

**SYLLABUS**  
**POST GRADUATE COURSE**  
**LIBRARY AND INFORMATION SCIENCE**  
**(SEMESTER SYSTEM)**

**2022-2023**



**SCHOOL OF LIBRARY AND INFORMATION SCIENCE**  
**GANGADHAR MEHER UNIVERSITY,**

**AMRUTA VIHAR**

**SAMBALPUR-768004, ODISHA**

**Vision**

To become one of the best schools in the field of library and

information science and prepare efficient skilled professional who are ready to meet the technological challenges of contemporary ever-growing knowledge society.

### **Mission**

- The mission of the school is to contribute through the pursuit of excellence in teaching and other innovative academic endeavours pertaining to LIS education and research, to the process of developing capable and dynamic professionals.
- It is the endeavour of the school to contribute in the construction of knowledge, develop scientific research and promote life-long learning.
- To equip students with skills essential to carry out library housekeeping activities and to provide various library and information services using Information and Communication Technologies.

**Post Graduate  
Programme Structure  
School of Library and Information Science  
G.M. University, Sambalpur  
Revised Syllabus 2021-22**

Post Graduate Programme comprising two years, will be divided into 4 (four) semesters each of six months duration.

Year	Semesters	
First Year	Semester I	Semester II
Second Year	Semester III	Semester IV

The detail of title of papers, credit hours, division of marks etc of all the papers of all semesters is given below.

1. There will be two elective groups namely:

- Discipline Specific Elective in Sem II.
- Interdisciplinary Elective in Sem III.

A student has to select one of the DSE paper in Sem II and one of the paper in Sem III as offered by the respective department at the beginning of the semester II and semester III respectively.

2. Each paper will be of 100 marks out of which 80 marks shall be allocated for semester examination and 20 marks for internal assessment (Mid Term Examination). 3. There will be four lecture hours of teaching per week for each paper.

4. Duration of examination of each paper shall be three hours.

5. Pass Percentage:

- The minimum marks required to pass any paper shall be 40 percent in each paper and 40 percent in aggregate of a semester.
- No students will be allowed to avail more than three (3) chances to pass in any paper inclusive of first attempt.

#### Semester-I: Part-I

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
101	Foundation of Library and Information Science	20	80	100	3	4

102	Organization of Knowledge – Classification Theory	20	80	100	3	4
103	Organization of Knowledge – Cataloguing Theory	20	80	100	3	4
104	Management of Library & Information Centres	20	80	100	3	4
105	Organization of Knowledge – Classification Practice and Cataloguing Practice	-	100	100	3	4
<b>Total</b>				<b>500</b>		<b>20</b>

### Semester-II: Part-I

Papers		Marks		Total Marks	Durati on (Hrs)	Cre dit Hou rs
Paper No	Title	Mid Term	End Term			
201	Search Strategies and Techniques	20	80	100	3	4
202	Information Sources & Services	20	80	100	3	4
203	Basics of Information and Communication Technology & Application in Libraries	20	80	100	3	4
204	Personality Development & Communication Skill	20	80	100	3	4
205	ICT and Library Management Software-Practice	-	100	100	3	4
<b>DSE Papers* (Any one)</b>						

206 A	Preservation & Conservation of Library Materials	20	80	100	3	4
206 B	Community Information Service	20	80	100	3	4

206 C	Information Resource Development	20	80	100	3	4
Total				600		24

\*Discipline Specific Elective Paper. Any one paper can be opted by students of this

Department. **Semester-III: Part-II**

Papers		Marks		Total Marks	Duration (Hrs)	Credit Hours
Paper No	Title	Mid Term	End Term			
301	Information Retrieval	20	80	100	3	4
302	Digital Library and Content Management	20	80	100	3	4
303	Academic Library System	20	80	100	3	4
304	Web Technologies	20	80	100	3	4
305	Internship and Content Management Software Practice	-	100	100	3	4
<b>IDSE Papers**</b>						
306 A	Intellectual Property Rights & Copyright	20	80	100	3	4
306 B	Internet & Its Applications	20	80	100	3	4
306 C	Electronic Publishing (E-Publishing)	20	80	100	3	4
<b>Total</b>				<b>600</b>		<b>24</b>

\*\*Inter Discipline Specific Elective Paper. Any one paper can be opted by students of other Departments.

**Semester-IV: Part-II**

Papers	Marks	Total Marks	Duration	Credit Hours
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Paper No	Title	Mid Term	End Term	Marks	(Hrs)	
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401	Research Methodology	20	80	100	3	4
402	Information System and Networks	20	80	100	3	4
403	Knowledge Management	20	80	100	3	4
404	Information Literacy	20	80	100	3	4
405	Dissertation/Project and Viva-voce	-	100	100	3	4
<b>Total</b>				<b>500</b>		<b>20</b>
<b>22 Papers</b>	<b>Grand Total</b>			<b>2200</b>		<b>88</b>

**SEMESTER-I  
PART-I**

**Paper No: 101**

**Paper Name: FOUNDATION OF LIBRARY AND INFORMATION SCIENCE**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	<b>20</b>	<b>80</b>	<b>100</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>04</b>			

**Objectives: 1.** To acquaint the students with the basic concept and philosophy of Librarianship

**2.** To acquaint with basic concept of Information Communication Technology.

**Unit 1: Libraries- Concepts, Types, Their Role and Development**

- Types of Libraries: Features and Functions, Five Laws of Library Science - Growth & Development of Libraries in UK, USA and India
- Library Extension Services
- Library Legislation, Press and Registration of Books Act, Delivery of Books and Newspapers Act

## **Unit 2: Professional Associations and Organizations**

- Professional Ethics in Librarianship
- Professional Associations: IFLA, ILA, IASLIC, SLA
- Information and Documentation Organizations: UNESCO, NISCAIR, DESIDOC, NASSDOC

## **Unit 3: Information and Communication**

- Data, Information and Knowledge: Conceptual Difference
- Information Transfer Cycle, Information as Resource
- Communication: Channels, Media, Models and Barriers
- Information Society and National Information Policy

## **Unit 4: Library and Information Users'**

- Information Users': Types and Characteristics
- Information Needs, Information Seeking Behaviour Models
- User Education & User Study
- Electronic/Digital Literacy

**Course Outcomes:** After completion of the course, students will be able

CO-1 To understand the basic concept and philosophies of the subject

CO-2 To identify the professional associations and their role in the field.

CO-3 To be abreast with the concept of data, information and knowledge

CO-4 To understand the different models and their application in information science

## **RECOMMENDED BOOKS**

1. Amudhavalli, & Singh, A. & J. (2010). *Challenges and changes in librarianship papers in honour of professor sewasingh in 2 vols.*
2. Brynteson, S., & Information, C. for N. (1991). *Information policies: A compilation of position statements, principles, statutes, and other pertinent statements.* Washington, D.C. : Coalition for Networked Information.
3. Esperanza, M. (1994). *Perspective of library movement in india: An account of various facets and phases of indian library movement and the work and contribution of prof. P.N. kaula, a tribute on his 71st birthday.*
4. Evans, W., & Baker, D. (2011). *Libraries and society: Role, responsibility and future in an age of change.* Elsevier.
5. Feather, J. (1998). *The information society: A study of continuity and change.* Library Assn

Pub Limited.

6. Khan, R. (2006). *Introduction to library science*. SBS Publishers.
7. Khanna, J. K. (1987). *Library and society*. New Delhi: EssEss Publications.
8. Kumar, P. S. G. (2003). *Foundations of library and information science [vol.1] Paper 1 of ugc model curriculum*.
9. Kumar, S. & Sah, Leena. (2000). *Public Library Act in India*, New Delhi: EssEss Publications.
10. McBride, P. K. (2003). *Career award information and communication technology: Foundation level*. Cambridge University Press.
11. Ngurtinkhuma, R. K. (2011). *Public library in india: Impact on socio-cultural and educational development of mizoram*.
12. Prasher, R. G. (1991). *Information and its communication*. New Delhi: Medallion Press.
13. Rai, A. N. (2000). *Communication in the digital age*. New Delhi: Author Press.
14. Ranganathan, S. R. (2006). *The five laws of library science*. EssEss Publication.
15. Rubin, R. E., & Rubin, R. G. (2020). *Foundations of library and information science: Fifth edition*. ALA Neal-Schuman.

**Paper No: 102**

**Paper Name: ORGANIZATION OF KNOWLEDGE – CLASSIFICATION THEORY**

Credit Distribution Mid-Term En						
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objectives:**

1. To apprise the students with the organization of knowledge with different basic concepts and philosophies of library classification.
2. Grasp the meaning of terms and their use in the theory and practice of library classification.



3. Know the different schemes of library classification being used today for the organization of knowledge.
4. Obtain an insight into the application of the postulational approach to library classification

### **Unit 1: Knowledge Organization**

- Universe of Knowledge/Subjects: Nature and Attributes
- Modes of Formation of Subjects
- Knowledge Classification and Library Classification; Static & Dynamic Theories of Classification

### **Unit 2: Classification Schemes**

- Species of Library Classification Schemes
- Salient Features of DDC, UDC, and CC
- Mapping of Subjects in DDC, UDC and CC

### **Unit 3: Library Classification Theory**

- Definition, Need and Purpose of Classification
- Planes, Canons, Principles, Fundamental Categories, Postulates, Facet Analysis and Facet Sequence
- Phase Relation, Common Isolates, Devices, Mnemonics

### **Unit 4: Notational Techniques and Recent Trends**

- Notation: Definition, Types, Functions, Qualities and Techniques
- Design and Development of Classification Schedules
- Recent Trends in Library Classification

**Course Outcomes:** After completion of the course, students will be able

CO-1. To understand various issues in library classification.

CO-2 To Understand the functions of different classification schemes.

CO-3 To become aware of the recent trends and developments in the subject.

## **RECOMMENDED BOOKS**

1. Broughton, V. (2004). *Essential classification*. Facet Publishing.
2. Husain, S. (1993). *Library classification: Facets and analyses*. B. R. Publishing.
3. Kao, M. L., & Carter, R. C. (2003). *Cataloging and classification for library technicians*. Mumbai: Jaico.

