KARNATAK UNIVERSITY, DHARWAD

Regulations

For

MASTER OF LIBRARY AND INFORMATION SCINECE

CHOICE BASED CREDIT SYSTEM (M.Lib.I.Sc. – CBCS)

2021-2022 & Onwards

KARNATAK UNIVERSITY, DHARWAD

REGULATIONS

For

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From

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KARNATAK UNIVERSITY, DHARWAD

Regulations concerning Master Degree Programme

Faculty of Social Sciences, from 2021-2022

Master Degree Programme in Library and Information Science (M.Lib.I.Sc.-CBCS)
Regulations Governing the Post-Graduate Master Degree Programmes under Choice Based Credit System (KU-CBCS), framed under Section 44(1)(C) of K.S.U. Act, 2000.

MASTER OF LIBRARY AND INFORMATION SCINECE
CHOICE BASED CREDIT SYSTEM (CBCS)

Title:

These Regulations shall be called "Karnatak University Regulations Governing Post-Graduate under the Choice Based Credit System" for Master Degree programmes.

Commencement:

These Regulations shall come into force from the academic year 2021-2022.

Definitions:

In these Regulations, unless otherwise mentioned:

a) "University" means Karnatak University:
b) "Post-Graduate Programmes" means Master's Degree Courses.
c) "Compulsory Course" means a fundamental paper which a student admitted to a particular Post-Graduate programme should successfully complete to receive the Post-Graduate Degree in the concerned subject.
d) "Specialization Paper" means an advanced paper due to departmental choice for students wanting to receive Degree in the specialization area:
e) "Open elective" means a course offered by Department for students of other Departments in the same Faculty. Students have freedom to choose from a number of optional courses offered by other Department/s to add to their credits required for the completion of their respective programmes: however, if in a P.G. Centre there is only one Department for the time being, the students of that Department should study that open elective course.
f) "Credit" means the unit by which the course work is measured. For this Regulation, one Credit means on hour of teaching work or two hours of practical work per week. Normally a Semester is of 16 weeks duration in any given academic year. As regards the marks for the courses, 1 credit is equal to 25 marks, 2 credits is equal to 50 marks, 3 credits is equal to 75 marks and 4 credits is equal to 100 marks as used in conventional system.
g) "Grade" is an index to indicate the performance of a student in the selected course. These Grades are arrived at by converting marks scored in each subject by the candidate after completing his/her Internal Assessment and Semester end Examinations. Each course carries a prescribed number of the marks of credits. These grades are awarded

for each subject after conversion of the marks and after completion of the examinations in each semester.

h) "Grade Point Average" of GPA refers to an indication of the performance of the student in a given semester. GPA is the weighted average of all Grades a student gets in a given semester. The GPA depends on the number of courses student takes and the grades awarded to him/her for each of the subjects so chosen.

i) "Cumulative Grade Point Average" or CGPA refers to the cumulative Grade Point Averages weighted across all the semesters and is carried forward. The calculations of the GPA, CGPA is shown at the end of this regulation.

Minimum Eligibility for Admission:

The students who have successfully completed the three year/four-year Degree course or any other Degree course of this University or of any other University recognized as equivalent there to by this University shall be eligible for admission to the Post Graduate Programmes under the KU-CBCS Programme provided they also satisfy the eligibility conditions like percentage of marks etc., as may be prescribed by the University and as per Ordinance of the course.

Entrance Test

Candidate seeking admission to the course shall be required to appear for entrance test conducted by the University, for the 1st Semester.

Selection for Admission

The selection of students shall be made on merit in each category of reservations as per the University rules for 1st Semester.

Intake

The total number of candidates to be admitted to the course would be 30 only for the 1st semester. Two seats are allocated to other University candidates of which one for other University within the state and one for Outside state. Eight seats are under enhanced fee. Total Seats is 30.

Course of Study:

The courses of study for M.Lib.I.Sc degree shall comprise of Theory and Practicals as noted in the syllabus.

Note: Specification of Degrees as per UGC notification dated March 2014 published in the Gazette of India, 5th July 2014 (Part III Section 4).

Duration of the Programme:

The programme of study for the Post-Graduate Master Degree shall normally extend over a period of two academic years, each academic year comprising of two semesters, and each semester comprising of sixteen weeks of class work.

Medium of Instruction

The medium of instruction and examination is English.

Minimum Credits and Maximum Credits:

a) There shall be three categories of courses viz., Compulsory course, Specialization Course and Open Elective Course. Compulsory and Specialization Course should be from the concerned department only. The Open Elective are the courses offered by other Departments in the same Faculty.
b) Each course shall have a definite course objective, Eligibility criterion for taking the course, scheme of Evaluation including the components of Internal Assessment (IA) marks, Projects (if any), the number of contact hours, type of practical and the prescribed credits.
c) The credits for each of compulsory course may vary from 3 to 4 credits; for specialization course it may vary from 1 to 4. In case of Open Elective Course, it shall be 1 to 3 credits for each paper.
d) A student shall register for minimum of 18 credits and a maximum of 30 credits per semester. However, to qualify for the degree in any Department under any school and faculty, he/she should have registered and cleared a minimum number of credits, which vary from course to course.

Course Structure:

a) The students of Post-Graduate Programme shall study the courses as may be approved and prescribed by the Academic Council of the University from time to time.
b) A typical Master Degree program consists of a number of courses. This number varies from discipline to discipline. The term course is used to indicate a logical part of a subject matter of the programme (also referred to as paper). In essence the courses are of three types:

    i. Compulsory Course
    ii. Specialization Course or Optional Course and
    iii. Open Elective Course.

c) Each programme shall have a set of compulsory course that a student must complete to get the degree in the concerned Department. These are distributed in each semester. There could be a minimum of such papers for each semester depending on the department.
d) The students shall also choose a minimum number of specializations Course offered within the department. Each department will offer at least one specialization paper in the third and fourth semester. The Department, BOS and the Faculty may also have spell out the number of such specialization courses a student will have to take for the specialization. The Department offering of specialization course shall provide the flexibility in the system so that the student can opt for a variety of programmes depending upon their interest.
e) Each department shall offer at least two Open Elective courses for the II and III Semester for students from other department. Student from the same department are generally not allowed to opt the courses offered as Open Elective course in the same department.

