

JNANA SAHYADRI, SHANKARAGHATTA – 577 451.

SYLLABUS FOR 4th (COMPULSORY PAPER) 5th AND 6th(DISCIPLINE CORE AND COMPULSORY PAPERS) SEMESTER LIBRARY AND INFORMATION SCIENCE OPTIONAL SUBJECT FOR B.A./B.Sc. DEGREE COURSE (2026-27) UNDER SEP

PROGRAM STRUCTURE

Course / Paper Code	Title of the paper	Subject category	Teaching hours	Semester end exam	Internal Assessment	Total marks	Credits	Examination duration
Semester –I								
LIS-1.1	Fundamentals of Library and Information Science	Theory	05	80	20	100	05	3
Semester –II								
LIS-2.1	Library Management(Theory)	Theory	03	80	20	100	05	3
Semester –III								
LIS-3.1	Information Sources(Theory)	Theory	03	80	20	100	05	3
EL/OP-1	Information Literacy	Theory	02	80	20	50	03	2
Semester –IV								
LIS-4.1	Information Services	Theory	05	80	20	100	05	3
EL/OP-2	Research methodology	Theory	02	40	10	50	02	2
Compulsory 2 (Practical Knowledge/ Skill-1)	Library Management (Practice)	Practical	04	40	10 (Record)	50	2	2

Course / Paper Code	Title of the paper	Subject category	Teaching hours	Semester end exam	Internal Assessment	Total marks	Credits	Examination duration
Semester –IV								
Compulsory 2 (Practical Knowledge/Skill-1)	Library Management (Practice)	Practical	04	40	10 (Record)	50	2	2
Semester –V								
LIS-5.1	Library Classification (Theory & Practice)	Theory	03	80	20	100	3	3
		Practical	04	40	10 (Record)	50	2	2
Semester – V								
LIS-5.2	Fundamentals of Computer (Theory)	Theory	03	80	20	100	3	3
Compulsory 2 (Practical Knowledge/Skill-2)	Basics of Computer (Practice)	Practical	04	40	10 (Record)	50	2	2
Semester –VI								
LIS-6.1	Library Cataloguing (Theory & Practice)	Theory	03	80	20	100	3	3
		Practical	04	40	10 (Record)	50	2	2
Semester –VI								
LIS-6.2	Application of Information Technology (Theory)	Theory	03	80	20	100	3	3
Compulsory 2 (Practical Knowledge/Skill-3)	Library Automation (Practice)	Practical	04	40	10 (Record)	50	2	2

Note: 1.Practical Classes should be conducted in batches of 10 students each under the guidance of teacher.2. One hour Practical Class is equivalent to One hour Theory Class.

SEMESTER – IV:

COMPULSORY 2 (PRACTICAL KNOWLEDGE/SKILL-1)

PAPER: LIBRARY MANAGEMENT (PRACTICE)

Learning outcomes:

- Understand the procurement methods for acquiring documents, including purchasing, gifts, and exchange programs.
- Able to handle budgeting, accounting, auditing, and human resource management (staffing, performance appraisal).
- Able to gather, analyze, and interpret statistical data on library usage and collection size.

- Understand the loan periods, renewal processes, and return policies, fines for overdue items and costs for lost or damaged materials, etc.

Content
• Library budgeting - preparation of Library budget.
• Acquisition - book recommendation form, placing the order, invoice processing.
• Accessioning- entry in the Accession Register
• Preparation of library annual report.
• Preparation of library rules and regulations.

(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).

SEMESTER – V

PAPER 5.1: LIBRARY CLASSIFICATION (THEORY & PRACTICE)

Course Objectives:

- To introduce the students to the library classification with concept, need and purposes and basic terminologies.
- To understand the Knowledge classification and Book classification schemes and their structure and organization.
- To know the different schemes of classification and their features with reference to DDC and CC.
- To make understanding the fundamental categories, common isolates, devices, and other features of library classification
- To teach the importance, types and qualities of notation

Learning Outcomes:

- Understands the basic concept of library classification.
- Able to compare and understand the knowledge and book classification schemes
- Develops the knowledge of using different schemes of classification
- Gain insights of fundamental categories, common isolates, devices and other features of library classification.
- Understands of importance, types and qualities of good notation.

PART-A (THEORY)

Units	Content
Unit – 1	Library Classification: Meaning, Definition, Need and Purpose. Basic Terminologies of Library Classification
Unit – 2	Knowledge Classification and Book Classification: Concept and Types
Unit – 3	Library Classification Schemes: CC & DDC- History, Development, Features, and Structure
Unit – 4	Notation: Meaning and Definition, Need, Types. Qualities of Good Notation.
Unit - 5	Fundamental Categories: PMEST, Facet Analysis and Facet Sequence, Phase Relation. Devices in Colon Classification
Unit - 6	Common Isolates. Concept, Types-Anteriorising and Posteriorising Common Isolates.