4. Ranganathan, S. R. (2006). *Philosophy of library classification*. EssEss Publication.
5. Sonal, S. (1998). *Universe of knowledge: Structure & development*. Raj Publishing.
6. Sood, S. P. (1998). *Universe of Knowledge and Universe of Subjects*. G. Star Printers.
7. Dhiman, A. K., & Rani, Y. (2005). *Learn library management: Learning library science series*. EssEss Publication.
8. Kumar, P. S. G. (2003). *Knowledge organization, information processing and retrieval: Theory*. B. R. Publishing.
9. Jennex, M. E. (2008). *Knowledge management: Concepts, methodologies, tools, and applications*. IGI Global.
10. Pathak, L. P. (2000). *Sociological terminology and classification schemes*. Mittal Publications.
11. Taylor, A. G., Joudrey, D. N., & Miller, D. P. (2015). *Introduction to cataloging and classification*. Libraries Unlimited.

**Paper No: 103**

**Paper Name: ORGANIZATION OF KNOWLEDGE – CATALOGUING THEORY**

<b>Credit Distribution</b>						
<b>Mid-Term En</b>						
<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	<b>20</b>	<b>80</b>	<b>100</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>04</b>			

**Objectives:**

1. To acquaint the students with the organization of knowledge with various concepts and philosophies of library cataloguing.
2. To explain different types of catalogues, Catalogue codes as well as Laws, Canons and Principles in the context of cataloguing.
3. To discuss the need and importance of bibliographic standards, filing rules and subject headings.
4. To describe different types of bibliographic record format and its importance.

### **Unit 1: Cataloguing Principles**

- Catalogue: Definition, Objectives, Functions
- Types of Catalogue and Physical Forms of Catalogue
- Principles of Cataloguing: Ranganathan's Cannon, Paris Principles
- Introduction to Catalogue Codes: CCC, AACR-IIR

### **Unit 2: Entry Elements, Filing Rules & Subject Headings**

- Kinds of Entries and their Elements of Description
- Elements of Bibliographic Description of Non-Book Material (AACR-IIR) - Rules for Choice and Rendering of Headings in AACR –IIR
- Subject Heading Lists: Sears List & LCSH

### **Unit 3: Standards of Bibliographic Description**

- ISBD, FRAD (Functional Requirements for Authorized Description), GARR (Guidelines for Authority Records and References), RDA (Resource Description and Access)
- Standards for Bibliographic Information Interchange and Communication- ISO 2709, Z39.50, Z39.71
- ISBN & ISSN

### **Unit 4: Bibliographic Record Formats & Other Aspects**

- Bibliographic Records Format- MARC 21, UNIMARC, CCF
- Cataloguing of E-Resources- Metadata Standards (Dublin Core)
- Derivatives of Cataloguing (Copy Cataloguing)

**Outcomes:** After studying this paper, students shall be able to:

CO.1 Understand the basic concept, various forms, laws, canons, principles of library catalogue.

CO 2. Comprehend the importance of cataloguing codes, filing rules and subject headings in performing cataloguing work in libraries

CO 3. Understand the different entries of library catalogue

CO 4. Know about the various standards of bibliographic descriptions.

CO 5. Know the standards for bibliographic interchange and communication. CO 6. Explain the current trends in library cataloguing

### **RECOMMENDED BOOKS**

1. Andrew, P. G. (2014). *Cataloging sheet maps: The basics*. Routledge.

2. Association, A. L., Association, C. L., & Britain), C. I. of L. and I. P. (Great. (2004). *Anglo-American cataloguing rules*. Amer Library Assn.
3. Aswal, Rajinder Singh. (2004). *Marc 21: Cataloguing format for 21st century*. EssEss Publication.
4. Carter, R. C., & Kao, M. L. (2020). *Cataloging and classification for library technicians, second edition*. Routledge.
5. Dhawan, K. S. (1997). *Online cataloguing systems*. Commonwealth Publication.
6. Dhiman, A. K. (2004). *Cataloguing of non book materials*. EssEss Publication.
7. Gredley, E., Hopkinson, A., Association, C. L., & Association, A. L. (1990). *Exchanging bibliographic data: MARC and other international formats*. Canadian Library Association ; London : Library Association ; Chicago : American Library Association.
8. Hagler, R. (1997). *The bibliographic record and information technology*. American Library Association.
9. Kumar, G., & Kumar, K. (2004). *Theory of cataloguing*. Delhi : Vikas Publishing House.
10. Leigh, Gernert. (2003). *A Text Book of Cataloguing*. (2003). Dominant Publishers.
11. Mitchell, A. M., & Surratt, B. E. (2005). *Cataloging and organizing digital resources: A how-to-do-it manual for librarians*. Neal Schuman Pub.
12. Roe, S. K. (2013). *The audiovisual cataloging current*. Routledge.
13. Singh, S. N., & Prasad, H. N. (1985). *Cataloguing manual AACR-II*. B. R. Publishers.
14. Sood, S. P. (1999). *Theory of Library Cataloguing*. Raj Publishing House
15. Taylor, A. G., Joudrey, D. N., & Miller, D. P. (2015). *Introduction to cataloging and classification*. Libraries Unlimited.
16. Viswanathan, C. G. (2008). *Cataloguing theory and practice: A guide to the student of library science*. EssEss.

**Paper No: 104**

**Paper Name: MANAGEMENT OF LIBRARY & INFORMATION CENTERS**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective:** To apprise the students and making them aware of the various management techniques in organization of library & information centers.

**Unit 1: Management: Concept and Principles**

- Schools of Management Thought
- Principles of Scientific Management in Libraries and Information Centers - Elements of Management Process (POSDCORB)
- Total Quality Management, Change Management, Disaster Management, Crisis Management, Marketing of Library & Information Services
- Project Management- PERT/CPM, SWOT Analysis, MIS, DSS
- Library Committee- Types and Functions

**Unit 2: Physical Resource Management and Library Operations**

- Library Building: Site, Selection, Planning
- Furniture, Fittings and Equipments: Standards and Specifications
- System Analysis and Design in Library Operations
- Collection Development and Management – Acquisition, Maintenance, Stock Verification, Weeding out Policy and Procedures
- Preservation and Conservation

**Unit 3: Human Resource Management**

- Organizational Structure
- Job Description and Analysis: Job – Evaluation
- Inter – Personal Relations
- Recruitment Procedures
- Motivation: Group Dynamics
- Training and Development
- Performance Appraisal

**Unit 4: Financial Resource Management**

- Resource Mobilization and Outsourcing
- Budgeting, Accounting and Auditing
- Budgetary Control

**Outcomes:**After studying this paper, students shall be able to

CO 1 Know how Library & Information Centres are managed

CO 2 Know the use and application of modern management techniques in Library and Information center management

era  
CO 3. To develop skills of Library Professionals required by the recruiters in the changing

CO 4 To develop a taxonomical hierarchy and construct a group of Library & Information Science professionals who can work in reputed organizations and manage the Library & Information Centres smoothly.

### RECOMMENDED BOOKS

1. Beardwell, I., & Holden, L. (1997). *Human resource management: A contemporary perspective*. Pitman Publishing.
2. Bryson, J. (1990). *Effective library and information centre management*. Jaico Pub. House
3. Drucker, P. F. (2001). *Management challenges for the 21st century*. HarperBusiness.
4. Evans, G. E. (2019). *Management basics for information professionals* (2nd ed.). Libraries Unlimited.
5. Ginn, M. L., Smith, J. R., & Kallaus, N. F. (2004). *Records management (7th ed.) With disk and practice set with disk: (2 books with disks)*. South-Western Pub.
6. Johnson, P. (2009). *Fundamentals of collection development and management*. American Library Association.
7. Kotler, P. (2006). *Marketing management* (11th ed.). Pearson.
8. Narayana, G. J. (1991). *Library and information management*. Prentice Hall of India.
9. Paton, P. R. A., & McCalman, J. (2008). *Change management: A guide to effective implementation*. SAGE.
10. Ramaswamy. (2009). *Marketing management: Global perspective, indian context*. Macmillan.
11. Rowley, J. (2016). *Information marketing*. Routledge.
12. Stueart, R. D., Moran, B. B., & Morner, C. J. (2012). *Library and information center management, 8th edition*. ABC-CLIO.

**Paper Name: ORGANIZATION OF KNOWLEDGE – CLASSIFICATION PRACTICE AND CATALOGUING PRACTICE**

<b>Credit Distribution Mid-Term En</b>						
<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	<b>-</b>	<b>100</b>	<b>100</b>
<b>0</b>	<b>0</b>	<b>4</b>	<b>04</b>			

**Objectives:** To familiarize the students with the building class numbers of various titles using DDC and cataloguing of various types of library resources

(A) Assigning Class Numbers representing Simple, Compound, Complex Subjects according to DDC (Latest available edition)

(B) Preparation of Main and Added Entries of Documents according to AACR – IIR (Latest edition) having the following items,

- Single Responsibility and Shared Responsibility, Mixed Responsibility • Corporate Author, Continuing Resources (Serials), Pseudonyms and Anonymous works • Classics, Non-Book Materials (Cartographic Materials & e-resources) • Assigning Subject Heading to Documents according to Sears List of Subject Heading (Latest edition)

(C) **Note:** In Practical Paper total marks will consist as under:

End Term Examination – [A (50 marks) + B (50 marks) =100 marks]

**Outcomes:** After studying this paper, students shall be able to:

CO 1 Classify library resources by using DDC scheme and can catalogue the library resources by using AACR II (R) and use subject headings.

CO.2. Develop a clear-cut idea and general view of cataloguing various types of special materials as well as electronic resources.

**RECOMMENDED BOOKS**

- Association, A. L. (1999). *Anglo-American cataloging rules*. American Library Association.
- Bristow, B. A., & Farrar, C. S. (2014). *Sears list of subject headings*. H. W. Wilson.
- Dewey, M. (2011). *Dewey Decimal Classification and Relative Index: Relative index*.

OCLC Online Computer Library Center.

