*. New York: Academic Press. Connaway, Lynn Silipigni & Powell,
3. Ronald R. (2010). *Basic research methods for librarians*. 5th ed. Santa Barbara, CA: Libraries Unlimited.
4. Das, N.G. (2009). *Statistical methods*. Calcutta: Tata McGraw-Hill. Glazier, Jack D, & Hall, Peter M. (1992). *Qualitative research in information management*. Englewood, CO: Libraries Unlimited. Goon, 5. A.M., Gupta, M.K. and Dasgupta, B. (1978). *Basic statistics*. Calcutta: World Press.
6. Gorman, G.E. & Clayton, Peter. (2004). *Qualitative Research for the Information Professional: a practical handbook*. 2nd ed. London: Facet.
7. Gupta, S.P. (2002). *Statistical Methods*. New Delhi: Sultan Chand.
8. Donald, H. K. & Boyce, Bert R. (1991). *Operations research for libraries and information agencies: techniques for the evaluation of management decision alternatives*. San Diego: Academic Press.
9. Hafner, Arthur W. (1997). *Descriptive statistical techniques for librarians*. (2nd ed.). Chicago: American Library Association.
10. Hernon. P. (1989). *Handbook of statistics for library decision making*. Norwood, NJ: Ablex.
11. Khan, M. A. (2002). *Research methods in library and information science*. New Delhi: Cosmo Publications.
12. Krishan Kumar (1992). *Research methods in library in social science*. New Delhi: Vikas.
13. Lawal, I. O. (2009). *Library and information science research in the 21st century: a guide for practicing librarians and students*. Oxford, UK: Chandos Pub
14. Losee, Robert M., Jr., & Worley, Karen A. (1993). *Research and evaluation for information professionals*. San Diego: Academic Press.
15. Lynam, P., Slater, M. & Walker, R. (1982). *Research and the practitioner: dissemination of research results within the library-information profession*. London: Aslib.
16. Martyn, John, & Lancaster, F. Wilfrid. (1981). *Investigative methods in library and information science: an introduction*. Arlington, VA: Information Resources Press.
17. Moore, N. (2006). *How to do research*. 3rd ed. London: Facet Publishing. Pickard, Alison Jane. (2012). *Research Methods in Information*. 2nd ed. London: Facet.
18. McClure, Charles R. & Hernon, Peter, Ed. (1991). *Library and Information science research: perspectives and strategies for improvement*. Norwood, NJ: Ablex Publishing Corporation.
19. Simpson, I. S. (1990). *How to interpret statistical data: A guide for librarians and information scientists*. London: Library Association.
20. Slater, Margaret, Ed. (1990). *Research methods in library and information studies*. London: Library Association.
21. Stephen, Peter, & Hornby, Susan. (1995). *Simple statistics for library and information professionals*. London: Library Association.

# **Paper- V : E-Resources Management**

## **Unit – 1 Information sources**

Information sources- categories, feature, organization  
Information sources Vs Information resources  
Roles of Information sources in education and research  
Documentary source  
Non print materials including digital information sources

## **Unit – 2 Digital Information Literacy**

Information Literacy- element, standard, role in knowledge society,  
Digital Information skills- Programme, initiatives and channels  
Skill related to searching, browsing  
Managing Social Media

## **Unit – 3 Accessing Electronic Resources**

Accessing electronic resources  
Accessing union catalogue  
Accessing bibliographic databases  
Accessing electronic alerting services

## **Unit – 4 Open Access Resource**

Open Access- what and why  
Open Access- Gold path and Green path  
Open Access ETD, Text Book

## **Unit – 5 Open Educational Resources (OER)**

OER- what and why  
OER- Programme and Initiatives  
OER Repositories  
OER and MOOC  
OER and swayam

## **SUGGESTED READINGS:**

1. Ellingsen, M., (2004). Electronic Resource Management Systems, *LIBER Quarterly*, 14 (3-4), p. None. DOI: <http://doi.org/10.18352/lq.7782>, accessed on 9-05-2018 from <https://www.liberquarterly.eu/articles/10.18352/lq.7782/>
2. Singh, Neena (2001). Internet: Importance and usage for library and Information professionals, *DESIDOC Bulletin of Information Technology*, Vol., 21, No. 3, 17-28.
3. Foulonneau, M, *Metadata for digital resources: implementation, systems design and interoperability*, 2008, Oxford, Chandos
4. Resnick, T, Ugaz, A, Burford and N, Carrigan, E, *E-resources: transforming access services for the digital age*, *Library Hi Tech*, 2007, 26(1), 141–156.
5. Collins, M, *Electronic resource management systems (ERMS) review*, *Serials Review*, 2008, 34(4), 267–299.