f) Each course (paper) in this system is designed carefully to include lectures / tutorial/ Laboratory work/ seminars/ Project work/ practical training/ report writing/ Viva-voce etc., to meet effective teaching and learning needs and the credits are assigned suitably.
g) Master Degree Programmes are essentially semester system Programmes. There shall be 4 semesters in each Programme. There shall be two semesters for each year of the Programme. Each of the Semester will be of 16 weeks duration including evaluation and grade finalization period. The academic session in each semester will provide 90 teaching days with 48 hrs of teaching / learning periods in six days session per week.
h) The normal calendar for the semester would be as follows:
    i. I and III semester - August to November
    ii. II and IV Semester - January to April

Attendance

a. Each paper shall be taken as a unit for the purpose of calculating the attendance.
b. Each student will have to sign and mark his attendance for every hour of teaching of each paper. At the end of every month all teachers shall notify the attendance of every student on the Notice Board of the department during 2nd week of every month. Chairman shall certify the fulfilment of required attendance of every candidate in the Examination form.
c. Certain proportion of the marks in Internal Assessment shall be awarded based on attendance as an incentive to the student for regularity in attendance.
d. A student shall be considered to have satisfied the requirement of attendance for each paper, if he/she has to attend not less-than 75% of the number of classes held up to the end of the semester including tests, seminars, group discussions, practical, tutorials, etc.
e. However, if a student represents his/her institution, University, State or Nation in sports, NCC, NSS of Cultural of any other officially sponsored activities, he/she shall be eligible to claim the attendance for the actual number of days participated subject to a maximum of 20 days in a semester based on the specific recommendation of the head of the Department.

Course Outline for the M.Lib.I.Sc.

SEMESTER - I

Paper Code	Title of the Paper	Max. Marks	Internal Assessment	Total Marks	Credits	Teaching Hrs.
	Compulsory Papers					
PG44T101	Foundations of Library & Information Science	75	25	100	4	4 Hrs / week
PG44T102	Knowledge Organization, Information Processing and Retrieval (Theory)	75	25	100	4	4 Hrs / week
PG44P103	Knowledge Organization, Information Processing and Retrieval (Practical)	75	25	100	4	8 Hrs / week
PG44T104	Information Sources (Theory)	75	25	100	4	4 Hrs / week

PG44T105	Information Technology: Basics	75	25	100	4	4 Hrs / week
PG44P106	Information Technology (Practical)	75	25	100	4	8 Hrs / week

SEMESTER - II

Paper Code	Title of the Paper	Max. Marks	Internal Assessment	Total Marks	Credits	Teaching Hrs.
	Compulsory Papers					
PG44T201	Management of Libraries & Information Centres	75	25	100	4	4 Hrs / week
PG44T202	Information Systems & Services	75	25	100	4	4 Hrs / week
PG44P203	Information Sources & Services (Practical)	75	25	100	4	8 Hrs / week
PG44P204	Information Processing & Retrieval - UDC & Non-Book Materials (Practical)	75	25	100	4	8 Hrs / week
PG44T205	Library and Users	75	25	100	4	4 Hrs / week
	Open Elective Paper					
PG44O206	Electronic Information Sources and Services	75	25	100	4	4 Hrs / week

SEMESTER - III

Paper Code	Title of the Paper	Max. Marks	Internal Assessment	Total Marks	Credits	Teaching Hrs.
	Compulsory Papers					
PG44T301	Information and Communication	75	25	100	4	4 Hrs / week
PG44T302	Information, Retrieval, Processing and Repackaging (Theory)	75	25	100	4	4 Hrs / week
PG44T303	Research Methods	75	25	100	4	4 Hrs / week
PG44T304	Applications of Information Technology (Theory)	75	25	100	4	4 Hrs / week
PG44P305	Applications of Information Technology (Practical)	75	25	100	4	8Hrs / week
	Open Elective Paper					
PG44O306	Information Literacy	75	25	100	4	4 Hrs / week

SEMESTER – IV

Paper Code	Title of the Paper	Max. Marks	Internal Assessment	Total Marks	Credits	Teaching Hrs.
	Compulsory Papers					
PG44T401	Networking and Internet Technology (Theory)	75	25	100	4	4 Hrs / week
PG44T402	Digital Library and Multimedia (Theory)	75	25	100	4	4 Hrs / week
PG44T403A **PG44T403B** **PG44T403C**	Public Library System Academic Library System Special Library System	75	25	100	4	4 Hrs / week
PG44P404	Digital Libraries and Multimedia (Practical)	75	25	100	4	4 Hrs / week
PG44D405	Dissertation	100	00	100	4	6Hrs / week
PG44D406A **PG44I406B** **PG44E406C**	Dissertation Viva – voce Internship Education Tour Report	40 50 10	00 00 00	40 50 10	4	

Internship

The students need to undergo Internship (which is compulsory) for one month after the completion of third semester M.Lib.I.Sc.

Study Tour

There shall be a study tour, which is compulsory and a student has to submit a tour observation report. The Study tour will be conducted at the beginning of the fourth semester.

Submission of Dissertation

a) M.Lib.I.Sc III semester students shall have to choose a topic for dissertation and preliminary preparation be carried out under the guidance of a teacher.
b) M.Lib.I.Sc –IV semester students shall have to submit the dissertation on the chosen topic, before the commencement of the theory examination.
c) Candidates keeping terms but not appearing for the theory and practical papers and not submitted the dissertation within the prescribed time, may appear for respective examination and submit the dissertation within the prescribed time.
d) Candidates appearing for the examination under the provision of (c) will be not eligible for the award of any rank, prize, medal etc.

Evaluation:

a. Each Course has two components, the first being Internal Assessment Marks and the second being the Semester End Exams. The Internal Assessment (IA) marks are based on continuous

Internal Assessment. The total marks for the Internal Assessment would be based on the total credit awarded to the Course. For instance, if a Compulsory Course has a Credit award of 4, then the total max marks would be 100 for the subject.

b. The marks shall be displayed on the Notice Board of the Department also. The tests shall be written in a separately designated book and after evaluation; the same should be shown to students.
c. In case of candidates who wish to appear in improvement examinations, if any, the marks obtained in the Internal Assessment shall not be revised. There is no improvement for internal assessment.
d. To encourage the students for the regular participation in academic curricula following break-up for attendance has been recommended.