- Dhyani, P. (2002). *Classifying with dewey decimal classification (ed. 19th and 20th)*. EssEss Publications.
- Kaushik, S. K. (2012). *Dewey decimal classification: A practical manual of 23rd edition*. EssEss Publication.
- Khan, M. T. M. (2005). *Anglo-American cataloguing rules: AACR*. Shree Publishers.
- Kumar, K., & Garg, B. S. (2005). *Advanced cataloguing practice: Based on anglo american cataloguing rules 2nd ed*. Har-Anand Publications.
- Mortimer, M. (2007). *Learn dewey decimal classification first north american edition*. Totalrecall Publication Incorporated.
- Ranganathan, S. R. (1958). *Classified catalogue code: With additional rules for dictionary catalogue code*. Sarada Ranganathan Endowment for Library Science.
- Ranganathan, S. R., & Neelameghan, A. (2006). *Classified catalogue code: With additional rules for dictionary catalogue code*. EssEss Publication.
- Satija, M. P. (2012). *Exercises in the 23rd edition of dewey decimal classification*. EssEss Publication.
- Satija, M. P. (2019). *User's guide to sears list of subject headings*. Rowman & Littlefield Publishers.
- Singh, S. N., & Prasad, H. N. (1985). *Cataloguing manual AACR-II*. B. R. Publishing.

## SEMESTER-II

### PART-I

Paper No: 201

Paper Name: SEARCH STRATEGIES AND TECHNIQUES

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			



**Objective:** To acquaint the students about the different types of search strategies to find information online and the indexing techniques.

**Unit-1: Search Strategies**

- Search Strategies: Concept, Need, Development
- Process for Searching: Preparing to search, Feedback and Refining - Basic Search Techniques: Word and Phrase, Boolean, Truncation, Proximity, Field, Metadata, Limit Search Techniques

**Unit-2: Online Searching**

- Online Searching and Retrieval: Definition, Historical development, basic features; Searching vs. browsing
- Online Search tools: Search Engines- Primary Search Engines, Meta search Engines, Focused crawler-based search engines and Directories, Subject Gateways
- Google Search tools and techniques,
  - Federated search: Concept, Need, Functions, Advantages, Disadvantages, Federated Search Engine vs Meta search engine; Cluster Based Web search

**Unit-3: Indexing Language and Vocabulary Control**

- Indexing Language: Types and Characteristics
- Vocabulary Control: Definition and Purpose. Tools of Vocabulary Control - Thesaurus: Structure and Function; Design/Construction of Thesaurus. (Printed material)

**Unit-4: Indexing techniques**

- Pre-Coordinate & Post Coordinate Indexing,
- Assigned Indexing vs Derived Indexing
- Assigned Indexing Systems: Pre-Coordinate (PRECIS, POPSI and Chain Indexing)
- Derived Indexing Systems: Keyword Indexing (KWIC, KWOC and KWAC) - Automatic Indexing: Concept and Process; Manual vs Automatic Indexing - Automatic Term Extraction and Weighing, Automatic Text Retrieval

**Outcomes:** After studying this paper, students shall be able to:

CO 1. use different type of search strategies to find information online and develop skill to apply indexing techniques in the library.

CO 2. Gain the knowledge about Boolean operators in forming queries.

CO 3. Comprehend the importance of controlled vocabularies and their applicability in libraries for subject indexing purposes.

CO 4. Understand the concept, structure of keyword indexing and able to prepare keyword index entries.

CO 5. Obtain the knowledge on different citation indexes and their use in academic work.

## RECOMMENDED BOOKS

1. Bobick, J. E., & Berard, G. L. (2011). *Science and technology resources: A guide for information professionals and researchers*. ABC-CLIO.
2. Borowick, J. N. (2000). *Technical communication and its applications*. Prentice Hall; 2nd edition (June 11, 1999).
3. Burroughs, S., Brocato, K., Hopper, P. F., & Sanders, A. (2009). Media literacy: A central component of Democratic citizenship. *The Educational Forum*, 73(2), 154–167. <https://doi.org/10.1080/00131720902739627>
4. Chowdhury, G. G., & Chowdhury, S. (2001). *Searching CD-ROM and online information sources*. Library Assn Pub Limited.
5. Foskett, A. C. (1996). *The subject approach to information*. Facet Publishing.
6. Guha, B. (1983). *Documentation and information: Service, techniques and systems* (2nd ed.). World Press.
7. Hague, B. N., & Loader, B. D. (2005). *Digital democracy: Discourse and decision making in the information age*. Routledge.
8. Hutchins, J. (1997, May). Translation technology and the translator. In *Proceedings of the Eleventh Conference of the Institute of Translation and Interpreting* (pp. 113-120).
9. Kent, A., Lancour, H., & Daily, J. E. (1978). *Encyclopedia of Library and Information Science: Volume 24 - Printers and Printing: Arabic Printing to Public Policy: Copyright, and Information Technology*. CRC Press.
10. Lancaster, F. W. (1979). *Information retrieval systems: Characteristics, testing, and evaluation*. New York ; Toronto : Wiley.
11. Large, J. A., Tedd, L. A., & Hartley, R. J. (1999). *Information seeking in the online age: Principles and practice*. K G Saur Verlag GmbH & Company.
12. McGrath, M. (2004). Interlending and document supply: A review of recent literature – XLVIII. *Interlending & Document Supply*, 32(1), 50–54. <https://doi.org/10.1108/02641610410520279>

13. Mitchell, E., & Walters, S. (1994). *Document delivery services: Issues and answers*. Information Today.
14. Rowley, J. E. (1998). *The electronic library*. Library Assn Pub Limited.
15. Saracevic, T., Spink, A., & Wu, M.-M. (1997). Users and intermediaries in information retrieval: What are they talking about? In *User Modeling* (pp. 43–54). Springer Vienna. [http://dx.doi.org/10.1007/978-3-7091-2670-7\\_6](http://dx.doi.org/10.1007/978-3-7091-2670-7_6)
16. Singer, C. A. (2012). *Fundamentals of managing reference collections*. American Library Association.
17. Walford, A. J., Harvey, A. P., & Drubba, H. (1980). *Walford's guide to reference material*. London : Library Association.
18. Walford, A. J. (1993). *Walford's Guide to Reference Material: Science and technology*. London : Library Association.

**Paper No: 202**

**Paper Name: INFORMATION SOURCES & SERVICES**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective:** To acquaint the students about the different types of information sources with their specific features and characteristics.

**Unit 1: Information Sources**

- Documentary and Non-Documentary Sources (Human & Institutional) - Reference Sources: Categories, Characteristics and Usefulness
- Evaluation of Reference Sources: Print and Electronic

**Unit 2: Electronic Sources of Information**

- e-Documents, OPAC, Web-OPAC
- Subject Gateways/Portals, Bibliographical Sources, Full text Databases, Bulletin Boards, Discussion Groups/Forums
- Open Access Resources, List Serves, Social Networking Sites

**Unit 3: Information Services**

- Information Services: Definition, Scope, Need and Functions

- Types of Information Services: Reference Service, Referral Service, Bibliographic Service, Translation Service, Indexing & Abstracting Services, Reprographic Service - CAS/Alerting Service, SDI, DDS

#### **Unit 4: Internet based Information Services**

- Library 2.0: Concepts, Characteristics & Components
- Synchronous Communication & Content Delivery: Instant Messaging, RSS Feeds, Streaming Media, Podcasts, Vodcasts, SMS Enquiry Service
- Collaborative Publishing Tools: Blogs & Wikis
- Collaborative Service Platforms: Social Networks, Tagging, Social Bookmarking

**Outcome:** On completion of the course, students can able to

CO1. Understand the various types of Information resources

CO2. Know about the various E-Resources and their use in the library

CO3 Understand the various types of information services provided to users

CO4. Familiar to use the various types of collaborative service platforms.

#### **RECOMMENDED BOOKS**

1. Association, L. (1984). *Printed reference material*. London : Library Association.
2. Chowdhury, G. G., & Chowdhury, S. (2001). *Information sources and searching on the world wide web*. Library Assn Pub Limited.
3. Guha, B. (1978). *Documentation and information: Services, techniques and systems*. World Press.
4. Gupta, , S. (Ed.). (2012). *Innovative Challenges in Information Services: Changing Paradigm for the sustenance of Library and Information Centers in the Digital Era*. Kutub Publishers.
5. Kumar, K. (1989). *Reference service*. Vikash Publication.
6. Lancaster, F. W. (1998). *Indexing and abstracting in theory and practice*. University of Illinois, Graduate School of Library & Information Science.
7. London : Library Association.
8. Padhi, P. (1994). *Reference sources in Modern Indian Languages: A study on Oriya language*. Gayatri Devi Publication.
9. Panda, K. C., & Gautam, J. N. (1999). *Information Technology on the Cross Road from Abacus to Internet*. Y. K. Publishers.

10. Ranganathan, S. R. (2006). *Reference service*. EssEss Publication.
11. Riordan, D. (2013). *Technical report writing today*. Cengage Learning.
12. Seetharama, S. (1997). *Information consolidation and repackaging: Framework methodology planning*. EssEss Publications.
13. Singer, C. A. (2012). *Fundamentals of managing reference collections*. American Library Association.
14. Walford, A. J. (1993). *Walford's Guide to Reference Material: Science and technology*.
15. Walford, A. J., Harvey, A. P., &Drubba, H. (1980). *Walford's guide to reference material*. London : Library Association.

**Paper No: 203**

**Paper Name: BASICS OF INFORMATION AND COMMUNICATION TECHNOLOGY & APPLICATION IN LIBRARIES**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objectives:** To train the students with the basics structure of Information and Communication Technology and use of library software for record management and dissemination.

**Unit 1: Computer Technology**

- Evolution of Digital Computers;
- Number systems;
- Character Representation: ASCII, ISCII and UNICODE;
- Basic Components of a Computer: Arithmetic Logic Unit;
- Control Unit; Memory Unit; Input / Output devices;
- System Software; Application software.
- Operating Systems: Linux, Windows;
- Introduction to Programming Languages

**Unit 2: Introduction to Communication Technology**

- Tele-communication: Transmission Media, ISDN, PSDN, Multiplexing, - Modulation, Standards and Protocols,

- Wireless Communication; Networking: Topology and levels of networks, Network protocols, Network Models (OSI),
- Tools and Devices. Hardware requirements

### **Unit-3: Library Automation**

- History and Development of Library Automation
- Planning and implementation
- Automation of in-house operations
- Requirements for Acquisition, Cataloguing, Circulation control, Serials Control, OPAC
- Library Security Technology: Barcode, QR Code, RFID, CCTV, Biometrics, Smartcard

### **Unit-4: Library Automation Packages**

- History, Evolution and Generations of Packages
- Commercial Software Packages: LIBSYS, SOUL 2.0, SLIM
- Open-Source Software Packages: KOHA, NEWGENLIB, E-GRANTHALAYA - Evaluation of Software Packages

#### **Outcomes:**

**CO 1** To identify the basic knowledge about computers and how they are used in Libraries

**CO 2** To know the benefits of Computer Technology, Communication Technology, Library Automation software packages.

**CO 3** To know the difference between traditional Library System and integrated library system by the use of computers.

