

UNIVERSITY OF RAJASTHAN
JAIPUR

SYLLABUS

Bachelor of Library & Information Science

(Annual Scheme)

Examination – 2020

A handwritten signature in black ink, appearing to read 'Raj / Jas', is written over a horizontal line.

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SYLLABUS
BACHELOR OF LIBRARY AND INFORMATION
SCIENCE
2019-2020

Main Objectives

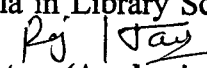
The objectives of the BLISc (One Year) Programme are:

- To educate the students in the philosophy of librarianship, basic principles, fundamental laws, professional ethics.
- To train the students in the skills of information knowledge processing, organization and retrieval.
- To train the students in the management of Library and Information Centres.
- To enable the students to understand and appreciate the functions and purposes of Library and Information Centres in the changing social cultural, technological and economic environment.
- To provide students the basic knowledge of computer and its application in library and information activities.
- To give the students an understanding of the basics of Information Science.

Rules for Admission

- O.144 (4) : For all examinations (including Library Science) in the Faculty of Education : A Candidate Shall be required to put in a minimum of 75% attendance at the lecturers and 75% at the practicals, separately. Provision of condonation of attendance is to be followed as per university rules.
- O.329 I : The duration of the course will be one academic year (July to April).
- O.329 J: A candidate for admission to the Bachelor of Library and Information Science course should possess a Bachelor's degree or Master's degree of the University or of any other University recognised for the purpose by the Syndicate with 45% marks in the aggregate either at the Bachelor's degree examination or at the Master's degree.

The candidates employed in the recognised Libraries of Rajasthan as whole time paid worker and possessing at least three years experience after passing C. Lib. Sc. or Diploma in Library Science


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recognised by the University of Rajasthan may also be admitted subject to a maximum of 25% of total seats.

O. 329 K - I : Omitted.

SCHEME OF EXAMINATION

R. 43 -B For a pass, a candidate shall be required to secure a minimum of 30% marks in each paper and 40% marks in the aggregate of all the papers. Successful candidates securing at least 60% marks in the aggregate shall be placed in First division and those securing at least 50% marks in the aggregate in Second division. All the rest will be declared to have passed the examination.

A candidate for the examination shall be required to offer theory and practical paper mentioned below. The maximum marks of each paper shall be as noted against each and the duration of each theory paper and practical paper shall be 3 hours.

Papers	Maximum Marks
I. Library, Information and Society	100
II. Library and Information Centre Management	100
III. Library Classification (Theory)	100
IV. Library Cataloguing (Theory)	100
V. Information Sources, Products and Services	100
VI. ICT Application in Library and Information Science (Theory)	100
VII. Library Classification (Practical)	75
VIII. Library Cataloguing (Practical)	75
IX. ICT Application in Library and Information Science (Practical)	50

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Paper - I : Library , Information and Society**M.M. 100**

1. Concept of Library, Information and Society, Development of Libraries in India, Library as a Social institution. Role of Library and Information Centers in Modern Society
2. Types of Libraries: Public, Academic, Special and National Library: Objectives, functions and services, National Library of India, Calcutta
3. Five Laws of Library Science and their implications
4. Library Movement in India, U.K. and U.S.A.
5. Library Legislation: Need, Purpose and Objectives, Model Library Act in India.
6. Freedom of Access to Information: Intellectual Property Rights, Press and Registration Act, Delivery of Books 'and Newspapers' (Public Libraries) Act.
7. Professional Associations: ILA, IASLIC, ALA, CILIP, ASLIB, SLA
8. National and International Organizations: IFLA, UNESCO and RRRLF
9. Library Cooperation / Resource sharing: Concept, need, purpose. Resource sharing programmes, Impact of IT on Resource Sharing.
10. Librarianship as a Profession and Professional Ethics
11. Role of Library and Information Professionals in Digital Era
12. Library Education in India: Historical Development, levels of courses. Present Trends.