## **Second Semester**

### **Paper-I : Information and Communication Technology (Theory)**

#### **Unit – 1 Web Technology in Libraries**

ICT : Definition, Concepts, Need, Scope and objectives.  
Implication of www on Library Website, Web OPAC  
Web 2.0, 3.0: Feature and Function  
Web Directories, Subject gateways, Library Portal  
Weblogs (Blogs), Podcasts, RSS Feeds, Instant Messaging, Wikis, Flickr etc

#### **Unit – 2 Integrated Library Automation and Networking System**

Open Source Library Software and its Application  
Web Based Library Management Software  
Library Software Security Parameters  
Virtual Library

#### **Unit – 3 Multimedia and Institutional Repositories**

Multimedia: Definition and Concept  
Multimedia application in Libraries  
Image creation using Photoshop, Coral Draw etc.  
Institution Repositories: Greenstone Digital Library, Dspace etc.

#### **Unit – 4 Introduction to Network**

Computer Networks: Basic, Types, Components, Categories  
Wireless Networking and Emerging Networking Technologies  
Network Software: Network Operating System, Domain Name system and Network management system

#### **Unit – 5 Emerging Technologies in Libraries**

RSS Feed Technologies and use in Libraries  
Library Security Technologies- RFID, Barcodes, Smart Card and CCTV etc.  
Video and Audio Conferencing  
Digital content Management System  
Artificial Intelligence and Libraries

## **SUGGESTED READINGS:**

1. BOSS (Sanjoy K). Hardware and Software of personal computers. 1991. Wiley Eastern; New Delhi
2. HUNT (Roger). and SHSLIE (John). Computers and commonsense. 1990. 4th ed. Prentice-Hall; New Delhi.
3. LAST (R). MS DOS revealed. 1991. Galgotia; New Delhi.
4. MAHAPATRA ( P K). The Computer in Library Services. 1985. World Press; Calcutta.
5. NEW PETER (G). Reprography for librarians. 1975. Clive Bingley; London .
6. RAJARAMAN (V). Fundamentals of computers. 1991. Prentice – Hall; New Delhi.

## **Paper-II : Information Communication and Technology: (Practice)**

### **Unit – 1 Website Designing and Navigation Tools**

Designing static and Dynamic Library Website  
Developing Web Directories, Subject Gateway and Library Portal  
Designing and Developing Library Blogs, RSS Feed, Wikis and Flickr etc.  
Image Creation using Photoshop etc.

### **Unit – 2 Integrated Library Management Systems and Institutional Repositories**

Installation and configuration, Hands on Functional Modules of an integrated library Management system (Open Source)  
Web based library Management software  
Installation and Configuration, Hands on Collection building using Open Source Software (GSDL/Dspace)

### **Unit – 3 Audio and Video Conference**

Audio Conferencing  
Video Conferencing

### **Unit – 4 Advanced searching and Metadata Creation**

Downloading MARC-21 records using Z39.50 records  
Federated Search  
Creation of Metadata

### **Unit – 5 Software Practice**

Customization of GSDL /Dspace

## **SUGGESTED READINGS:**

1. BRODY (E W). Communication tomorrow: new audiences, new technologies, new media.1990. Praeger; New York
2. CAWKELL (A E). World information technology manual. Vol. I. computers, telecommunications and information processing. Vol. II. Systems and services.1991. Elsevier; Amsterdam.
3. CRAWFORD (Walf). Current technologies in the library: an informal overview.1988. G. K. hall; Boston.
4. KENDALL (P A). Introduction to systems analysis and design: a structures approach.1987. Allyn& Bacon; Boston.
5. RAJARAMAN (V). Fundamentals of computers. 1991. Prentice – Hall; New Delhi.
6. <https://www.dspace.com>
7. <http://gsdl.org.in>
8. <https://www.loc.gov › marc>
9. <http://www.loc.gov › z3950>



# **Paper- III : Management and Organization of Libraries and Information centers**

## **Unit – 1 Management**

Concept, Definition and Scope  
Function and Principles of Management  
Scientific Management  
Total Quality management- Definition, Concept, Elements

## **Unit – 2 Planning and Human Resource**

Planning- Definition, Need and Purpose  
Organizational Structure and Library Committee  
Performance Evaluation  
Library Building and Infrastructure Planning  
Job description and analysis with reference to libraries  
Human Resource Development

## **Unit – 3 Library Finance**

Source of Finance  
Budget- concept, definition, purpose and techniques for budget preparation  
Budget Management

## **Unit – 4 Library House Keeping Operations**

Different section of Library and Information Centre  
Functions of Library Housekeeping operation

## **Unit – 5 Library Records and Statistics**

Library rules, stock verification  
Weeding out policies and procedure  
Types of reports, content and style of annual reports, Library statistics etc.