**CO 4.** To familiar with the working knowledge of various type of Library Software Packages and how they are used in Library & Information Centres.

### **RECOMMENDED BOOKS**

1. Arora, A., & Bansai, S. (2002). *Computer fundamentals*. Excel Books.
2. Atul, K. (2004). *Introduction to database management systems*: Pearson Education India.
3. Babu, Dr. B. R., & Gopalakrishnan, Dr. S. (2004). *Information, communication, library, and community development: Festschrift in honour of prof. C.P. vashishth*. B. R. Publishing.
4. Bach, M. J. (1986). *The design of the UNIX operating system*. Pearson.
5. Basandra, S. K. (1998). *Computer Today*. Galgotia Publications.
6. Bilal, D. (2014). *Library automation: Core concepts and practical systems analysis, 3rd edition: Core concepts and practical systems analysis*. ABC-CLIO.

7. Brown-Syed, C. (2011). *Parents of Invention: The development of library automation systems in the late 20th century: The development of library automation systems in the late 20th century*. ABC-CLIO.
8. Date, C. J. (2006). *An introduction to database systems*. Pearson Education India.
9. Doyle, S. (2015). *Complete ICT for Cambridge IGCSE®*. Oxford University Press - Children.
10. Doyle, S. (2015b). *Complete ICT for cambridge IGCSE® revision guide*. Oxford University Press - Children.
11. Goel, A. (2010). *Computer fundamentals*. Pearson Education India.
12. Gopal, K. (2005). *Modern library automation*. Authors Press.
13. Grewal, G. (2004). *Handbook of library security*. Dominant.
14. Jain, M., Jain, & Singh, S. (2003). *Introduction to database management*. BPB Publications.
15. Jha, J., Mahanti, P. K., & Sahoo, L. (1996). *Elements of computer science*. Alpha Science International, Limited.
16. Kochtanek, T. R., & Breeding, M. (2017). *Library information systems: From library automation to distributed information access solutions, 2nd edition*. Libraries Unlimited.
17. Kochtanek, T. R., & Matthews, J. R. (2002). *Library information systems: From library automation to distributed information access solutions*. Greenwood.
18. Kumar, P. S. G. (2004). *Information and communication: Paper ix of ugc model curriculum*. B.R. Publisher.
19. Leon, A. (2009a). *Database management systems, 1E*. Vijan Nicole.
20. Matthew, N., & Stones, R. (2011). *Beginning linux programming*. John Wiley & Sons.
21. Petersen, R. (2007). *Linux: The complete reference (with cd)*. Tata McGraw-Hill Education.
22. Reddy, S., Balakrishnan, S., & Paliwal, P. K. (2001). *Automated management of library collections*. EssEss Publications.
23. Redmond, E., & Wilson, J. R. (2012). *Seven databases in seven weeks: A guide to modern databases and the nosql movement*. Shroff.

24. Shotts, W. (2019). *The Linux Command Line: A Complete Introduction*. No Starch Press.
25. Shuman, B. A. (1999). *Library security and safety handbook: Prevention, policies, and procedures*. American Library Association.
26. Silberschatz, A., Gagne, G., & Galvin, P. B. (2018). *Operating system concepts*. Wiley.
27. Silberschatz, A., Korth, H. F., & Sudarshan, S. (2011). *Database system concepts*. McGraw-Hill Education.
28. Siwatch, A. S. (2006). *New approaches to modern librarianship*. Sanjay.
29. Stallings. (2003). *Computer networking with internet protocols and technology*. Pearson Education India.
30. Sujatha, G. (1999). *Resource sharing and networking of university libraries*. EssEss Publications.
31. Sybex. (2007). *Linux complete*. BPB Publications.
32. Ward, B. (2014). *How linux works, 2nd edition: What every superuser should know*. No Starch Press.
33. Ward, B. (2021). *How linux works, 3rd edition: What every superuser should know*. No Starch Press.
34. Wilson, K. (2016). *Essential computing: Concepts of ICT*. Elluminate Press.

**Paper No: 204**

**Paper Name: PERSONALITY DEVELOPMENT & COMMUNICATION SKILL**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective:**

1. To develop communication skills as well as positive personality traits
2. Developing effective communication skills(spoken and written) and presentation skills.
3. Become self-confident individuals by mastering inter-personnel skills, team management skills, and leadership skills.
4. Development of all-round personalities with mature outlook to function effectively in different circumstances.
5. Development of broad career plans, evaluate the employment market, identify the



organizations to get good placement, match the job requirements and skill sets.

**Unit 1: Personality and its Characteristics**

- Personality Types, Traits and Characteristics
- Social, Soft and Influencing Skill Development
- Attitude, Appearance, Time and Stress Management Skill

**Unit 2: Communication Skill**

- Professional Communication Skills (Verbal, Non-Verbal & Written)
- Communication –Understanding the Audience, Presentation, Body Language, Interpersonal Skills and ability to listening Skill
- Technical Communication Skills and Editorial Tools

**Unit 3: Marketing Skills & Public Relations**

- Marketing Planning and Strategy
- Publicity and Promotion
- Public Relations and Liaison with Library Authority and Patrons

**Unit 4: Leadership and Vision**

- Organizational Ability, Team Leadership and Problem Solving
- Project Management, Annual Plan, Five-Year & Perspective Plan, Disaster Management, Conflict and Crisis Management
- Visionary and Futuristic Approach, Preparation of Vision Document
- Negotiation Skills & Strategies

**Outcomes:** on completion of course students will be able to

CO 1. Effectively communicate through verbal/oral communication and improve the listening skills

CO2. Write precise briefs or reports and technical documents

CO3. Actively participate in group discussion / meetings / interviews and prepare & deliver presentations

CO 4. Become more effective individual through goal/target setting, self-motivation and practicing creative thinking.

CO 5. Function effectively in multi-disciplinary and heterogeneous teams through the knowledge of team work, Inter-personal relationships and conflict management skills.

**RECOMMENDED BOOKS**

1. Aitchison, J. (2004). *Teach yourself linguistics*. McGraw-Hill.
2. Booth, P. F. (1991). *Report writing*. Huntington.

3. Chandler, H. E. (1983). *Technical writer's handbook*. Asm International.
4. Cooper, B. M. (1964). *Writing technical reports*. Penguin UK.
5. Gerson. (2007). *Technical writing: Process and product, 5/E*. Pearson Education India.
6. Gladis, S. D. (1993). *Writetype: Personality types and writing styles*. Human Resource Development.
7. Harrison, C. (1980). *Readability in the classroom*. Cambridge University Press.
8. Huckin, T. N., & Olsen, L. A. (1991). *Technical writing and professional communication: For nonnative speakers of English*. McGraw-Hill Humanities, Social Sciences & World Languages.
9. James, G. G. (1986). *Strategies and skills of technical presentations*. Greenwood Press.
10. Karten, N. (2010). *Presentation skills for technical professionals: Achieving excellence*. Itgp.
11. Masters, A., & Wallace, H. R. (2010). *Personal development for life and work*. Cengage Learning.
12. McMurry, J. H. (2002). *The etiquette advantage: Personal skills for social success*. Stellar Publications.
13. S. G. (2009). *Personality development and communication skills*. Book Enclave.
14. Saxena, T. P., & Arvinda, C. (1979). *Style manual for writing theses, dissertations and papers in social sciences by Arvinda Chandra and T P Saxena*. Metropolitan Books.
15. Sherman, T. A., & Johnson, S. S. (1975). *Modern technical writing*. Prentice Hall.
16. Swain, D. V., & Swain, J. R. (1991). *Scripting for the new AV technologies*. Taylor & Francis.
17. VanAlstyne, J. S. (1999). *Professional and technical writing strategies: Communicating in technology and science*. Prentice-Hall Inc.
18. Weisman, H. M. (1992). *Basic technical writing*. Prentice Hall.

**Paper No: 205**

**Paper Name: ICT and Library Management Software-Practice**

Credit Distribution	Total Credits	Mid-Term	End-Term	Total Marks
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<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	-	<b>100</b>	<b>100</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>04</b>			

**Objective:** To provide hands on practice on free and open-source library automation software packages.

**Unit 1: Use of system software and application software**

- Windows-10, Linux
- MS-Word, MS-Excel, MS-PowerPoint

**Unit 2: Hands on experience with library automation software (any one)**

- Newgenlib
- E-Granthalaya
- Koha

**Unit 3: Programming language and databases**

- Basic Programming in HTML
- DBMS (MS-Access)

**Unit 4: Viva-Voce**

**Note:** In Practical Paper total marks will consist as under:

End Term Examination = Record Assignment 30 Marks +Computer Practice 50 marks +  
Viva- voce (20 marks) = 100 marks

**Outcome:** After completion of the course, students will be able to operate the different types of Library automation software packages.

**RECOMMENDED BOOKS**

1. Mukhopadhyay, P. Library automation – software packages – MLII 104 (ICT applications – Part 1), MLIS, IGNOU, 2006.
2. Mukhopadhyay, P. Library automation packages - introduction – BLII 003, Block 1, Unit 1 of CICTAL course, IGNOU, 2005
3. Shotts, Williams E. (2012). The Linux Command Line – A Complete Introduction.
4. Silberschatz, A.(2005). Operating System Concepts. Wiley
5. Silberschatz. (2013). Database System Concepts Paperback. McGrawHill.

**Paper No: 206-A**

**Paper Name: PRESERVATION & CONSERVATION OF LIBRARY MATERIALS**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To appraise need and techniques of preservation and conservation of library materials.