Paper - II : Library and Information Centre Management**M.M. : 100**

1. Principles of Library Management
 - Definition, Need and Scope of Management
 - Scientific Principles of Management and their Applications to Libraries and Information Centers
2. Library House Keeping Activities:
 - Acquisition: Organization, Purpose and Function,
 - Book Selection: Principles, Sources, Procedure and Methods, Book Ordering.
 - Technical Processing: Routines and Tools



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- Circulation: Organization, Purpose and Function, Methods of Charging and Discharging Systems: Browne and Newark Systems
 - Serials Control: Organization, Purpose and Functions, Acquisition and Processing etc., Three Card Systems.
 - Maintenance: Binding, Shelving, Stock Rectification.
 - Stock Verification:-Policies, Procedures and Methods.
3. Library Personnel: Job Description and Analysis, Job Satisfaction and Job Evaluation
 4. Library Authority and Library Committee: Purpose, Functions and Types of Library Committee .Role of the Librarian
 5. Financial Management: Sources of Finance, Financial estimation and Budgeting Techniques.
 6. Library Building: Planning and Space Management.
 7. Annual Report, Library Statistics and Library Rules
 8. Total Quality Management

Paper III- Library Classification (Theory)

Max. Marks: 100

1. Library Classification – Meaning, Need and purpose of classification. Notation -- Definition, Types, Structure, Quality and functions. Canons for Characteristics.
2. Laws of Library Science and Basic Laws – Implications: Law of interpretation; Law of impartiality; Law of symmetry; Law of Parsimony; Law of local variation, and Law of osmosis. Formation and Structure of Subjects: Loose assemblage; Lamination; Fission; Fusion; Distillation; Agglomeration; and Cluster. Phase Analysis – Phase, Intra-facet & Intra-array relations.
3. Species of Classification Schemes : Enumerative Classification (EC); Almost enumerative Classification (AEC); Almost Faceted Classification (AFC); Rigidly Faceted Classification (RFC); Freely Faceted Classification (FFC). Salient Features of Dewey Decimal Classification (DC); Colon Classification (CC).
4. Main Class – Canonical Class and Basic Class. Five Fundamental Categories: PMEST. Isolate -- Common Isolate – Kinds of Common Isolates, Special Isolates, Auxiliary Schedules.
5. Facet Analysis -- Postulates pertaining to Fundamental Categories. Postulational Approach to Classification with steps in Systematic


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Classification. Principles of Facet Sequence, viz. Wall-Picture Principle, Whole-Organ Principle, Cow-Calf Principle, Actand Action – Actor – Tool Principle.

6. Principles of Helpful Sequence: Time sequence; Evolutionary sequence; Spatial sequence; Quantitative measures sequence; Complexity measures sequence; Canonical sequence; Literary-warrant sequence; and Alphabetical sequence
7. Different devices to form foci in an array. Chronological Device (CD); Geographical Device (GD); Subject Device (SD); Alphabetical Device (AD); Mnemonic Device (MD); Facet Device (FD); Super Imposition Device (SID); Classic Device (CLD); Telescoping of array and facet.
8. Book Classification: Call Number; Class Number; Book Number – Types of Book Numbers; Collection Number.

Paper - IV: Library Cataloguing (Theory)

Max. Marks: 100

1. Library Catalogue - Definition, Objectives, Purpose and Functions & Similar Other Tools: Bibliographies, indexes, accession lists and shelf list.
2. Brief History and Development of Library Catalogue.
3. Types of Entries in CCC and AACR-2: Main Entry and Added Entries.
4. Physical Forms of Catalogue Including OPAC, Types of Inner Forms of Catalogues.
5. Normative Principals of Cataloguing: Laws. Principles and Canons.
6. Principles of Subject Headings. Methods for derivation of Subject Headings: Chain Indexing. Sear's List of Subject Headings (SLSH) and Library of Congress Subject Headings (LCSH).
7. Choice of Heading and its rendering: Personal authors (western and Indic Names), Corporate Authors, Pseudonym, anonymous and Uniform Titles, Periodicals.
8. Rules for Filing of Entries in CCC and AACR-II.
9. Bibliographic Standards: ISBD, MARC, CCF, ISO 2709 and Z39.50.
10. Centralized and Cooperative Cataloguing.