## SUGGESTED READINGS:

1. ANDERSON (R). Management information systems and computers: an introduction. 1986.
2. Application of management techniques to library and information systems, 12th IASLIC conference, Roorkee, 1979.
3. Conference on the corporate approach to library management. Proceeding ed by P.A.Thomas and V.A.Woord. Aslib; London.1974.
4. JONES (Noragh) and JORDAN (Peter). Case studies in library management . 1988. Clive Bingley; London.
5. KHANNA (J K) . Fundamentals of library organization . 1984 . Ess Ess ; New Delhi.
6. MITTAL(R L) . Library administration: theory and practice. 1983. 5th ed. Metropolitan; New Delhi.
7. MOOKHERJEE (S K) and SENGUPTA (B). Library organization and library administration .1972. World Press; Calcutta.
8. NARAYANA (G J) . Library administration. 1959. 2nd ed. Asia house; Bombay.
9. RANGANATHAN (S R) . Library manual. SEETHARAMA (S) . Guidelines for planning of libraries and information centers .1990 .
10. SINGH (M). Library and information management: theory and practice. 1983 . IBT; Delhi.

## **Paper- IV : Digital Library**

### **Unit – 1 Digital Library**

Digital Library- Meaning and Definition, Objectives, Characteristic, Evolution  
Digital Library Collection

### **Unit – 2 Content Creation**

Electronic documents file and file formats.  
Study of different file formats- JPEG, MPEG, GIF, TIFF and PDF  
Digitization- Scanning, OCR

### **Unit – 3 Creating Web Documents**

Markup Language, SGML, HTML and XML  
Studying and Creating documents in HTML  
HTML editors and tools

### **Unit – 4 Digital Library Architecture**

Elements of Digital Library  
DOI, Open URL, Cross reference and other aspects  
Metadata- MARC-21, Dublin core, Access control and DRM  
Security and Parameters issues

### **Unit – 5 Digital Library Software**

Studying and feature of GSDL/DSpace  
Installation and developing collection using GSDL/DSpace  
Copyright issues in the development of Digital Library

## SUGGESTED READINGS:

1. Argerich, K. (2004). Professional PHP programming. Mumbai: SPD/Apress Reprints.
2. Arms, W. (2000). Digital libraries. Cambridge MA: MIT Press,.
3. Bayross, I. (2000). Using Apache, MySQL, PHP and PERL on Linux. New Delhi: BPB Publications.
4. Bhatnagar, S. (2002). Information and communication technology in development: cases from India. New Delhi: Sage.
5. Barnes, S. J. (2004). Becoming a digital library. New York: Marcel Dekker.
6. Brophy, P. (2001). The library in the twenty-first century. London: Library Association.
7. Calhoun, Karen. (2013). Digital libraries. London: Facet Publishing.
8. Caplan, Priscilla. (2000). Metadata fundamentals for all librarians. Chicago:: ALA.
9. Chowdhury, G.G. & Chowdhury, S. (2003). Introduction to digital libraries. London: Facet Publishing.
10. Chowdhury, G.G. & Foo, Schubert, Ed. (2012). Digital libraries and information access: research perspectives. London: Facet Publishing.
11. Verheul, I., Tammaro, A. M., & Witt, S. (2010). Digital Library Futures: User Perspectives and Institutional Strategies. Berlin: De Gruyter Saur.
12. Fox, E. A., & Torres, R. S. (2014). Digital Library Technologies: Complex Objects, Annotation, Ontologies, Classification, Extraction, and Security. San Rafael: Morgan & Claypool Publishers.
13. Gorman, G.E, & Dorner, D.G. (2004). Metadata applications and management. London: Facet Publishing,.
14. Lesk, M. (2004). Understanding digital libraries. 2nd ed. San Francisco
15. Oleck, J., & Primary Research Group. (2012). Creating the digital library. New York: Primary Research Group, Inc.
16. Morgan & Claypool. Stewart, C. (2010). The academic library building in the digital age: A study of construction, planning, and design of new library space. Chicago, Ill: Association of College and Research Libraries.
17. Tanenbaum, A.S. (2001). Computer networks (3rd ed.). New Delhi: Prentice-Hall.
- 18.. Thomas A. Peter. (2000). Library Trends: Special issue: Assessing digital library services,

# Paper- V : Content management

## **Unit - 1**

Introduction to Content Management system  
Benefits, Principles, Architecture, system and Data integration in CMS

## **Unit - 2**

Creating and Managing Web Page  
Content on Web Page  
Fundamental of Planning of Dynamics websites

## **Unit - 3**

Overview of CMS  
Dynamics and Flexible websites  
Evolution of CMS

## **Unit - 4**

Application of CMS  
CMS and Community Information system  
Document Management  
Record management Digital  
Assets management

## **Unit - 5**

Practice of CMS Like Word press, Joomla, Drupal and other to create and flexible websites

## **SUGGESTED READINGS:**

1. ANDREWS( Judith ) , LAW(Derek).Digital Libraries: Policy, Planning and Practice
2. CHOWDHURY(G G) and CHOWDHURY(SUDATTA) . Introduction to Digital Libraries. 2003
3. LESK(Michael). Understanding Digital Libraries.2004
4. WITTEN(Ian H.), BAINBRIDGE(David) and NICHOLS(David M.) . How to Build a DigitalLibrary. 2010