Attendance	Marks Allotted
91 to 100%	3
81 to 90%	2
75 to 80%	1

e. Students seeking the condoning of attendance after representing the University have to produce attendance certificates from the concerned authority and that attendance period to condone of shall be considered for the allotment of marks as under.
f. There shall be one end semester examination of 3 duration (for 75 marks/ paper). Each answer scripts of the semester end examination (theory and project report) shall be assessed by two examiners (one internal and another external). The marks awarded to that answer script shall be the average of these two evaluations. If the difference in marks between two evaluations exceeds 20% of the maximum marks such a script shall be assessed by third external examiner. The marks allotted by the third examiner shall be average with nearer mark of the two evaluation

Completion of Course:

a. A candidate is expected to successfully complete P.G. Master Degree course in two years from the date of admission.
b. Whenever the syllabus is revised, the candidate reappearing shall be allowed for PG Degree examinations only according to the new syllabus.
c. The CBCS scheme is fully carry-over system. However, the four –semester two years course should be completed by a student within double duration of the normal course period (i.e. 4 years). For these periods, candidate may be permitted to take examination in cross-semester (even semester examination in even and odd semester examination in odd semester examination) after paying the examination fee of Rs. 1,000/- per paper.

Declaration of Results:

a. Minimum for a pass in each paper shall be 40% of the total 100 marks including both the IA and the semester end examinations. However, candidate should obtain at least 40% of the marks in the Semester End Examination. There is no minimum in the IA marks. However, after

adding the IA and the semester end examination, the candidates should score a minimum of 40 % of the maximum marks for the subject.

b. The candidates, seeking improvement of their results shall submit a representation along with a permissible fee to the Registrar (Evaluation) and surrender the degree certificate/ provisional pass certificate /original marks card of that semester within 15 days of announcement of result.

Marks and Grading

The grading of successful candidate at the examination shall be as follows:

Percentage	GPA/CGPA	Letter	Class
75.00 to 100.00 %	7.50 to 10.00	A	First Class with Distinction
60.00 to 74.90%	6.00 to 7.49	B	First Class
50.00 to 59.94%	5.00 to 5.99	C	Second Class
40.00 to 49.94%	4.00 to 4.99	D	Pass
Less than 40.00%	Less than 4.00	F	Fail

KARNATAK UNIVERSITY, DHARWAD

SYLLABUS

For

MASTER OF LIBRARY AND INFORMATION SCINECE

CHOICE BASED CREDIT SYSTEM

(M.Lib.I.Sc – CBCS)

PROGRAMME SPECIFIC OUTCOMES (PSOS)

After completion of this programme, the student will be able to:

1. Understand the logic of knowledge organization and its importance in Library and Information Centres.
2. Learn the practical and managerial skills to handle the housekeeping operations of the Library and Information Centres.
3. Understand the information needs and requirements of different user communities and their by develop new services and facilities.
4. Effectively use Information and Communication Technology (ICT) in automation of Libraries and provision of advanced services and facilities in Library and Information Centres.
5. Contribute to LIS profession by inculcating research aptitude, communication skills and other necessary soft skills.

Paper Code and Name	PG44T101: FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the basic philosophy of Librarianship / LIS profession.
CO 2	Identify the different types of libraries and differentiate between Academic / Public / Special libraries.
CO 3	Understand the professional ethics and its / their application / implementation in practicing the profession.
CO 4	Understand the importance of the five laws of library science and their implications in Library and Information Centres' activities.
CO 5	Analyse the salient features of public library legislations enacted by Indian States and their importance in the promotion of library movement in India.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Library as a Social Institution	
- Social and Historical Foundations of Library and Information Centres. - Different types of Libraries - their distinguishing features and functions. - Academic (School, College and University Libraries) - Public Libraries - Special Libraries - National Library - Role of Public Library in promotion of formal and Informal Education	12 Hours
Unit 2: Normative Principles of Library and Information Science	
- Five Laws of Library Science - Implications of Five Laws of Library and Information Science and their application to Library and Information Centres activities. - Latest Trends in Five Laws of Library and Information Science	8 Hours
Unit 3: Library Development in India	
- Libraries in Ancient, Medieval and Modern Period.	6 Hours

- Role of Central Government in Development of Libraries in India-UGC and INFLIBNET - Role of State Government in Development of Libraries in Karnataka. - Development of Public Libraries in Karnataka after the enactment of Karnataka Public Library (KPL) Act, 1965.	
Unit 4: Laws Relating to Libraries and Information Centres	
- Library Legislation- need, purpose, and essential features. - Library Legislation in India- problems and prospects. - Overview of Public Library Acts in Indian States and Union Territories. - Detailed study of Karnataka Public Library Act, 1965. - Press and Registration Act and Delivery of Books (Public Libraries) and News Papers Act, 1954 and 1956. - Copyright Act and Intellectual Property Rights (IPR).	12 Hours
Unit 5: Library and Information Science Profession	
- Attributes of a Profession. - Librarianship as a Profession. - Professional Ethics and Qualities. - Professional Education and Research. - Role of Professional Associations in promotion of LIS Profession.	6 Hours
Unit 6: Professional Associations	
- Professional Associations- Objectives and Functions - Role of Professional Associations in the Development of Library and Information Centres and Professionals. - Regional Library Associations- Objectives, Functions and Activities, KALA - National Library Associations- Objectives, Functions and Activities, ILA, IASLIC, IATLIS and SIS. - International Library Associations- Objectives, Functions and Activities, IFLA, Commonwealth Librarians Association (CWLA) and ALA. - Promoters of Library and Information Centres - National Level: RRRLF International Level: UNESCO.	12 Hours
Unit 7: Public Relations and Extension Activities	
- Concept, Definition, and Scope - Role of Public Relation Officer (PRO) in promotion of Library Resources and Services.	8 Hours

- Publicity and Extension Activities: Quiz, Debate, Essay, Singing Competitions and Story Telling Hours. - Library Path Finders (Guides)	
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Paper Code and Name	PG44T102: KNOWLEDGE ORGANISATION, INFORMATION PROCESSING AND RETRIEVAL (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand and learn the basics of classification, importance of Library Classification
CO 2	Understand the logic of Knowledge Organisation by learning different schemes of Library Classification
CO 3	Develop an understanding of analysis of subject content and the principles and practices of document description.
CO 4	Understand the Nature, Scope and Importance of Library Catalogue.
CO 5	Learn the importance ISBD in maintaining uniformity in cataloguing the records.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Knowledge Organisation	
- Conceptual analysis of classification, Historical development of Knowledge Classification, definition, meaning, objectives, purpose and functions of Library Classification, General theory of classification, Descriptive and Dynamic theories of Library Classification.	10 Hours
Unit 2: Development of Knowledge Organisation Systems	
- Contributions of Dr. S. R. Ranganathan, Normative Principles, Basic Laws, Fundamental laws, Canons, Principles and Postulates, Species of Classification, Enumerative Classification, Almost Enumerative, Almost Faceted, Faceted Classification, Rigidly Faceted, Freely Faceted Classification. Outline of CC, DDC and UDC, Organisation of Knowledge in the Internet World, Ontology and Folksonomy.	10 Hours
Unit 3: Universe of Knowledge	
- Concept, Meaning, and Definition, Structure and attributes of Subjects, Subject Categories Simple, Compound and Complex Subjects, Modes of Formation of different Subjects.	8 Hours