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Paper - V: Information Sources, Products and Services**M. M. : 100**

1. **Sources of Information:** Documentary & Non Documentary, Primary, Secondary and Tertiary. Evaluation of reference sources. Institutional & Human sources. Electronic Sources of Information.
2. **Reference Service:** Concept, Need, Types: Ready and Long Range Reference Service. Enquiry Techniques, Role of Reference Librarian and Information Officer in Electronic Environment
3. **Information Services:** CAS and SDI (Manual and Computerised), Bibliographic, Referral and Documents Delivery Services, etc. Literature Search (CD ROM/ On Line), Indexing and Abstracting Services. Compilation of Bibliographies, Referencing Style
4. **Information Users:** Types, Information Needs, Users studies and User education.
5. **Library Networks and Resource Sharing:** Concept, Purpose, National and International Initiatives: INFLIBNET, DELNET, and OCLC.
6. **Bibliographical Databases:** Concept, Examples: CAS, Physics Abstracts, Biological Abstracts, Science Citation Index, Dissertation Abstracts International, and LISA
7. **Bibliographic Control:** Basic concept. Recent Trends and Impact of IT on information Sources & Services

**Paper - VI: ICT Application in Library and Information Science:
(Theory)****M. M.: 100**

1. **Fundamentals of Information & Communication Technology:** Computer: Concept, need, Generations. Classification of computer Hardware: Internal Structure of Computer including CPU, Storage Devices, Input and Output devices, etc.
2. **Software:** Concept, Types: System Software, Application Software. System Software: Operating System. Operating Systems: Concept and basic features of DOS, Windows and Linux. Programming Languages: Concept and types. Application Software: General Purpose Software: Word Processors, Spread Sheets, Presentation software. Basic features of MS-Word, MS-Excel & Power point, Open Office (brief introduction) and DBMS.


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3. **Networking of Computers:** Concept, Types & Topology. Local Area Network (LAN), and Wide Area Network (WAN), Media of Computer Communication: Ethernet, Twisted Pair Cable, Coaxial Cable, Optical fibre, Wireless & Satellite Communication.
4. **The Internet:** Concept & its Services. OSI Model. TCP/IP Model. E-mail, World Wide Web (WWW). Domain Names, IP Address and URLs: Concept and examples.
5. **Library Automation:** Planning. Computer Application in House Keeping Operations. Application of RFID.
6. **Library Management Software:** Basic features of CDS/ISIS, WINISIS, SOUL and KOHA.

Paper - VII : Library Classification (Practical)

Max Marks : 75

1. Classification of documents by Colon Classification (6th Ed. reprint) and Dewey Decimal Classification (19th Ed.). Classification of Documents, having simple, compound and complex subjects.
2. Classification of documents requiring use of common isolates, phase relations, devices etc.

The questions paper will consist of two independent parts one for colon classification and another for Dewey Decimal classification.

Details of each part are given below:

Colon Classification:

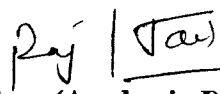
Part – I

- Q.1 8 Titles out of 10 Titles are to be classified (Based on five fundamental categories, rounds, levels, systems and specials).
- Q.2 5 Titles out of 8 Titles to be classified (Titles with certain emphasis on the use of devices, common isolates, phase relation etc.)
- Q.3 Book Numbers.

Dewey Decimal Classification

Part – II

- Q.1 8 Titles out of 10 Titles are to be attempted. (based on enumerated numbers, standard sub divisions, area tables and add devices).
- Q.2 5 Titles out of 8 Titles are to be attempted on the basis of use of tables 3 to 7 and add devices.


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Note:

Since the Department will not be in a position to acquire more than 20-25 copies of CC (Ed. 6 reprint) and 20-25 sets of DDC (Ed. 19), examination of this paper will be conducted in different groups of examinees; each group will consist of 40 examinees only. In case the number of examinees is more than 40 in a session, the number of question papers to be set would be increased accordingly.

Paper - VIII: Library Cataloguing (Practical)**M.M.: 75**

Practical Cataloguing of under mentioned types of documents for a Classified Catalogue and a Dictionary Catalogue by using 'Classified Catalogue Code' (Latest edition with amendments) for the former and the "Anglo-American Cataloguing Rules-2 (1978) along with 'Sears List of Subject Headings' for the latter.

1. Books involving personal authorship with shared responsibilities and series in note.
2. Books involving corporate authorship.
3. Books involving pseudonymous authors.
4. Books requiring titles as heading.
5. Composite books.
6. Multi-volume books
7. Periodical publications.

Note :

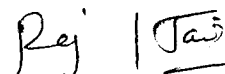
Complicated periodicals, pseudo series and author merged title are to be excluded.

This paper will have 5 titles.

First 2 Titles will be catalogued according to CCC (Ed. 5 with amendments).

Next 2 Titles will be catalogued according to AACR -2 (1978).

Fifth Title will be simple periodical to be catalogued either by CCC or AACR -2.