**Unit 1: Basics of Preservation and Conservation: Overview**

- Preservation and Conservation: Historical Development, Need and Purpose -
- Preservation of Print Materials: Books, Periodicals, Pamphlets
- Digital Preservation

**Unit 2: Preservation of Non-Print Materials**

- Palm Leaves
- Manuscripts
- Films
- Floppies and Disks

**Unit 3: Hazards and Control Measures to Library Materials**

- Environmental Factor (Temperature, Humidity, Water, Light, Air Pollution, Smoke, Dust, etc)
- Chemical Factors
- Biological Factors

**Unit 4: Binding**

- Types of Binding of Library Materials
- Binding Material and their Varieties
- Binding Process
- Standards for Library Binding

**Outcome-** After completion of the course, students will be able to understand various preservation and conservation techniques of library materials.

**RECOMMENDED BOOKS**

1. Casey, J. P. (1960). *Papermaking*. Inter-science Publishers.
2. Corderoy, J. (1967). *Bookbinding for beginners*. Thomas and Hudson.
3. Dasgupta, K. (1988). *Conservation of library materials: Seminar : Papers*. National

Library.

4. Dureau, J.-M., Clements, D. W. G., & Conservation, I. F. of L. A. and Institutions. S. on. (1986). *Principles for the preservation and conservation of library materials*. Hague : IFLA Headquarters.
5. Gabriel, M. R., Roselle, W. C., & Ladd, D. P. (1980). *The microform revolution in libraries*. Greenwich, Conn. : Jai Press.
6. Harvey, D. R. (1993). *Preservation in Libraries: A Reader*. K G Saur Verlag GmbH & Company.
7. Jensen, H. (1969). *Sign, symbol, and script: An account of man's efforts to write*. George Allen & Unwin.
8. Singh, R.S. . (1993). *Conservation of documents in libraries, archives and museums*. Aditya Prakashan.

**Paper No: 206-B**

**Paper Name: COMMUNITY INFORMATION SERVICE**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-**To acquaint students with need and purpose of community information services.

**Unit 1: Basics of Community Information**

- Community Information: Definition, Origin and Scope
- Need for and Sources of Community Information
- Role of Libraries in Dissemination of Community Information

**Unit 2: Community Information Services**

- Community Information Services: Meaning, Types and Target Users
- Community Information Centers: Planning and Role of Information Services - Community Information Services to Specific Communities
  - a) Rural, Urban and Metropolitan Communities
  - b) Industrial, Business Communities
  - c) Academic, Research, Institutional and R & D Communities
  - d) Physically/Mentally Disadvantaged Communities

- e) Children, Women and Senior Citizens
- Community Information Services in India, UK and USA

### **Unit-3: Community Information Resources**

- Nature and Scope, Differences with bibliographical resources
- Documentary Sources: vital statistics, land records, official publications, magazines etc.
- Institutional Sources: Publications of local governments and government agencies, educational and religious institutions etc.
- Human Resources: village level leaders, field extension personnel, religious leaders, government officials, etc;
- Cultural heritage resources and Digital resources.

### **Unit 4: Digital Community Information Services**

- Digital Community Information Services – Need, Advantages, Tools and Techniques
- Software Framework for Community Information Services: Models, Components - Community Communication and Interaction: Tools, Techniques and Processes

**Outcome-** After completion of the course, the students will be aware of developing community information center for providing services to the community.

## **RECOMMENDED BOOKS**

1. Ainley, P. (1980). *Basics of community information: An action handbook for librarians*. Association of Assistant Librarians.
2. Association, A. L. (1967). *Minimum standards for public library systems, 1966*. ALA.
3. Babu, Dr. B. R., & Gopalakrishnan, Dr. S. (2004). *Information, communication, library, and community development: Festschrift in honour of prof. C.P. vashishth*. B. R. Publishing.
4. Bunch, A. (1982). *Community information services: Their origin, scope, and development*. London : Bingley.
5. Bunch, A. (1993). *The basics of community information work*. Unipub.
6. Coleman, P. (1986). Community information policy and provision. *Aslib Proceedings*, 38(9), 305–316. <https://doi.org/10.1108/eb060051>
7. Durrance, J. C. (1984). *Armed for Action: Library response to citizen information needs*. New York, NY : Neal-Schuman Publishers.
8. Durrance, Joan Coachman, & Pettigrew, K. E. (2002). *Online community information:*

*Creating a nexus at your library.* American Library Association.

9. Kahn, A. J. (1971). *Neighborhood information centers: A study and some proposals.* Columbia University School of Social Works.

10. Roy, L., Bhasin, A., & Arriaga, S. K. (2011). *Tribal libraries, archives, and museums: Preserving Our Language, Memory, and Lifeways.* Scarecrow Press.

11. Vashishth, C. P. (1995). *Libraries as rural community resource centres: Papers & proceedings of the Workshop on Rural Community Resource Centres, New Delhi, august 28-29, 1992.* B. R. Publishing.

**Paper No: 206-C**

**Paper Name: INFORMATION RESOURCE DEVELOPMENT**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To keep acquainted with the types of information resources and develop various types of resources in the library to use for learning and research and need of principles for resource development, bibliography, use of databases, institutional repositories, open access resources etc.

**Unit 1: Types of Information Resources**

- Documentary (Primary, Secondary & Tertiary)
- Non-Documentary
- E-Resources

**Unit 2: Book Selection Principles**

- Drury's Principle
- Dewey's Principle
- McColvin's Principle
- Ranganathan's Principle

**Unit 3: Selection Tools**

- Current List
- Bibliographies
- Library Catalogue
- Books in Print
- Publishers' Catalogue

- Directories
- WebOPAC (WorldCat)
- Websites

#### **Unit 4: Categories of Documents**

- By Physical Characteristics
- By Information Characteristics
- Books and Periodicals
- Theses and Dissertations
- Govt. Publications
- Grey Literature

**Outcome-** On completion, the students can provide new platform of services in library, dissemination of information and resources for wider use among the patrons. They also can adopt various principles in resource development;prepare various bibliographies for greater academic interest etc.

#### **RECOMMENDED BOOKS**

1. Ani, O. E., & Ahiauzu, B. (2008). Towards effective development of electronic information resources in Nigerian university libraries. *Library Management*, 29(6/7), 504–514. <https://doi.org/10.1108/01435120810894527>
2. Harrell, M. C., Thie, H. J., Yardley, R. J., & Lytell, M. C. (2011). *Information systems technician rating stakeholders: Implications for effective performance*. RAND Corporation.
3. Laudon, K. C., & Laudon, J. P. (2017). *Management information systems: Managing the digital firm*. Pearson.
4. McCloy, K. R. (1995). *Resource management information systems: Remote sensing, GIS and modelling, second edition*. CRC Press.
5. McNurlin, B. C., & Sprague, R. H. (2003). *Information systems management in practice*. Prentice Hall.
6. Pitschmann, L. A., & Federation, D. L. (2001). *Building sustainable collections of free third-party web resources*. Washington, D.C. : Digital Library Federation, Council on Library and Information Resources.

### **SEMESTER-III PART-II**

**Paper No: 301**



**Paper Name: INFORMATION RETRIEVAL**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To get abreast the students about the indexing & vocabulary control techniques and searching of resources both through print and electronic form.

**Unit 1: Basics of Information Retrieval Systems**

- Definition, Components and Types of ISAR Systems
- Evaluation of ISAR Systems
- Elements of File Organization
- Artificial Intelligence and Expert System
- Information Retrieval Models

**Unit 2: Subject Representation and Indexing Languages**

- Alphabetical Subject Representation
- Contributions of Cutter, Kaiser, Ranganathan, Farradane and Coates
- Characteristics of Indexing Languages
- Vocabulary Control-List of Subject Headings, Thesaurus and Thesaurofacet, Classaurus

**Unit 3: Indexing Systems and Techniques**

- Indexing Concept, Principles and Process
- Pre - Coordinate Indexing System & Post-Coordinate Indexing System
- Uniterm Index System
- Citation Indexing – Meaning and importance, Different citation indexes: SCI, SSCI, AHCI
- Full-Text (STAIRS, LEXIS-NEXIS, etc.)
- Automatic Indexing: COMPass, Web Indexing

**Unit 4: Information Searching and Evaluation**

- Search Methods and Search Strategy, Boolean Search
- Information Searching in different Media: Print and Electronic
- Need and Parameters of Evaluation
- Retrieval Performance: Recall and Precision

**Outcomes:** After studying this paper, students shall be able to:

CO1 Use the indexing techniques and retrieve the useful resources for learning and

research for the benefits of the users in the library.

CO2 Gain the knowledge of Information Storage and Retrieval System and various requirements for using the system.

CO3 Understand concepts of user interface system and its functions (i.e. searching, saving, printing etc.) in ISAR.

CO4 Learn the different stages of intellectual operations and working of some important pre-coordinate indexing systems such as, Chain Indexing, PRECIS and POPSI. CO5 Understand the concept of computerized indexing in terms of its features, components, categories, and index file organization, develop skills of using different indexing techniques for formulating different types of subject headings.

CO6 Learn the methodology for evaluating an ISAR Systems and understand measures of retrieval efficiency in terms of Precision and recall.

### **RECOMMENDED BOOKS**

1. Aitchison, J., Bawden, D., & Gilchrist, A. (2003). *Thesaurus construction and use: A practical manual*. Routledge.
2. Becker, J., & Hayes, R. M. (1963). *Information storage and retrieval: Tools, elements, theories*. New York : Wiley.
3. Chowdhury, G. G. (2004). *Introduction to modern information retrieval*. Library Assn Pub Limited.
4. Convey, J. (1992). *Online information retrieval: Introductory manual to principles and practice*. Clive Bingley.
5. de Grolier, E. (1962). *A study of general categories applicable to classification and coding in documentation*. Paris, Unesco.
6. Ellis, D. (1996). *Progress and problems in information retrieval*. Library Association Pub. Library Association Pub.
7. Foskett, A. C. (1996). *The subject approach to information*. Facet Publishing.
8. Fugmann, R. (1993). *Subject analysis and indexing: Theoretical foundation and practical advice*. INDEKS Verlag .
9. Lancaster, F. W., W, L. F., Lancaster, W., & Joncich, M. J. (1977). *The measurement and evaluation of library services*. Washington : Information Resources Press.
10. Losee, R. M. (1998). *Text retrieval and filtering: Analytic models of performance*. Springer.
11. Matthews, J. R. (2017). *The Evaluation and Measurement of Library Services, 2nd Edition*. ABC-CLIO.