Unit 4: Library Cataloguing	
- Resource Description: Concepts and definition. - Library Catalogue: Meaning, Definition, Need, Purpose, Objectives and functions. - History and development of Catalogue codes and practices: - Resource description standards: ISBD, AACR2R and RDA. - Resource sharing of Bibliographic Data: Meaning and Importance. - Centralized Catalogue, Co-operative Catalogue, Union Catalogues.	8 Hours
Unit 5: Forms of Catalogues	

- Outer forms of Catalogue:
  - Book Form; Sheaf Form; Card Form and Computerised Form (OPAC)
- Inner forms of Catalogues:
  - Author Catalogue, Name Catalogue, Title catalogue, Alphabetical subject Catalogue, Dictionary Catalogue, Classified or systematic catalogue, Alphabetical-classed catalogue
- Kinds of Entries:
  - Main Entry; Added Entries; Reference Entries;
- Filing rules and procedures.
- Subject Cataloguing:
  - Sears List of Subject Headings;
  - Library of Congress Subject Headings (LCHS);
  - Medical Subject Headings (MeSH);
  - Subject Headings for Engineering (SHE).
	10 Hours

Unit 6: Normative principles of Cataloguing	
- Background and Development of Normative Principles; - General Normative Principles: Principles - Specific Normative Principles of Library and Information Science: Laws - Specific Normative Principles of Cataloguing: Canons.	10 Hours
Unit 7: Latest Trends in Cataloguing	
- WebOPAC's and Z39.50 - Metadata: Meaning, Definition, Purpose, Use and types. - Metadata standards: MARC-21 & Dublin Core.	8 Hours
REFERENCES	

1. Anglo American Cataloguing Rules (2002). 2nd Rev ed. New Delhi: Oxford.
2. Barbara, M W., (Ed,), (1997). Sears list of subject headings. New York: HW Wilson.
3. Beghtol W. B. (2004). Knowledge Organization and Classification in International Information Retrieval. London: Routledge.
4. Byrne, D. J. (1998). MARC manual: Understanding and records. Chicago: ACA.
5. Krishan Kumar (2004). Theory of Library Classification. New Delhi: Vikas.
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Paper Code and Name	PG44P103: KNOWLEDGE ORGANISATION, INFORMATION PROCESSING AND RETRIEVAL (PRACTICAL)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Identify the Specific Subject of the Document by analysing the contents.
CO 2	Devise call numbers of the documents by constructing class numbers and book numbers
CO 3	Understand the logic of mapping of subjects.
CO 4	Impart Practical training to the students in cataloguing various types of documents according to the AACR-2
CO 5	Catalogue the works with Pseudonymous authors, Works with Uniform Titles and Serials Publications.

PARTICULARS	Teaching Hours (Max. 64)
Classification	
- Classification of documents by identifying Specific Subject, identification of documents representing simple, compound and complex subjects.	12 Hours
- Structure of DDC, Introduction to 23rd edition of DDC, Use of Standard subdivisions (table 1) and use of table 2 to 6 in DDC	12 Hours
- Assigning Book Numbers and introduction to Web Dewey	8 Hours
Cataloguing	
- Cataloguing of printed monographs- Single personal Authorship shared Responsibility	10 Hours
	8 Hours

- Cataloguing of works under editorial direction Cataloguing of Multi-volume and multi-part documents.	
- Cataloguing of works under Pseudonymous authors – and Works with Uniform Titles and Serials Publications.	8 Hours
- Cataloguing of works authored by various types of corporate bodies: Government publications, Institutional publications, Society publications, Conference/Seminar proceedings, Workshop materials etc.	6 Hours

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Paper Code and Name	PG44T104: INFORMATION SOURCES (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	understand the characteristics of different sources of information.
CO 2	gain the knowledge of non-print sources of information.
CO 3	know the structure of different sources of information.
CO 4	Understand the nature and characteristics of electronic resources .
CO 5	Know about different Human and Institutional sources of information.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Sources	
- Meaning, Definition, Nature; - Evolution, Importance, Characteristics; - Functions, Types of Primary, Secondary and Tertiary sources; - Criteria for Evaluation of Information sources.	6 Hours
Unit 2: Primary Sources	
- Meaning, definition and features of Primary sources - Periodicals, Research reports, Technical reports. - Patents, Standards and Specifications, - Theses and Dissertations, - Conference and Seminar publications, Trade literature.	8 Hours
Unit 3: Secondary Sources	
- Meaning, definition and features of Secondary sources - Dictionaries, Encyclopaedias, - Yearbooks, Almanacs, - Biographical sources, Bibliographies, Geographical sources, - Current sources, Statistical information sources,	10 Hours

- Handbooks, Manuals, - Indexing and Abstracting periodicals, Annual reviews, treatises etc.	
Unit 4: Tertiary Sources	
- Meaning, definition and features of Tertiary sources - Directories, Guides to reference sources, - Guides to subject literature, - Bibliography of bibliographies, - Directory of directories, - Monographs, Union catalogues, Textbooks.	8 Hours
Unit 5: Non-Documentary Sources	
- Meaning, definition and features of Non-documentary sources. - a) Human Sources: Information generators, information gatherers, information processors, Information recorders, information disseminators, Technological gatekeepers, Invisible collages, Consultants, Experts/resource persons, Extension workers, Representatives of firms. - b) Institutional / Organizational Sources: Government ministries and departments, R& D organizations, learned societies, Publishing houses, Broadcasting stations, Archives, Data banks, Information analysis centers, Referral centers, Institutional web sites.	8 Hours 10 Hours
Unit 6: Non – Print Sources	
- Meaning, Definition, features of Non-print sources - Microforms, Audio visual materials, Optical media-based databases, - Online databases, Social Networking sites: Twitter, Telegram, facebook, YouTube, Whats-app, Instagram, flicker, Mobile apps.	6 Hours
Unit 7: Electronic information Resources.	
- Meaning, Definitions, features of Electronic information resources, - E-books, E-journals, E-theses, E-newspapers, - Internet sources, Blogs and Wikis, - Online dictionaries/encyclopaedias/directories, - Personal and Institutional websites, Subject Gateways and Portals. - Bulletin board services, Open access resources: DOAJ, DOAB. Open DOAR.	8 Hours