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**Paper - IX: ICT Application in Library and Information Science
(Practical)**

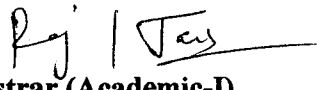
M. M. : 50

1. **Operating Systems:** MS DOS: Commands; Windows- Basic features. Creating, editing, copying, moving, and deleting files and directories / folders. MS Word; MS Excel; Power Point Presentation,
2. **Bibliographical Database:** CDS/ISIS, WINISIS– Database Design: FDT preparation; Worksheet design; Display Format language and Format design; Indexing techniques in CDS/ISIS; FST preparation; Data Entry; Search Techniques: Dictionary search, Truncated search, Boolean search, Any search, Free Text search; Sorting & Printing Services; Master File Services; Data Import & Export of records.
3. **Web Page Designing** using HTML
4. **Internet Searching.**

RECOMMENDED BOOKS

Paper - I - Library, Information and Society


1. RANGANATHAN (SR). Five laws of library science. Ed. 2. 1989. Sarda Ranganathan Endowment for Library Science, Bangalore.
2. RANGANATHAN (SR). Library manual. 1959. Asia Publishing House, Bombay.
3. RANGANATHAN (SR). Library development plan: A thirty year programme for India with draft bill. 1950. University of Delhi, Delhi.
4. RANGANATHAN (SR), Ed. Free books service for all: An international survey. 1969. Asia Publishing House, Bombay.
5. RANGANATHAN (SR). Pustakalaya Vigyan Ke Panch Sutra. Translated by C.L. Sharma. 1977. Rajasthan Hindi Granth Academy, Jaipur.
6. BENGE (Ronald). Libraries and cultural change. 1970. Clive Bingley, London.
7. RUBIN (Richard E). Foundation of library and information science. 1998. Neal - Schuman, New York.
8. HESSEL (A). History of Libraries. Translated by Reuben Peiss. 1955. Scarecrow Press, New York.
9. WHITE (CM), Ed. Bases of Modern librarianship. 1964. Pergaman Press, New York.


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10. KRISHAN KUMAR. Library Organisation. 1993. Vikas, New Delhi.
11. MURISON (WA). Public Library: Its origin and purposes and significance as social institution. Ed 2. 1971. Harrap, London.
12. CHAPMAN (Elizabeth A) and LYNDEN (Frederick). Advances in librarianship. 24 V. 2000. Academic Press, San Diego.
13. McCOLOVIN (CR). Public library extension. 1951. UNESCO, Paris.
14. PEDLEY (Paul). Copyright for library and information service profession. Ed 2. 2000. Library Association, London.
15. RADDON (Rosemary), Ed. Information dynamics. 1996 Gower, London.
16. INDIA, LIBRARIES (Advisory Committee for -) Report. 1959. Manager of Publication, New Delhi.
17. ROBERT COMMITTEE Report. 1965. H.M.S.O., London.

Paper - II - Library and Information Centre Management

1. RANGANATHAN (SR). Library administration. Ed 2. 1989. Sarada Ranganathan Endowment for Library Science, Bangalore.
2. LOCK (RN). Library administration. Ed 3. 1973. Philosophical Library, New York.
3. KRISHAN KUMAR. Library administration and management. 1993. Vikas, New Delhi.
4. SPILLER (Davide). Providing materials for library users. 2000. Library Association, London.
5. URWICK (L). Elements of administration. Ed 2. 1947. Pitman, London.
6. THOMPSON (James). Introduction to University library administration. Ed 3. 1979. Clive Bingley, London.
7. WITHERS (FN). Standards for library service: An international survey. 1974, Unesco, Paris.
8. METCALF (KD). Planning academic and research library building. Rev. ed. 1986. McGraw-Hill, New York.
9. LANCASTER (FW) and SANDORE (Beth). Technology and management in library and information service. 1997. Library Association, London.
10. KREIZMAN (Karen). Establishing an information centre: A practical guide. 1999. Bowker - Saur, London.
11. GALLIMORE (Alec). Developing an IT strategy for your library. 1997. Library Association, London.


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12. RANGANATHAN (SR). Library book selection. 1966. Asia Publishing House, Bombay.
13. KAULA (PN). Library buildings: Planning and design. 1971. Vikas Publication, New Delhi.
14. WILSON (LR) and TAUBER (MF). University library. 1958. Columbia University Press, New York.
15. NARAYANA (GJ). Library and information management. 1991. Prentice-Hall, New Delhi.
16. STANDARDS (Indian-Institution). Code for library building etc. 1960. ISI, Bangalore.