12. Meadow, C. T., Boyce, B. R., Kraft, D. H., & Barry, C. L. (2006). *Text information retrieval systems*. Academic Press Incorporated.
13. Sharp, H. S. (1964). *Readings in information retrieval*. The Scarecrow Press.
14. Soergel, D. (1974). *Indexing languages and thesauri: Construction and maintenance*. Los Angeles : Melville Publishing Company.
15. Soergel, D. (1985). *Organizing Information: Principles of Data Base and Retrieval Systems*. Morgan Kaufmann.

**Paper No: 302**

**Paper Name: DIGITAL LIBRARY AND CONTENT MANAGEMENT**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To make the students aware with content management concepts, content developing strategies and digitization in library and develop their confidence level in using the same in the library.

#### **Unit 1: Content Management & Digitization**

- Content Development: Concept; Content Creation & Organization
- E-Content Development Strategies
- Virtual Learning Environment
- Digitization Process, Tools and File Formats

#### **Unit 2: Digital Library Concepts**

- Digital Library & Institutional Repository: Concepts; Digital Library Initiatives (National & International)
- Digital Library Software(s)
- Digital Library Creation using D-Space

#### **Unit-3: Knowledge Discovery through Data Mining**

- Definition, Benefits and applications of data mining
- Data mining approaches and functionalities
- Important data mining techniques
- Web Mining and its applications

#### **Unit-4: Legal Issues in Content Management & Digital Library**

- File formats, Identifiers & Handle systems in digital libraries
- Metadata standards – Dublin Core, METS, TEI etc
- Metadata interoperability, cross walking and mapping
- Copyright and Rights Management in digital libraries

**Outcome-** The students, after completion of the course, will be in a position  
 CO1 To know about the basic knowledge of content management and digitization  
 CO2 To know the concept of digital library and virtual library  
 CO3 To implement the content management, content developing strategies and digitization of information resources in the library.

**RECOMMENDED BOOKS**

1. Andrews, J. (2017). *Digital libraries: Policy, planning and practice*. Routledge.
2. Chowdhury, G. G., & Chowdhury, S. (2003). *Introduction to digital libraries*. Facet Publishing.
3. Deegan, M., & Tanner, S. (2006). *Digital preservation*. Facet Publishing.
4. Hoshi, T. P., & Schatz, B. (2003). *Digital library use: Social practice in design and evaluation*. MIT Press.
5. Jones, R. E., Andrew, T., & MacColl, J. (2006). *The institutional repository*. Elsevier.
6. Lakshmi, V., & Jindal, S. C. (2004). *Digital libraries*. Gyan Publishing House.
7. Shinde, G. Z. (2015). *Emerging technologies and future of libraries issues and challenges*. Daya Publishing House.

**Paper No: 303**

**Paper Name: ACADEMIC LIBRARY SYSTEM**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To make the students conversant with organization, functions, building, user oriented collections and services in academic library as well as role of library in continuing education program.

**Unit 1: Academic Library: Functions and Services**

- Role of Academic Library in Higher Education
- Academic Library Services
- Academic Library Management
- Role of UGC for Academic Library Development

**Unit 2: Resource Development**

- Physical Resources including ICT Infrastructure
- Collection Development Policy, Weeding out Policy
- Human Resource Development
- Financial Resource Management

**Unit 3: Staff Development and Continuing Education**

- Staffing Norms and Standards
- Continuing Education Program for Academic Libraries
- Personnel Management
- 

**Unit 4: Library Networks and Consortia**

- INFLIBNET- Objectives, Functions and Services; MHRD/UGC-INFLIBNET - Initiatives for Academic Library Development: E-ShoudhSindhu and N-LIST

**Outcomes:** After completion of the course the students will be able

CO1 To identify the basic knowledge and functions of Academic Libraries which includes School, College & University Libraries.

CO2 To explain the Roles of Academic Library, Resource Development, Staff Development, How the Library Information Networks & Consortium works in the field of Library & Information Science.

CO3. To establish a relationship between the parent organization and the Academic Library for the benefit of the users.

CO 4 To analyze how the application of ICT has changed the services in Academic Libraries

CO5 To handle all the activities of the Academic Library easily

**RECOMMENDED BOOKS**

1. Beard, J. (2016). *University libraries and digital learning environments*. Routledge.
2. Bose, K. (1994). *Information networks in India: Problems and prospects*. EssEss Publications.
3. Brophy, P. (2005). *The Academic Library*. Facet Publishing.

4. Cowley, J. (1982). *Personnel management in libraries*. London : Bingley.
5. Evans, G. E., & Evans, G. R. (1983). *Management techniques for librarians*. Emerald Group Pub Limited.
6. Gelfand, M. A. (1971). *University libraries for developing countries*. University Book and Stationery.
7. Isaac, D., & Ramaiah, L. S. (1993). *Academic libraries, Role in the National Development: Festschrift Volume in Honour of Prof. N.B. Inamdar ; foreword by G. Ram Reddy*. T R Publications.
8. Katz, L. S. (2012). *Selecting materials for library collections*. Routledge.
9. Kent, A. (1979). *The Structure and Governance of Library Networks: Proceedings of the 1978 Conference in Pittsburgh, Pa., Co-sponsored by National Commission on Libraries and Information Science and University of Pittsburgh*. Marcel Dekker Incorporated.
10. Kumar, G. (1989). *Library development in India*. Vikas.
11. Kumar, K. (2009). *Library Administration and Management*. Vikas.
12. McKee, B. (1989). *Planning library service*. London : C. Bingley.
13. Mishra, R. N. (2017). *Use and Services of University Library*. Today and Tomorrow's Printers and Publishers.
14. Mittal, R. L. (2007). *Library administration: Theory and practice*. EssEss Publication.
15. Orne, J. (1977). *Academic libraries by the year 2000: Essays honoring Jerrold Orne*. New York : R. R. Bowker Company.
16. Prasher, R. G. (1991). *Managing university libraries*. Scholarly Publications.
17. Ranganathan, S. R., & Gopinath, M. A. (2006). *Library book selection*. EssEss Publication.
18. S., T. (2013). *Challenges of academic library management in developing countries*. IGI Global.

**Paper No: 304**

**Paper Name: WEB TECHNOLOGIES**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	04	20	80	100
3	1	0				

### Objectives:

- To introduce the students with basic concepts of Web technology.
- To familiarize the students with the concepts of web page design.
- To acquaint students with the current trends in web technologies.

### Unit 1: Internet Basics/Web Technology

- World Wide Web: History and Evolution, Uniform Resource Locator (URL), Open URL, Web Servers, Network Protocols: TCP/IP, FTP, SSHD, SOAP, etc.
- Web Browsers- Netscape Navigator, Internet Explorer and Mozilla Firefox • Search Engines: Definition; Evolution; categories; search techniques; Metatags • Web Security concepts

### Unit 2: Web Page Design

- Introduction to Mark Up languages: SGML, HTML, DHTML, XHTML and XML, Common HTML commands.
- Tools for Web Page Designing: HTML Editors; Client-side Scripting – VB Script, Java Script and PHP; Server-side Scripting- ASP and JSP; DOM, CSS; Features of Web Page Design Tools; Advantages of Web Page Design Tools
- Evaluation of websites

### Unit 3: Web 2.0/ Web 3.0 Concepts and Applications

- Web OPAC, Web 2.0 functions and features, Web 3.0
- Web 2.0 Tools and their application in Libraries: RSS Feed, Blogs/Weblogs, Tags, Folksonomy,
- Mashups, Podcasts, Instant Messaging, Flickr, Wikis and Social Networking Sites, Youtube
- Semantic Web

### Unit 4: Current Trends

- Cloud computing: Concept, types
- Vendors in cloud computing: Google, Amazon, Microsoft, rackspaceetc. • Application of Cloud computing in Libraries

• M-computing: Concept and Applications

**Outcomes:** The students, after completion of the course, will be in a position CO1 to understand the concept of web technology.

CO2 to analyze a web page and identify its elements and attributes.

CO3 to become aware with the use of current trends following web technologies.

**Recommended Books:**

1. *A Helpful Guide to Web Search Engines -- how search engines work (page 4)*. (n.d.). Retrieved September 7, 2021, from <http://www.monash.com/spidap4.html>
2. Cleveland, A. D., & Cleveland, D. B. (2013). *Introduction to indexing and abstracting: Fourth edition*. ABC-CLIO.
3. Croft, B., Metzler, D., & Strohman, T. (2011). *Search engines: Information retrieval in practice*. Pearson Higher Ed.
4. Hahn. (1996). *The Internet complete reference*. Tata McGraw-Hill Education.
5. Hill, B. (2003). *Google for dummies*. John Wiley & Sons, Inc.
6. Hurwitz, J. S., Bloor, R., Kaufman, M., & Halper, F. (2010). *Cloud computing for dummies*. John Wiley & Sons.
7. Kinyanjui, D. (2017). *Application of web 2.0 Technologies in libraries*. Grin Verlag.
8. Kizza, J. M. (2020). *Guide to computer network security*. Springer Nature.
9. Parkes, D., & Walton, G. (2010). *Web 2.0 And libraries: Impacts, technologies and trends*. Chandos Publishing.
10. Velte. (2009). *Cloud computing*. Tata McGraw-Hill Education.
11. Williamson. (2001). *Xml: The complete reference*. Tata McGraw-Hill Education.
12. Young, M. L. (1999). *Internet: The complete reference, millennium edition*. McGraw-Hill Osborne Media.



**Paper No: 305**

**Paper Name: INTERNSHIP AND CONTENT MANAGEMENT SOFTWARE PRACTICE**

<b>Credit Distribution Mid-Term En</b>						
<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	<b>-</b>	<b>100</b>	<b>100</b>
<b>0</b>	<b>0</b>	<b>2</b>	<b>02</b>			

**(A) INTERNSHIP - 50 marks**

To place students in a working Library & Information Centre environment approved / recommended by the Department to enable them to be exposed to the various sections / divisions to gain practical knowledge and to give them working experience.