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Paper Code and Name	PG44T105: INFORMATION TECHNOLOGY: BASICS
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand and learn the basic skills of Information Technology and computer
CO 2	Outline the components of a computer and differentiate between Input and Output Devices
CO 3	Identify and understand the different useful application software
CO 4	Learn about the different Number Systems (Binary, Octal, Decimal and Hexadecimal)
CO 5	Analyse the different programming languages (Machine, Assembly and High-Level Languages)

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Technology	
- Meaning, Definitions, Evolution, Revolutions: Agricultural, Industrial, Technology, Information revolutions, Scope, Importance, Components, Functions, Benefits and Applications	6 Hours
Unit 2: Introduction to Computer	
- Concept, Definition, Historical Developments, Characteristics, Classification of Computers: Generations, Size, Principle - Benefits of Computer / Disadvantages	8 Hours
Unit 3: Computer Architecture	
- Components of a Computer: Types of Memory, Computer Diagram, Central Processing Unit (CPU), Input and Output Devices, Internal and External Storage Devices	10 Hours
Unit 4: Software	

- System Software: Software, Hardware and Firmware, Purpose, Classification of Operating Systems: Multi User, Multi processing and Multi-Tasking, Operating Systems – Microsoft Windows, Open-Source Operating Systems - Application Software: MS-Office - Ms-Word, Excel, Power point, Internet Browsers, Open Office.Org, Anti-Virus Programs, Web Designing Tools, HTML Editors, Software Suits	8 Hours 10 Hours
Unit 5: Data Representation	
- Data representation in computers - Number Systems: Binary, Decimal, Octal and Hexadecimal (Addition, Subtraction of Number Systems) - Conversion of Binary to Other Number System and Vice-Versa. - Character Encoding Standards: ASCII, EBCDIC, ISCII and UNICODE.	8 Hours
Unit 6: File Organization	
- File Concepts: Meaning and Definitions, Features, Attributes, File Types: Text, Audio, Video, Image, Executable, Methods, Functions, - Types of Organizing A File: Sequential, Inverted, Indexed Sequential and other methods	6 Hours
Unit 7: Overview of Programming Languages	
- Concept, Need, Examples - Machine, Assembly and High-level programming languages - Programming Concepts: System Analysis, Algorithms and Flow-Charts	8 Hours
REFERENCES	
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Paper Code and Name	PG44P106: INFORMATION TECHNOLOGY (PRACTICAL)
COURSE OUTCOMES (COs)	
At the end of this paper the students will be able to:	
CO 1	Identify the computer peripheral devices
CO 2	Understand the different operating systems (Windows, Linux)
CO 3	Analyse and outline various skills of MS office packages (MS-Word, Excel and Power point)

Particulars	Teaching Hours (Max. 64)
Introduction to Peripheral Devices: Input Devices	4 Hours
Introduction to Peripheral Devices: Output Devices	4 Hours
Introduction to Operating Systems: Windows	4 Hours
Introduction to Operating Systems: Linux	4 Hours
Introduction to MS Word	14 Hours
Introduction to MS Excel	14 Hours
Introduction to MS Power Point	14 Hours
Creation of E-mail IDs in different domains	6 Hours

Paper Code and Name	PG44T201: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the principles of management and their application in Library and Information Centres.
CO 2	Identify the different divisions / sections of Library and Information Centres.
CO 3	Recognise the different types of resources required to manage the Library and Information Centres.
CO 4	Understand the problems and challenges involved in the management of Library and Information Centres.
CO 5	Understand the importance of Total Quality Management (TQM) and its application in Library and Information Centres.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Management	
- Concept, Meaning, Definitions and Scope. - Management Schools of Thoughts (Classical to Modern Management Schools). - Functions and Principles of Management. - Scientific Management, Principles of Scientific Management and their application to Library and Information Centres. - Organizational Structures.	10 Hours
Unit 2: Library House Keeping Operations	
- Different Sections of Library and Information Centres. - Book Selection and Acquisition: Purpose, Objectives, Need and Functions. - Book Selection Tools and Principles of Book Selection. - Technical Processing. - Serial Control, Circulation Control, Maintenance, Reference Section/ Readers Advisory Service. - Stock Verification: Policies, Procedures and Methods.	14 Hours

- Online Bookshops: Identification, Advantages, Online Book Shops Vs Traditional Book Shops. URLs. (https://books.google.co.in and Amazon Books). - Collection Development and Management Policies and Procedures. - Archiving- Conservation-Preservation: Print and non-print materials.	
Unit 3: Human Resource Planning, Management and Development	

- Human Resource Planning: Meaning, Definitions and Planning Process.
- Human Resource Management: Meaning, Definitions and Functions.
- Job Description, Analysis and Job Evaluation.
- Recruitment procedures.
- Developing and Retaining Staff.
- Motivation, Delegation, and Decision Making.
- Human Resources Development.
  - Training and Development.
  - Performance Appraisal.
  - Grievances.
- Leadership Qualities, Functions and Skills.
- Emotional Intelligence.
	10 Hours

Unit 4: Financial Management	
- Sources of Finance and their Importance. - Income Generation - Budgeting: Meaning and Definitions. - Tips for Preparation of Budget. - Types of Budget: Line Budget, PPBS and Zero-Based Budgeting (ZBB). - Budget as a Control Device. - Cost effectiveness and Cost Benefit Analysis. - Out sourcing.	8 Hours
Unit 5: System Analysis and Design	
- Concepts, Meaning and Definitions. - Study of a System - Performance Evaluation of Library and Information Centres. - Performance Measurement. - Management of Information systems (MIS): Concept, Use. - Project Management, PERT / CPM.	6 Hours
Unit 6: Physical Facility Management	

- Concept of Change. - Changes in Procedures, Methods, Tools and Techniques. - Challenges in Incorporating Change. - Techniques of Managing Change - Total Quality Management (TQM): Concept, Meaning, Definitions and Elements - Use of Technology and Technology Management. - Risk Management, Contingency Management.	8 Hours
Unit 7: Planning and Reporting	
- Planning: Concept, Definitions, Need, Purpose and Types. - Policies and Procedures, Management by Objective (MBO). - Building and Space Management in Library and Information Centres. - Planning for new place, moving to new Location. - Library Statistics. - Library Committees: Importance, Types and Functions. - Library Rules and Regulations. - Annual Report: Compilation, Contents and Style.	8 Hours
REFERENCES	
1. Besterfield, D. H. Total Quality Management. Prearson, New Delhi. 2011. 2. Brophy, Peter and Courling Kote. Quality Management for Information and Library Managers. Bombay: Jaico, 1997. 3. Iyer, V. K. Library Management of Staff Training and Development. Delhi: Rajat, 1999. 4. Kumar P.S.G. Management of Libraries and Information Centres. Paper V of UGC Model Curriculum. Delhi: B.R Publishing Corporation, 2003 5. Paliwal, P.K. Compendium of Library Administration. New Delhi: Ess Ess, 2000. 6. Pankl, V., & White, D.T. Recruitment, Development, and Retention of Information Professionals: Trends in Human Resources and Knowledge Management. Business Science Reference, 2010. 7. Sengar Sunita & Singh, R K. Human Resource Management in Libraries. Shree Publisher & Distributors. New Delhi. 2009. 8. Edward Evans G. and Camila A. Alire, Management Basics for Information Professionals, London: Facet Publishing, 2013. 9. http://egyankosh.ac.in/	