Paper - III and VII - Library Classification (Theory and Practical)

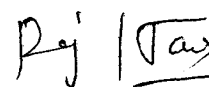
1. RANGANATHAN (SR). Elements of library classification. Ed 3. 1962. Asia, Bombay.
2. RANGANATHAN (SR). Prolegomena to library classification. Ed 3. 1989. Sarada Ranganathan Endowment for Library Science, Bangalore.
3. PALMER (BI) and WELLS (AJ). Fundamentals of Library Classification. 1961.
4. SAYERS (WCB). Manual of Classification for librarians. Rev. by Arthur Maltby Ed 5. 1975. Andre Deutsch, London.
5. SAYERS (WCB). Introduction to library classification. Rev. by Arthur Maltby. Ed 9. 1958. Grafton, London.
6. KRISHAN KUMAR. Theory of classification. 1993. Vikas, New Delhi.
7. BHARGAVA (GD). Granthalaya Vargikaran. 1972. M.P. Hindi Granth Academy, Bhopal.
8. MILLS (J). A modern outline of library classification. 1962. Asia Publishing House, Bombay.
9. RANGANATHAN (SR). Preview of Colon Classification. Ed 7
10. SHRIVASTAVA (AP). Theory of knowledge classification. 1972. Laxmi Book Depot, Delhi.
11. RANGANATHAN (SR). Colon Classification. Ed 6. 1966. Asia Publishing House, Bombay.
12. DEWEY (Melvil). Dewey Decimal Classification. Ed 19. 1979. Forest Press, New York.

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Paper - IV and VIII - Library Cataloguing (Theory and Practical)

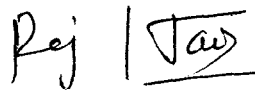
1. FOSKETT (AK). Subject approach to information. Ed 4. 1982. Clive Bingley, London.
2. KRISHAN KUMAR. Cataloguing. Ed 3. 1997. Vikas, New Delhi.
3. GIRJA KUMAR and KRISHAN KUMAR. Suchikaran Ke Sidhant. 1976. Vikas, Delhi.
4. HORNER (John). Cataloguing. 1970. Association of the Assistant Librarians, London.
5. AGARWAL (SS). Granthalaya Suchikaran. 1980. M.P. Hindi Granth Academy, Bhopal.
6. LIBRARY (American - Association). ALA filing rules. 1980. ALA, Chicago.
7. COATES (EJ). Subject Catalogue: Headings and structure. 1960. Library Association, London.
8. BAKEWELL (KCB). Manual of cataloguing practice. 1974. Pergman, Oxford.
9. NEEDHAM (CD). Organising knowledge in library. 1971 Rev. ed. Deutschi, London.
10. QUIGG (P). Theory of cataloguing. Ed 2. 1997. Clive Benjley, London.
11. SHERA (JH) and EGAN (MP), Ed. Classified Catalogue: Basic principles and practice. 1965. ALE, Chicago.
12. WYNAR (Bohdan S). Introduction to cataloguing and classification. Ed 7. 1985. Libraries Unlimited, New York.
13. AKERS (Susan Grery). Simple library cataloguing. Ed. 5. 1969. Scarecrow Pres Inc., Metuchen. N.J.
14. CATALOGUING PRINCIPLES (International Conference on-) (Paris) (1961). Report. 1968. IFLA, London.
15. HUNTER (J) and BAKEWELL (KGB). Cataloguing. Rev. ed 3. 1991. Library Association Publishing, London.
16. AMERICAN LIBRARY ASSOCIATION, etc. Anglo-American Cataloguing Rules. Ed 2. 1978. Library Association, London.
17. RANGANATHAN (SR). Classified Catalogue Code with additional rules for Dictionary Catalogue Code. Ed 5 (with amendments). 1989. Sarada Ranganathan Endowment for Library Science, Bangalore.
18. RANGANATHAN (SR). Cataloguing Practice. Ed 2. 1974. Asia Publishing House, Bombay.