Internship shall be for one month (30 days).

A Report shall be submitted by each student along with a certificate from the Head of the library concerned for the completion of Internship. The Internship report will be evaluated by the department faculty and marks will be sent to the Controller of Examinations.

**(B) Content Management Software Practice 50 marks**

- Hands on practice on Joomla/Drupal.

- Hands on practice on Greenstone Digital Library Software (GSDL),

D-Space. End term examination 100 Marks

**A-Internship 50 Marks:** Report Submission 30Marks+ Presentation 20 Marks

**B- Content Management Software Practice 50 Marks:** Record Assignment & Computer Practice (30 marks) + Viva-Voce (20 marks)

**Paper No: 306-A**

**Paper Name: INTELLECTUAL PROPERTY RIGHTS & COPYRIGHT**

<b>Credit Distribution</b>	<b>Total Credits</b>	<b>Mid-Term</b>	<b>End-Term</b>	<b>Total Marks</b>
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<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	<b>20</b>	<b>80</b>	<b>100</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>04</b>			

**Objective-** To make the students aware of the intellectual property & copyright concepts and other issues related issues to patents, trade rights etc.

### **Unit 1: Intellectual Property Rights**

- IPR: Meaning, Concept, Genesis, and Development
- Categories of IPR
- Enforcement of Intellectual Property Rights& Role of WIPO,
- IPR Acts and its Application in Electronic Environment
  - Berne Convention; Universal Copyright Convention; Stockholm Conference; Paris Conference; WIPO Copyright treaty; GATT; TRIPS.

### **Unit 2: Copyright**

- Copyright: Meaning and Scope
- Rights to Copyright Owner, Open access journals and repositories
- Licensing of Copyright
- Copyright and Protection of Electronic Resources
- Copyright Laws, Creative Commons; Plagiarism

### **Unit 3: Patents**

- Concept and Scope
- Patent Laws in India & Abroad and its amendments
- Protection of Inventions

### **Unit 4: Copyright& Patent Violation and Infringement**

- India
- USA
- UK

**Outcome-** After completion of the course, students will be aware of IPR & copyright, copyright violation and infringement.

### **RECOMMENDED BOOKS**

1. Bouchoux, D. E. (2016). *Intellectual property: The law of trademarks, copyrights, patents,*

- and trade secrets, loose-leaf version.* Cengage Learning.
2. Correa, C. M., & Yusuf, A. A. (2016). *Intellectual property and international trade: The TRIPS Agreement: The TRIPS Agreement.* Kluwer Law International B.V.
  3. Fishman, S. (2020). *The Copyright Handbook: What Every Writer Needs to know.* Nolo.
  4. Freeman, L., & Peace, A. G. (2005). *Information ethics: Privacy and intellectual property.* IGI Global.
  5. Grant, J., Ashworth, C., & Charmasson, H. (2008). *Patents, registered designs, trade marks and copyright for dummies.* For Dummies.
  6. Litman, J. (2006). *Digital copyright.* Prometheus Books.
  7. Munari, F., & Oriani, R. (2011). *The economic valuation of patents: Methods and applications.* Edward Elgar Publishing.
  8. Murray, A. (2019). *Information technology law: The law and society.* Oxford University Press, USA.
  9. Narayanan, P. (2007). *Law of copyright and industrial designs.* Eastern Law House (ELH).
  10. Parulekar, A. (2006). *Indian Patents Law: Legal and business implications.* Macmillan India Ltd.
  11. Tian, Y. (2009). *Re-thinking Intellectual Property: The Political Economy of Copyright Protection in the digital era.* Routledge Cavendish.
  12. Umeh, J. (2007). *The World Beyond Digital Rights Management.* BCS, the Chartered Institute.
  13. Wadehra, B. L. (2004). *Law relating to patents, trademarks, copyright, designs and geographical indications.* University Law Publishing Pvt. Ltd.

**Paper No: 306-B**

**Paper Name: INTERNET & ITS' APPLICATIONS**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To make the students aware of Internet and its related technologies in teaching, learning and research.

### **Unit 1: Internet: An Overview**

- Internet: Introduction, Historical Development and Scope of Internet
- Internet Architecture: H/W & S/W Components, Client/Server Principle, Routers, Connection Types, ISP, Protocols, Uniform Resource Locator, IP Address - Domain Name System

### **Unit 2: Web Languages & Web Browsers**

- Web: Introduction, History and Functions
- Web Languages: HTML, XML, CSS, ASP, JavaScript, PHP
- Web Browsers: Internet Explorer, Mozilla Firefox, Google Chrome

### **Unit 3: Intranet & Internet Security**

- Intranet: Components, Prerequisites and Services
- Extranet: Components, Prerequisites and Services
  - Internet Security: Types of Security, Firewalls, Anti-Virus, Anti-Spyware

### **Unit 4: Internet Tools & Services**

- Communication Tools: Email, Telnet, Discussion Groups
- Search Tools: Gopher, Veronica, Jughead, Archie, Search Engines
  - Content Enriching Services: Blogs, Wikis, Social Community Websites

**Outcome-** After completion of the course, students will be aware of well use of Internet technology for learning, research. They will also can disseminate the skill to the users in the library.

### **RECOMMENDED BOOKS**

1. Bates, C. (2007). *Web Programming: Building Internet Applications, 3rd Ed.* John Wiley & Sons.
2. Crumlish, C. (1997). *The abcs of the internet.* Sybex Incorporated.
3. Hartl, M., & Prochazka, A. (2007). *RailsSpace: Building a social networking website with ruby on rails.* Addison-Wesley Professional.
4. Kalbach, J. (2007). *Designing web navigation: Optimizing the user experience.* "O'Reilly Media, Inc."
5. Miller, J. B. (2014). *Internet technologies and information services, 2nd edition.* ABC CLIO.

6. Morville, P., & Rosenfeld, L. (2006). *Information architecture for the world wide web: Designing large-scale web sites*. “O’Reilly Media, Inc.
7. Nair, R. R. (2002). *Internet for information services*. EssEss Publications.
8. Robbins, J. N. (2012). *Learning web design: A beginner’s guide to HTML, CSS, javascript, and web graphics*. “O’Reilly Media, Inc.”
9. Sehgal, R. L. (2000). *Intranet & Internet Applications For Librarians (Set Of Two Volumes)* . ESS ESS.
10. Stallings. (2003). *Computer networking with internet protocols and technology*. Pearson Education India.
11. Weinberg, T. (2009). *The new community rules: Marketing on the social web*. “O’Reilly Media, Inc.”

**Paper No: 306-C**

**Paper Name: ELECTRONIC PUBLISHING (E-PUBLISHING)**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective:** To make the students aware of different types of e-publishing comprising of electronic books, journal articles, reports etc. which facilitate easy access and use by the students for learning and research and its’ importance in the realm of e learning.

**Unit 1: Basics of Electronic Publishing**

- History of scholarly Publishing, Types of e-publications
- Migration of peer reviewed journals from print to electronic
- Role of Internet in accessing to such resources
- Digital publishing as a catalyst to interdisciplinary communication
  - Peer review process; Archival options for short- and long-term preservation

**Unit 2: Stakeholders of Electronic Publishing**

- Universities, research institutions, university presses;
- Libraries and commercial publishers in scholarly communication
- Newspapers and the transformation of journalism.
- Open Access Publishing

- Large scale digitization projects at the international level.

### Unit 3: E-Publishing and E-Learning

- Digital publishing- Models
- E-Pushing in the realm of e-learning
- E-publishing tools and evaluation techniques

### Unit-4: E-Publishing Technology

- Technology support such as, hardware, software for e-publishing
- DTP software
- Copyright

**Outcome:** After completion of the course, the students will be able to differentiate different types of e-publishing and mechanism of storage of the same for future retrieval and dissemination to the users in the library.

### RECOMMENDED BOOKS

1. Gastel, B., & Day, R. A. (2016). *How to write and publish a scientific paper*. Greenwood.
2. Rose, M. J., & Adair-Hoy, A. (2007). *How to publish and promote online*. St. Martin's Griffin.
3. Singh, V. P. (2008). *Simplified dtp course book*. Asianbooks.
4. Spring. (1991). *Electronic printing and publishing: The document processing revolution*. CRC Press.

## SEMESTER-IV PART-II

**Paper No: 401**

**Paper Name: RESEARCH METHODOLOGY**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To make the students aware of the research methodology concepts, definitions, and various techniques used for data analysis in research and to achieve new insights or gain familiarity of a phenomenon.

### **Unit 1: Research and Research Design**

- Concept, Meaning, Need and Process of Research
- Types of Research: Fundamental and Applied
- Research Design, Types of Research Design
- Designing Research Proposal
- Literature Search – Print, Non-Print and Electronic Sources
- Literature Review

### **Unit 2: Research Methods**

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

### **Unit 3: Data Analysis and Interpretation**

- Data Collection Techniques: Questionnaire, Interview, Observation, Sampling and Delphi
- Presentation of Data-Tables, Charts and Graphs
- Interpretation of Data: Frequency Distribution, Measures of Central Tendency, Analysis of Time Series, Co-relation Studies and Analysis of Variance
- Use of Statistical Packages

### **Unit 4: Bibliometric Methods and Report Writing**

- Bibliometric Studies: Meaning, Scope and Parameters
- Bibliometric Laws and their Applications
- Informetrics, Scientometrics and Webometrics
  - Guidelines for and Preparation of Writing Research Report (Thesis and Dissertation)

**Outcomes:** After studying this paper, students shall be able to:

- CO1 Aware of need of research, its' usefulness and confident to take up research work.
- CO2. Gain knowledge on different methods of research
- CO3 Comprehend theory, terminology and working of the spiral of scientific method as proposed by S.R. Ranganathan.
- CO4 Learn about literature review and report writing skills.
- CO.5 Compute various measures of central tendency, such as arithmetic mean, weighted arithmetic mean, median, mode.
- CO6 Understand the scope, definition, different terminologies and laws used in Bibliometrics.