PART-B (PRACTICE)

Classification of documents according to Dewey Decimal Classification (Latest available edition)

(Each student shall compulsorily maintain practical record, and submit the same at the time of practical examination).

Books for Reference:

- Krishan Kumar (2004). Theory of Library Classification. New Delhi: Vikas.
- Kumar, P. S. G. (2003). Knowledge Organization, Information Processing and Retrieval Theory. Delhi: BR Publications.
- Ramalingam, M. S. (2000). Library cataloguing and classification systems. Delhi: Kalpaz.
- Ranganathan, S. R. (1957-58). Prolegomena to Library Classification. Ed2, London: LA.
- Sumangala Jha. (2013). Knowledge Organization, Information and Retrieval. New Delhi: Anmol.
- PushpaDhyani: Library Classification: Theory & Principles, New Delhi, WishwaPrakaashana, 1998

- Ranganathan, S.R: Prolegomena to Library Classification, New Delhi, Vikas, 1989
- Ranganathan, S.R Library Manual: For School, College and Public Libraries-with revised examples of subject classification.New Delhi: ESS ESS Publications, 2008.
- Khan, MTM: Dewey Decimal Classification. Shree publishers and Distributors: New Delhi. 2005
- Satija, M.P. Theory and Practice of the Dewey Decimal Classification System. England: Chandos, 2007.
- Kaushik, Prashant. Library Classification.New Delhi: Anmol Publications,2006.
- Kumar, P.S.G. Knowledge Organization, Information Processing and Retrieval (Practice) Vol. III. Delhi: BR publishing Corp. 2003

SEMESTER-V

PAPER 5.2: FUNDAMENTALS OF COMPUTER (THEORY)

Course Objectives:

- To impart knowledge of computer with its characteristics, types, generations and capabilities and limitations.
- To make understanding the hardware components of computer including its peripherals.
- To gain the knowledge of computer software including operating systems, MS-Office and library software.
- To learn how data is represented in computer using computer codes and also about number system.
- To develop an understanding of the concept and types of programming languages.
- To understand structure and organisation, and types of file organisation.

Learning Outcomes:

- Acquire the basic knowledge of computer, its hardware, and its peripherals;
- Gain knowledge of both system software and application software, along with
- operating systems;
- Learn how data is represented in computer and also about computer codes and number system

- Develops the knowledge of programming languages and understands about file organisation and its methods in computer.

UNITS	CONTENT
Unit – 1	Computer: Concept, Need, Scope, Characteristics, Types, Generations Capabilities and Limitations.
Unit – 2	Computer Hardware: Components of a Computer-CPU and Peripherals, Memory-RAM and ROM. Input devices- Keyboard, Mouse, Joystick, Touchpad, Touch Screen; Output Devices: Printer, Plotter, Monitor, Speaker.
Unit – 3	Computer Software: Types-System Software: Compilers and Interpreters, Operating System- MS-Windows.; Application Software: MS Office -Word, Excel and PowerPoint. Library Software- SOUL.
Unit – 4	Data representation in Computer: concept of bits, bytes. Computer Codes –ASCII, ISCII and UNICODE. Number System – Binary, Decimal, Octal, Hexadecimal. Conversion from binary to decimal and Decimal to Binary.
Unit - 5	Programming Languages: Concept, Types- Machine, Assembly and High-level programming languages; Flow Chart.
Unit - 6	File Organization: concept of Field, Record, File, Database. Methods of file organisation- Sequential, Direct and Indexed Sequential and their Advantages and Disadvantages.

Books for Reference:

- Alexander, Tom and Mathew, Joe (2012). Computer and Information Technology. New Delhi: Neha Publishers & Distributors.
- Arvind Kumar Ed. (2006). Information Technology for all (2 Vols.). New Delhi: Anmol.
- Jain, Praveen C.A. (2015). Information Technology. New Delhi: Jain Publishing.
- Gupta, Vikas (2005). Rapidix Computer Course. New Delhi: Pustak Mahal.