Paper Code and Name	PG44T202: INFORMATION SYSTEMS AND SERVICES
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the importance of information services.
CO 2	Identify different kinds of Information Centres and their role in information dissemination.
CO 3	Familiarize with different types of information centres at the National and International level.
CO 4	Understand the significance of Reference service.
CO 5	Identify and use of Open Access Resources.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Systems	
- Basic concepts, components, characteristics of Information Systems - Kinds of Information Systems - their functions and services	8 Hours
Unit 2: Libraries, Documentation and Information Centres	
- Libraries, Documentation Centres, Information Centres, Databanks, Information Analysis Centres, Referral centres.	8 Hours
Unit 3: Planning, Designing and Evaluation of National and International Information Systems	

- Planning of Information Systems:
  - Planning Process, Need for Planning, Advantages of Planning,
- Factors in Planning:
  - Steps in Planning, Standards for Planning,
  - Objectives of the Planning of Information Centre.
- System Design:
  - Steps in System Design Process.
- Evaluation of Information Systems –
  - Process of Evaluation, Levels of Evaluation, Evaluation Criteria,
	10 Hours

- Present Concepts in Information System Evaluation, - Importance of Evaluation	
Unit 4: National Information Systems and Services	
- National Institute of Science Communication and Policy Research (NIScPR), - Defence Scientific Information & Documentation Centre (DESIDOC), - National Social Science Documentation Centre (NASSDOC), - Information and Library Network (INFLIBNET), - Indian Council of Social Science Research (ICSSR), - Environmental Information System (ENVIS). - Evaluation Criteria of National Information Systems	12 Hours
Unit 5: International Information systems and Services	
- Regional Information Systems – ASTINFO, APINESS, SAARC (SDC) - Global Information Systems – UNESCO – PGI, INIS, AGRIS, MEDLARS. - Evaluation Criteria of International Information Systems	10 Hours
Unit 6: Information Services	

- Meaning Definition, Need and Purpose of Information Service.
- Types of Reference Service:
  - Short Rang, Long Rang and Readers Advisory Services.
- Information Alerting Services:
  - News Paper Clipping Service; Current Awareness Services CAS);
  - Selective Dissemination of Information (SDI); Abstracting and Indexing services.
- Information Services:
  - Reprographic Service, Literature Search Services, Document Delivery Services (DDS), Electronic Document Delivery Services (EDDS), Translation Services
	8 Hours

Unit 7: Open Access Initiatives	
- Open access: Concept, Need, Characteristics and Types. - Open Access Initiatives in India. - Evolution of Institutional repositories - Institutional Repositories - Concepts and Issues - Repositories and Open Archives - Implementing institutional repositories	8 Hours

- IR and Case Studies.

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2. Carmel, Maguire, Weir, Anthony D., Kazlauskas, Edward J. (2013). Information Services for Innovative Organizations. Emerald Group Publishing Limited
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Paper Code and Name	PG44P203: INFORMATION SOURCES AND SERVICES (PRACTICAL)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	develop an understanding of organizing information sources.
CO 2	understand the principles and practices of document description including electronic documents.
CO 3	Familiarize with various information services to be provided in the libraries.
CO 4	acquire skills in planning and management of information services and systems.
CO 5	develop skills for creating new information services.

PARTICULARS	Teaching Hours (Max. 64)
Exercises on reference questions	14 Hours
Evaluation of reference documents	4 Hours
Database searching and retrieval: MOOCs, Institutional repository, Open course wares,	14 Hours
Searching Subject directories, Subject gateways, web directories, Library portals, Consortia based resources.	4 Hours
Preparation of Current awareness list	6 Hours
Compilation of Press clipping.	4 Hours
Development of computer-based information services, Online Information Services. Information alerting services. Current Awareness Services,	4 Hours
Selective Dissemination of Information (SDI), Translation and Document delivery Services, Virtual reference service.	14 Hours

Paper Code and Name	PG44P204: INFORMATION PROCESSING & RETRIEVAL - UDC & NON-BOOK MATERIALS (PRACTICAL)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the structure of Universal Decimal Classification (UDC)
CO 2	Devise call numbers of the documents by constructing class numbers and book numbers
CO 3	Understand the logic of mapping of subjects in Universal Decimal Classification (UDC)
CO 4	Catalogue the Non-Book Materials including Electronic resources.
CO 5	Apply the ISBD for Cartographic Materials, Manuscripts and Computer Files.

PARTICULARS	Teaching Hours (Max. 64)
Universal Decimal Classification (UDC)	
- Introduction to UDC and its structure.	12 Hours
- Use of Common Auxiliaries and special Auxiliaries.	12 Hours
- Construction of Class numbers, Filing order and Citation order, Assignment of Book Numbers.	8 Hours
Cataloguing of Non-Book Materials according to AARC-2	
- Cataloguing of Cartographic Materials	8 Hours
- Cataloguing of Manuscripts.	6 Hours
- Cataloguing of Sound Recordings, Motion Pictures and video Recordings.	10 Hours
- Cataloguing of Electronic Resources and Computer files.	8 Hours

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1. Asija, Sunitha. Documentation services in India: A review of some selected documentation centres. New Delhi, Academic Publications, 1998.
2. British Standards Institution (2003). Universal Decimal Classification. United Kingdom: British Standards Institution.
3. Carmel, Maguire, Weir, Anthony D., Kazlauskas, Edward J. (2013). Information Services for Innovative Organizations. Emerald Group Publishing Limited
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14. Smith, Linda C., & Wong, Melissa A. (2010). Reference and Information Services: An Introduction, / 5th ed., Libraries Unlimited,