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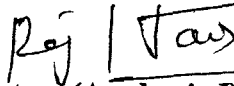
Paper - V - Information Sources, Products and Services

1. RANGANATHAN (SR). Reference Service. Ed 2. 1989, Ranganathan Endowment for Library Science, Bangalore.
2. KATZ (William A). Introduction to reference work: Reference services and reference processes. 2 V. Ed 5. 1987, McGraw-Hill, New York.
3. CHENEY (Frances Neel) and WILLIAMS (WJ). Fundamental reference sources. Ed 2. 1980. ALA, Chicago.
4. MUKERJEE (AJ). Reference works and its tools. 1964. World Press, Calcutta.
5. WINCHELL (CM). Guide to reference books. Ed 8. A.L.A., Chicago (with supplements).
6. KRISHAN KUMAR. Reference Service. Ed 5. 1996. Vikas, New Delhi.
7. CRAWFORD (John). Evaluation of Library and Information services. 2000. Aslib, London.
8. HUTCHINS (M). Introduction to reference work. 1944. A.L.A., Chicago.
9. SHORES (Louis). Basic reference sources. 1954. A.L.A., Chicago.
10. FOSKETT (DJ). Information service in libraries. Ed 2. 1967. Archon Book Hamden, Connecticut.
11. GATES (Jean Key). Guide to the use of libraries and information sources. Ed 6. 1989. McGraw-Hill Books, New York.
12. WALFORD (AJ). Guide to reference book. Ed 4. 3V. 1980. Library Association, London.
13. WILSON (TD) and STEPHENSON (J). Dissemination of Information. Ed 2. 1979. Clive Bingley, London.
14. BIDDISCOMBE (Richard), Ed. The end-user revolution. 1996. Library Association, London.
15. PENFOLD (Sharan). Change management for information service. 1999. Bowker - Saur, London.
16. LIBRARY ASSOCIATION (Great Britain). Guidelines for reference and information services in public libraries. Library Association, London.
17. KATZ (Bill), Ed. New Technologies and reference service. 2000. The Haworth Information Press, New York.


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Paper - VI and IX - ICT Application in Library and Information Science (Theory & Practical)

1. HUNT (Reger) and JOHN (Shelly). Computer and Commonsense. 1982. Printice Hall, Delhi.
2. REWLEY (JE). Computers for libraries. 1980. Clive Bingley, London.
3. TEDD (LA). Introduction to Computer-based library system. Ed 2. 1984. Hyden, London.
4. MAYNARD (J). Computer programming - made simple. 1983. ELBS, London.
5. FOSDICK (Howard). Computer basics for librarians and information scientists. 1985. Information Resources Press, Arlington.
6. LEVEY (Ian). Automating library procedure. 1984. Library Association, London.
7. KAUL (HK). Library network: An Indian experience. 1992. Virgo, New Delhi.
8. BROPHY (Peter). The library in the 21st century: New series for information age. 2001. Library Association, London.
9. CHOWDHURY (GG) and CHOWDHARY (Sudatta). Searching CD-ROM and online information sources. 2001. Library Association, London.
10. DICKSON (Garg W) and DESANCTIS (Gerardine). Information technology and the future enterprise: New models for managers. 2001. Prentice Hall, New Jersey.
11. JANCZEWSKI (Lech). Internet and intranet security management: Risks and solutions. 2000. Idea, Hershey.
12. RODRIGUEZ (MVR) and FIRRANTE (AJ). Information technology for the 21st Century: managing the change. 1996. MVR Rodviguez, Milano.
13. LESK (Michael). Practical digital libraries: Books, bytes and bucks. 1997. Morgan Kaufonon. San Francisco.
14. WINSHIP (Ian) and McNAB (Alison). The student's guide to the Internet. 1999. Library Association, London.
15. WISE (Richard). Multimedia: A critical introduction. 2000. Routledge, London.
16. SESHAGIRI (N) and AHAPOV (ARAM), Ed. Multimedia Computer and Communication. 1992. McGraw-Hill, New Delhi.
17. SUZANNE (Bahter), Ed. Information transfer, New age, New wasy. 1983. Kluwer Academic Publishers, London.
18. Getting Started Microsoft Windows 98. Ed 2. 1999. Microsoft Corporation, USA.
19. MINASI (Marks). Mastering in Windows NT server. 1999. BPB, New Delhi.
20. Discovering Microsoft Office 2000 premium and professional 1999. Microsoft Corporation, USA.
21. MINI-MICRO CDS/ISIS. Reference manual and CDS/ISIS PASCAL manual. 1989, UNESCO, Paris.


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