- Subramanian, N. (1998). Introduction to Computer: Fundamentals of Computer Science, Vol. 1. New Delhi, Tata Mc-Graw Hill.
- Terrence, W Pratt and Marvin, V Zelkowlts. (2000). Programming Languages: Design and Implementation. New Delhi, Prentice Hall of India Pvt. Ltd.
- Satyanarayana, R. (2005). Information Technology and its facets. Delhi: Manak.
- Dhamdher, D.M. (2012). Operating Systems: A concept Based Approach. New Delhi: Jain Publishing.
- Naresh Jotwani. (2009). Computer System Organization, New Delhi: Tata Mc Graw-Hill.
- Tedd, L.A. (1998). An introduction to computer and basic programming. Ed.2. New Delhi: New age publications.

SEMESTER – V

COMPULSORY 2 (PRACTICAL KNOWLEDGE/SKILL-2)

PAPER: BASICS OF COMPUTER (PRACTICE)

Learning Outcomes:

- Document creation and formatting: Able to create, edit, and format professional documents, including letters, resumes, using styles and themes. Familiar with editing tools Utilize tables, headers/footers to structure documents.
- Data management and analysis: Able to organize, sort, filter, and analyse data efficiently using rows, columns, and spreadsheets. Create and format tables, charts, and graphs to represent data trends visually.
- Presentation design: Able to create, edit, and organize professional, engaging slide presentations. Apply themes, slide masters, and transitions to create a cohesive, professional, and impactful presentation

CONTENT
• MS-Word- Word Processing: basic formatting, creating documents with images, tables, header and footer, page layout, table of contents.
• MS-Excel- Spreadsheets: data entry, formatting, formulas and function, graphs and charts.

- **MS-PowerPoint- Presentation Package:** creating slides, designing and formatting, working with multimedia transitions and animations.

(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).

SEMESTER – VI

PAPER 6.1: LIBRARY CATALOGUING (THEORY & PRACTICE)

Course Objectives:

- To understand the need, purpose, functions, and types of library catalogue.
- To familiarize with the different forms of library catalogue.
- To understand the and basic features of different catalogue codes.
- To discuss various laws, canons, and principles of library cataloguing.
- To understand the different kinds of entries with filing rules and principles.
- To elucidate the different subject headings and method of deriving subject heading with chain procedure.

Learning Outcomes:

- Understands of basic concept of library cataloguing.
- Understands the features of different catalogue codes
- Familiarise with normative principles of library cataloguing.
- Gain the knowledge of different kinds of entries among with filing rules.
- Gain the knowledge of different subject headings and chain procedure in deriving subject headings.

PART-A (THEORY)

UNITS	CONTENT
Unit – 1	Library Catalogue: Meaning & Definition, Purpose and Functions. Types of library catalogue. Co-operative and Centralized Catalogue; Union Catalogue
Unit – 2	Forms of Library Catalogue: Physical forms and Inner forms with examples.

Unit – 3	Cataloguing Codes: Brief history and salient features of CCC and AACR-II. Brief rules for preparation of main entry and added entries for various types of documents
Unit – 4	Kinds of Entries: according to CCC and AACR-2R.Filing Rules and Principles.
Unit - 5	Normative principles: Laws, Cannons, and Principles
Unit - 6	Subject Headings: Chain Procedure; Sear's List of Subject Headings and Library of Congress Subject Headings

PART-B (PRACTICE)

Cataloguing of Books and Periodicals according to AACR-2R

- Preparation of cataloguing entries for Single author, Two Authors, Three Authors and more than Three Authors, Edited books, Mixed Responsibility (collaborators), Pseudonymous documents and Journal publications.

Books for Reference:

- Kumar, P.S.G: Knowledge Organization, Information Processing and Retrieval (theory). Vol. II. Delhi: BR publishing Corp. 2003
- Ranganathan, S.R: Library Catalogue: Fundamentals and Procedure. Madras: Library Association, 1993
- Girija Kumar & Krishna Kumar: Theory of Cataloguing. New Delhi, Vikas, 1986
- American Library Association: Anglo-American Cataloguing Rules. 2nd ed. Chicago: ALA, 1978
- Sears, M.E: List of Subject Heading. 11th Ed. by Barbara M. West, New York. H.W. Wilson, 1997,
- Sharma, PSK: Cataloguing theory. Delhi: ESS Publication, 1989.
- Anglo American Cataloguing Rules. 2nd Rev ed. New Delhi: Oxford, 2002
- Ranaganathan, SR: Classified Catalogue Code with additional rules for Dictionary Catalogue. Ed.5. Bombay, Asia, 1965.
- Ranganathan, SR.: Cataloguing practice, Bangalore, Sarada Ranganathan Endowment for Library Science, 1975.
- Gandhi, T.M.K.: Cataloguing: theory and practice, New Delhi, Anmol Publications, 1995.