Paper Code and Name	PG44T205: LIBRARY AND USERS
COURSE OUTCOMES (COs)	
Students who complete this paper will be able to:	
CO 1	Understand the different category of library users and their information needs
CO 2	Know the Information Seeking Behavior (ISB) of users and to develop ability to recognize the different patterns adopted by users in retrieving and making use of information
CO 3	Conduct User Studies by adopting different methods and techniques.
CO 4	Understand the importance of information and identification of potential sources and their evaluation
CO 5	Know the significance of Life Long Learning.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Users and their Needs	
- User Communities: Students, Teachers, Scientists and Technologists, Research and Development Personnel, Planners, Policy Makers, Ethnic groups and other professionals - Need and Information Needs: Meaning, Definition, Distinction between need, want, demand and requirement, - Types of Information Needs: Physiological, Affective and Cognitive - Information Seeking Behavior: Meaning, Definition, Different Models of ISB. - ISB in the Digital Environment	12 Hours
Unit 2: User Studies	
- Concept, Meaning, Definition and its significance - User studies in the Digital Environment - Planning of User studies - Case studies	10 Hours

Unit 3: Methods and Techniques of conducting User Studies	
- Quantitative and Qualitative Techniques: Survey Method, Techniques of data collection, Questionnaire, Interview, Observation, Diary, Record Analysis and Citation Studies, - Sampling: Sampling techniques.	10 Hours
Unit 4: User Education	
- Meaning, Definitions and Importance - User Education in the digital environment - Different methods of conducting User Education - Evaluation of User Education Programs (UEP) - Resource Based Instruction, MOOCS, Online Resources	8 Hours
Unit 5: Information Literacy	
- Conceptual Analysis, Historical Development of the concept, Significance - Types of Literacies - Information Literacy Models	8 Hours
Unit 6: Life Long Learning	
- Meaning, Definition, Importance - Life Long Learners, - Major Drivers of lifelong learning	8 Hours
Unit 7: Global Trends	
- IL Standards and Guidelines, Development of National and International Standards - National Information Literacy Missions, Forums and Task forces - Integration of Information Literacy at different levels of education - Global Perspectives, Information Literacy in India	8 Hours

REFERENCES

1. P. Balasubramanian, P. (2011). Users and Uses of Library. New Delhi, Deep and Deep Publications Pvt. Ltd.
2. Ruthven, I and Kelly, D. (2011). Interactive Information-seeking Behaviour and Retrieval. London: Facet Publishing.
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Paper Code and Name	PG44O206: ELECTRONIC INFORMATION SOURCES AND SERVICES (OPEN ELECTIVE)
COURSE OUTCOMES (COs)	
Students who complete this paper will be able to:	
CO 1	Understand the basics of Information Sources (Primary, Secondary and Tertiary)
CO 2	Learn various search engines and search strategies
CO 3	Analyse the types of electronic information resources (e-journals, e-databases, e-books etc.)
CO 4	Develop information literacy skills and competencies
CO 5	Outline various electronic information sources

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Sources	
- Concept, Characteristic Features and Use. - Types of Sources (Primary, Secondary, Tertiary and Non-Documentary Sources)	10 Hours
Unit 2: Internet Sources	
- Concept, Kinds of Internet Sources, Services - Search Engines: Meaning and Definitions, Working of SEs, Types: General, Meta Intelligent, Subject Specific, Specialized. - Criteria for Evaluation of Internet Resources	12 Hours
Unit 3: Electronic Publishing	
- Introduction to E-publishing, meaning and definitions. - Electronic Information Sources: Meaning and Definitions, Historical Development of EIRs - Types of EIRs: E-journals, E-databases, E-books, Open Access Journals, Open access databases, Aggregators - Evaluation criteria for EIRs	14 Hours

Unit 4: Use of Electronic Information Sources	
- Information Seeking Behaviour - Information Literacy: Concept, Meaning and Definitions, SCONUL's Seven Pillars of Information Literacy, Bruce's Seven Faces of Information Literacy, PLUS Model - Search and Browse: Basic Search and Advanced Search in E-databases - Search Strategy, Search Syntax, Boolean Operators, Search Techniques: Field Search, Wild Card Search, Phrase, File type, Stop words etc.	14 Hours
Unit 5: Electronic Information Services	
- Meaning, Definition and Scope - Types of Information Services: Short range and long range - Information Alerting Services, E-mail, newspaper clipping service, Translation Service, Document Delivery Service, Bulletin Board Service, Use of Social Media Platforms	14 Hours

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1. Cooper, Michael D. (1996). Design of Library Automation Systems: File structure data structures and tools. New York: John Wiley.
2. Lesk, Michael (1997). Practical digital libraries: Books, bytes, and bucks. San Francisco: Morgn Kaufmann.
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6. www.infolibrarian.com
7. www.libraryspot.com
8. www.refdesk.com

Paper Code and Name	PG44T301: INFORMATION AND COMMUNICATION
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the importance of Data, Information, Knowledge and to bring out the intrinsic relation between them.
CO 2	Recognise the role of new Information Manager in the Knowledge Society.
CO 3	Identify and outline the different channels of Communication in the transmission of information and knowledge.
CO 4	Understand the type of education and training required for LIS Professionals to render quality services to the user community.
CO 5	Understand the importance of marketing of Information products and services in a changed environment.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Data, Information and Knowledge	
- Data: Types, Nature and Characteristics - Information: Nature, Characteristics, Value and Property of Information. - Knowledge: Nature, Types, Value and Characteristics features. - Inter-Relation between Data, Information and Knowledge.	8 Hours
Unit 2: Information Management and Knowledge Management	
- Information Management: Meaning, Definitions and Value. - Role of new Information Managers in a changing environment. - Knowledge Management: Meaning, Definitions and types of Knowledge. - Need for Knowledge Management. - Difference between Information Management and Knowledge Management. - Knowledge Management Models.	10 Hours
Unit 3: Communication	
- Concept, Meaning and Definitions.	