### **RECOMMENDED BOOKS**

1. Arnab, R. (2017). *Survey sampling theory and applications*. Academic Press.
2. Booth, W. C., Colomb, G. G., Williams, J. M., Bizup, J., & FitzGerald, W. T. (2016). *The Craft of Research, fourth edition*. University of Chicago Press.
3. Brady, J. (1997). *The craft of interviewing*. Vintage.
4. Fadem, T. J. (2008). *The art of asking: Ask better questions, get better answers*. FT Press.
5. Gillham, B. (2001). *Research interview*. Bloomsbury Publishing.
6. Mann, S. (2016). *The research interview: Reflective practice and reflexivity in research processes*. Springer.
7. Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research*. SAGE.
8. Nielsen, J. (2000). *Designing web usability*. New Riders Pub.
9. Raju, N. G. (2009). *Bibliometric applications: Study of literature use patterns*. Akansha Publishing.
10. Rea, L. M., & Parker, R. A. (2014). *Designing and conducting survey research: A comprehensive guide*. John Wiley & Sons.
11. Reinard, J. C. (2006). *Communication research statistics*. SAGE.
12. Rowntree, D. (1983). *Statistics without tears: A primer for non-mathematicians*. Penguin.
13. Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*. SAGE Publications.
14. Sudman, S. (1976). *Applied sampling*. Academic Press.
15. Wadsworth, Y. (2016). *Everyday evaluation on the run*. Routledge.
16. Williams, F., & Monge, P. R. (2001). *Reasoning with statistics: How to read quantitative research*. Wadsworth Publishing Company.
17. Willis, G. B. (2004). *Cognitive interviewing: A tool for improving questionnaire design*. SAGE Publications.

**Paper No: 402**

**Paper Name: INFORMATION SYSTEM AND NETWORKS**



<b>Credit Distribution</b>						
<b>Mid-Term En</b>						
<b>L</b>	<b>T</b>	<b>P</b>	<b>L+T+P</b>	<b>20</b>	<b>80</b>	<b>100</b>
<b>3</b>	<b>1</b>	<b>0</b>	<b>04</b>			

**Objective-** To make the students aware of the different information systems and networks available at national and international level used for data and information exchange.

**Unit 1: Information Systems**

- Definition, Types and Characteristics
- Information Organizations and Systems
- Planning and Designing of Information System
- Evaluation of Information System

**Unit 2: National Information Systems**

- Environmental Information System (ENVIS)
- Patent Information System (PIS)

**Unit 3: Global Information Systems**

- International System for Agricultural Science and Technology (AGRIS) - International Nuclear Information System (INIS)
- Information, Service for Physics Engineering and Computing (INSPEC) - Medical Literature Analysis and Retrieval System (MEDLARS)

**Unit 4: Networks**

- Resource Sharing and Networking – Objectives and Scope
- Features and Characteristics of Library Networks
- Data Networks – National Information Centre Network (NICNET), National Research and Education Network (ERNET), National Knowledge Network (NKN)

**Outcome-** After completion of course, students will be able

- CO1. To know about the basic concept of different information systems and networks
- CO2. To know about the National and Global Information system
- CO3 To familiar with functioning and their use for information exchange CO 4 To be familiar with the use of Educational and Research network services available in India.

## RECOMMENDED BOOKS

1. Kaul, H. K. (1999). *Library resources sharing and networks*. Virgo Publications.
2. Lihitkar, S. R. (2012). *Study of information systems and networks in India*. Today and Tomorrow's Printers and Publishers.
3. Neelameghan, A., & Prasad, K. N. (1998). *Information systems, networks, and services in India: Developments and trends*. Indian Bibliographic Center.
4. Rowley, J. E. (1996). *The basics of information systems*. Library Assn Pub Limited.
5. Simon, R. C. (2018). *Issues for libraries and information science in the internet age*. Libraries Unlimited Inc .
6. Tedd, L. A., & Large, J. A. (2005). *Digital libraries: Principles and practice in a global environment*. Walter de Gruyter.

**Paper No: 403**

**Paper Name: KNOWLEDGE MANAGEMENT**

Credit Distribution Mid-Term En						
L	T	P	L+T+P	20	80	100
3	1	0	04			

**Objective-** To make the students aware of need and concepts of knowledge management in library.

### **Unit 1: Basics of Knowledge Management**

- Concept of Knowledge
- Types of Knowledge: Explicit Knowledge, Implicit Knowledge
- Concept and Scope of Knowledge Management
- Knowledge Management Cycle

### **Unit 2: Knowledge Management: Creation & Tools**

- Knowledge Creation, Access, Transfer and Sharing
- Knowledge Tools

- Knowledge Networks
- Knowledge in Decision Making

### **Unit 3: Pre-requisites of Knowledge Management**

- Sharing of Expertise
- Knowledge Mapping
- Knowledge Worker

### **Unit 4: Trends and Challenges of Knowledge Management**

- KM Initiatives in Indian Organization
- Software for Knowledge Management
- Pioneers in Knowledge Management
- Advances in Knowledge Management

**Outcomes:** After completion of the course students will be able

CO1 To identify the concept, necessity, feature, process, the benefit of Knowledge management in Libraries.

CO2 To aware students of the need and concepts of Knowledge Management in the Library. CO3

To analyze how knowledge is created, accessed and transferred to users in Libraries CO4 To train students in a particular manner that they will aware of the application of knowledge management in Library & information centres

### **RECOMMENDED BOOKS**

1. Anderson, P. (2016). *Web 2.0 And beyond: Principles and technologies*. CRC Press.
2. Atwood, C. G. (2009). *Knowledge management basics*. American Society for Training and Development.
3. Awad, E. M., & Ghaziri, H. M. (2004). *Knowledge management*. Pearson Education.
4. Becerra-Fernandez, I., & Sabherwal, R. (2014). *Knowledge management: Systems and processes*. Routledge.
5. Cappelli, P. (2010). *The performance effects of it-enabled knowledge management practices*. National Bureau of Economic Research.
6. Dalkir, K. (2017). *Knowledge management in theory and practice*. MIT Press.
7. Easterby-Smith, M., & Lyles, M. A. (2011). *Handbook of organizational learning and knowledge management*. John Wiley & Sons.
8. Frappaolo, C. (2006). *Knowledge management*. Capstone.
9. Hislop, D., Bosua, R., & Helms, R. (2018). *Knowledge management in organizations: A critical introduction*. Oxford University Press.

10. Hoffmann, A., Kang, B., Richards, D., & Tsumoto, S. (2006). *Advances in knowledge acquisition and management: Pacific Rim Knowledge Acquisition Workshop, PKAW 2006, Guilin, China, august 7-8, 2006, revised selected papers*. Springer.
11. Liebowitz, J. (2012). *Knowledge management handbook: Collaboration and social networking, second edition*. CRC Press.
12. Peter, J. P., & Donnelly, J. H. (2007). *Marketing management: Knowledge and skills*. Irwin Professional Pub.

**Paper No: 404**

**Paper Name: INFORMATION LITERACY**

Credit Distribution			Total Credits	Mid-Term	End-Term	Total Marks
L	T	P	L+T+P	20	80	100
3	1	0	04			

### **Objective**

1. To make the students aware of the need and concepts of information literacy.
2. Explain how to apply information literacy in teaching and learning.
3. Clarify the implication of information literacy to teaching and learning, schools and workplaces, librarians, and to society and culture.

### **Unit 1: Emergence of Information Literacy**

- Information: Characteristics of information, Types of information
- Information Society and Information Literacy
- Information Literacy: Definition, Models and Standards
- Information Literacy: Strategic Plan
- Information Literacy and Lifelong Learning

### **Unit 2: ICT and Media Literacy**

- Computer Literacy and E-Literacy
- Digital Literacy
- Media Literacy
- Information Literacy and Bridging the Digital Divide

### **Unit 3: Information Literacy and Libraries**

- School, College and University Libraries
- Public Libraries
- Special Libraries
- Information Literacy and LIS Education,
- International and national initiatives, Policies and guidelines IFLA, ALA, UNESCO, Information literacy skills and best practices.

#### **Unit 4: Policy and Advocacy**

- Information Literacy: Initiatives and Forms in USA, UK and Australia - Policies, Guidelines and Standards: UNESCO, IFLA and ALA
- Information Literacy: Skills and Competencies
- Information literacy: Best Practices

**Outcomes:** After completion of the course, students will be in a position to:

- CO1. Determine the nature and extent of information needed.
- CO2. Access information effectively and efficiently.
- CO3. Evaluate information and resources for their academic work.

#### **RECOMMENDED BOOKS**

1. ACRL Information. (2000, January 1). *Information literacy competency standards for higher education*. American Library Association. <http://hdl.handle.net/11213/7668>
2. Association of College and Research Libraries. (2006, July 24). *Presidential Committee on Information Literacy: Final report*. Association of College & Research Libraries (ACRL). <https://www.ala.org/acrl/publications/whitepapers/presidential>
3. Association, A. L. (2000). ACRL STANDARDS: Information literacy competency standards for higher education. *College & Research Libraries News*, 61(3), 207–215. <https://doi.org/19242>
4. Australia Library and Information Association. (2021, June 24). *Statement on information literacy for all Australians*. ALIA Library. <https://read.alia.org.au/statement-information-literacy-all-australians>
5. Bawden, D. (2001). Information and digital literacies: A review of concepts. *Journal of Documentation*, 57(2), 218–259. <https://doi.org/10.1108/eum0000000007083>
6. Bruce, C. S. (1997). *The seven faces of information literacy*. AuslibPress.
7. Reppinger, J. (2021, August 31). *Research guides: Information literacy: Goals & objectives*. Willamette University. <https://libguides.willamette.edu/information-literacy>
8. Torras, M.-C., & Saetre, T. (2016). *Information literacy education: A process approach:*

*Professionalising the pedagogical role of academic libraries.* Chandos Publishing.

**Paper No: 405**

**Paper Name: DISSERTATION/ PROJECT and VIVA-VOCE**

Credit Distribution			Total Credits	Dissertation/Project	Viva-voce	Total Marks
L	T	P	L+T+P	80	20	100
0	4	0	04			

Every Student has to carry out a project work on a topic approved by the Departmental Council, under the guidance of a faculty member and prepare a Dissertation / Project Report. Student should make a presentation and appear for a Viva-Voce for evaluation and Grading.