SEMESTER-VI

PAPER- 6.2: APPLICATION OF INFORMATION TECHNOLOGY (THEORY)

Course Objectives:

- To impart the basic knowledge information technology and its application in libraries.
- To make familiar with library automation and automation software packages.
- To know the areas of automating various housekeeping operations of the library.
- To give understanding of internet including web browsers and search engines and Internet based library services.
- To make understand the initiatives of library networks in India.

Learning Outcome:

- Understands the planning of library automation and its application in libraries.
- Gain the knowledge about areas of library automation areas of library automation.
- Knowledge of technology used for automation of different library operations;
- Familiar with various library automation software like SOUL, Libsys, KOHA.

UNITS	CONTENT
Unit – 1	Information Technology (IT): Meaning and Definition, Evolution. Application of IT in Library and Information Centre.
Unit – 2	Library Automation: meaning and definition, Need and Purpose, Planning for Library Automation, Library Software Packages: features of SOUL, Libsys, Koha.
Unit – 3	Automation of Housekeeping Operations: Acquisition, Cataloguing- OPAC, Circulation. Retrospective Conversion- Methods.
Unit – 4	Internet: Historical development. Web Browsers and Search Engines – Need and Importance, Types, Search Strategies.
Unit - 5	Library Networks in India: Overview, INFLIBNET, DELNET. Consortia – Concept, Definition, Need, Types.

Unit - 6	Information Delivery: Alerting Services-Email, List Servs etc. Internet based library services- Current Awareness Bulletins, CD-ROM Databases, E-journals.
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Books for Reference:

- Kumar, P. S. G: Information Technology: Applications (Theory and Practice). New Delhi: B. R. Publishing, 2004.
- Chakravarthy, R. C. and Murthy, P. R. S: Information Technology and Library Science. New Delhi: Pacific Publications, 2011.
- Tiwari, Purushotham: International encyclopaedia of library automation: Contents: Vol.2- Library Computerisation, 2011.
- Haravu, L J: Library automation: design, principles and practice, 2004
- Riaz, Muhammad: Library automation, New Delhi, Atlantic Publishers, 1992.
- Thomas, C: Computer Concepts and Application. New York: McGraw Hill, 1991
- Dhiman, A.K: Basics of Information technology for librarians and Information scientists, Vol.1. New Delhi: ESS ESS, 2003.
- Moorthym, A.L: Information Technology Applications in Academic Libraries in India with emphasis on Networking Services and Information Sharing. Ahmedabad: INFLIBNET, 1997
- ITL Education Solutions Limited. Introduction to Information Technology. New Delhi: Pearson, 2012.
- Subramanian, V.S: Principles of Multimedia Database Systems, Mergan Kanufman, 1998
- Satyanarayana, R. Information technology and its facets. Delhi: Manak, 2005
- Raman Nair, R: Internet for Information Service. New Delhi: ESS ESS, 2002
- Terrence, W Pratt and Marvin, V Zelkowlts: Programming Languages: Design and Implementation. New Delhi, Prentice Hall of India Pvt. Ltd., 2000.
- Douglas E. Comer: The Internet Book. 3rded. New Delhi: Pearson Education Asia, 2000
- Nanda, Manohar: Library Automation. New Delhi: Anmol Publications, 2006.
- Kumar, P.S.G: Information Technology Applications: Theory and Practice Vol. IV. Delhi: BR Publishing Corp. 2004.

SEMESTER – VI

COMPULSORY 2 (PRACTICAL KNOWLEDGE/SKILL-3)

PAPER: LIBRARY AUTOMATION (PRACTICE)

Hands on experience and work assignment with library software package: SOUL

Learning Outcomes:

- Understands Functional Areas of SOUL and comprehend the purpose and workflow of key operational subsystems such as Acquisition (ordering/receiving), Technical Processing (cataloguing), and Circulation (charging/discharging).
- Identify the advantages of automating library tasks and gain skills in using automation software (e.g., SOUL) to improve efficiency in routine operations.
- Develop competency in using Online Public Access Catalogues (OPAC) to facilitate access.
- Application of Standards: Understand the application of cataloguing rules (e.g., AACR-2, MARC-21) and classification schemes for bibliographic organization.

Content
• Acquisition Module Record book orders, vendor details, invoice processing, accessioning, and budget allocation using the Acquisition module.
• Cataloguing Module Enter bibliographic records, perform authority control, and generate catalogue cards and spine labels.
• Circulation Module Perform member registration, issue/return/renewal of books, reservation, fine calculation, and generate circulation reports.
• OPAC Module Conduct basic and advanced searches through Online Public Access Catalogue (OPAC)

(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).