- Information Generation and Communication.
- Channels of Communication:
  - Formal and Informal;
  - Downward, Upward and Horizontal;
  - Verbal and Written.
- Barriers of Information Communication.
- Models of Communication: Lasswell Model, and Shannon & Weaver Mathematical Model.
	10 Hours

Unit 4: Information Science	
- Information Science: Concept, Meaning and Definitions. - Origin, Development and Evolution of Information Science. - Theoretical Foundations and Framework of Information Science. - Information Science as a Interdisciplinary Nature of Subject. - Physical and Cognitive Paradigms. - Education for Library and Information Science Professionals.	12 Hours
Unit 5: Information Society	

- Concept, Meaning and Definitions.
- Development and Evolution of Information Society.
- Agrarian, Industrial and Information Societies and their features and Characteristics.
- Changing Role of Library and Information Centres in the Information Society.
- Issues of Information Society: Social, Political, Cultural and Economical.
- Policies relating to Information: Right to Information Act (RTI) and Intellectual Property Rights (IPR).
- Concept of Freedom, Censorship, Data Security and Fair Use.
- National Information Policy on Library and Information Systems.
- International Programmes:
  - Universal Bibliographic Control (UBC)
  - Universal Available Publications (UAP).
	12 Hours

Unit 6: Marketing of Information Products and Services	
- Marketing: Meaning, Definition and Objectives. - Marketing of Information Products and Services in India. - Marketing Research and Market Segmentation. - Marketing Mix: Supply, Product, Place and Price. - Marketing in Digital Environment.	8 Hours

Unit 7: Economics of Information and Information Economics	
- Economics of Information: Concept, Meaning, Definition and Characteristics. - Information of Economics: Concepts, Meaning and Characteristics. - Information as a Resource in Production, Growth and Development.	4 Hours

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1. Ackerman, Mark S. [et al.]. Sharing Expertise: Beyond Knowledge Management. Boston: MIT Press. 2003
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Paper Code and Name	PG44T302: INFORMATION RETRIEVAL, PROCESSING AND REPACKAGING (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the features and structures of Information Retrieval Systems.
CO 2	Gain the knowledge of information search and other search strategies.
CO 3	Understand the features and importance of Indexing Languages.
CO 4	Understand the different kinds of Indexing Systems.
CO 5	Anlayse Information Repackaging and Consolidation process.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Retrieval System	
- Concept, Meaning, Definition, Objectives, - Characteristics, Components and Functions of IRS.	6 Hours
Unit 2: Information Retrieval Process	
- Objective and feature of Information search, - Search techniques, Search strategies, pre search interview, search logic. - Steps in query formulation, Tools of Internet Search, Search engines, - Multiple database searching, Voice search, Image search, Video search engines.	8 Hours
Unit 3: Indexing and Abstracting	
- Concept, Need and purpose of Indexing Languages. - Types and Characteristics, - Vocabulary Control, Thesauri and subject headings, - Pre-Coordinate and Post –Coordinating Indexing, - Chain Indexing, Citation indexing, Automatic Indexing. - Abstracting: Concept, Meaning and definitions, - Types and Uses. Abstracting agencies and services.	10 Hours
Unit 4: Information Retrieval Models	

- Models Based on Input / Output: Data Retrieval Model, Information Retrieval Model, Knowledge Retrieval Model. - Models Based on Theories and Tools, Boolean Retrieval Model, Fuzzy Logic Model, Set Theoretic Model, Vector Space Model, Probabilistic Retrieval Model, Linguistic Model, Mathematical Model, Psychological Model, Economic Model and Hypertext Linkage Model.	8 Hours 10 Hours
Unit 5: Evaluation of IR Systems	
- Purpose and criteria for evaluation, - Evaluation studies: ASLIB, The Crane fields; MEDLARS, SMART.	8 Hours
Unit 6: Current Trends in IRS	
- Developments, Searching and retrieval, - Full text retrieval, User interfaces, - IR standards and protocols.	6 Hours
Unit 7: Information Repackaging and Consolidation	
- Concept, meaning and utility of repackaging and consolidation of Information products. - Types of Repackaging and Information consolidation of products, - Agencies dealing with repackaging, Document delivery and Reprography techniques. - Translation Centers,	8 Hours

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1. Chowdhruy, G. G. Introduction to Modern Information Retrieval. 2nd edn. London, Facet Publishing, 2003.
2. . Cleaveland, D. B., Cleveland, A. D. Introduction to Indexing and Abstracting. 2001 3rd Ed. Englewood Colo.: Libraries Unlimited.
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5. Lancaster, F.W. (2003). Indexing and abstracting in theory and practice. London: Facet publishing.
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Paper Code and Name	PG44T303: RESEARCH METHODS
COURSE OUTCOMES (COs)	
Students who complete this paper will be able to:	
CO 1	Understand the basics of Research and Research process.
CO 2	Apply the different Research Skills / Methods for solving different Research Problems.
CO 3	Analyse the appropriateness of research techniques to collect valid data and to analyse and interpret the data using statistical measures.
CO 4	Differentiate between Bibliometrics, Scientometrics, Informetrics and apply Bibliometric Laws.
CO 5	Write down the research experiences (Research Report) to others and adding them to the fund of knowledge.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Foundations of Research	
- Research: Meaning, Definitions, Need and Purpose, Characteristics of Research. - Research Process / Steps in Research - Types of Research: Fundamental or Pure and Applied - Motivation in Research - Role of Research in the development of scholarship - Barriers of Research / Problems encountered by researchers in India - Areas of Research in LIS	6 Hours
Unit 2: Research Design	
- Planning of Research Process - Selection of a problem for Research: Mode of Selection, Sources of Problem, Identification of Research Problem: Characteristics, Journey from broad to narrow topics - Formulation of Research Problem - Research Design: Meaning, Definitions, Characteristics, Types, Contents of Research Design	

- Ethical Aspects of Research - Variable: Concept, Meaning and Definitions, difference between concept and variable, Types - Hypotheses: Meaning and Definitions, Functions, Types of Hypotheses: Descriptive, Relational, Working, Null, Statistical, Common-sense, Complex, Analytical hypotheses, Sources of Hypotheses. - Literature Review: Concept, Meaning, Purposes, Planning the Review Work and Sources for Review	10 Hours
Unit 3: Research Methods	
- Classification of Research: Scientific Methods – Meaning, Definitions, Characteristics, Steps and Arbitrary Methods - Ranganathan's Spiral of Scientific Method - Types of Research - Based on Application: Pure and Applied - Based on Objectives: Descriptive, Exploratory, Correlational and Explanatory Research - Based on Enquiry Mode: Qualitative and Quantitative Research - Historical Research Method: Meaning, Purpose, Steps and Types - Survey Method: Scope, Purpose, Types, Steps in Survey, Advantages and Disadvantages - Case Study Method: Concept, Characteristics, Objectives, Steps, Advantages and Disadvantages, Case Study vs. Survey Method. Delphi Method - Content Analysis: Characteristics, Steps, Advantages and Disadvantages'	12 Hours
Unit 4: Research Techniques and Tools	
- Questionnaire: Meaning, Schedule vs. Questionnaire, - Preparing a Questionnaire - Designing the Format, Types of questions to be added / avoided, Mechanics of the Schedule and Questionnaire, Characteristics of questionnaire, Advantages and Limitations. - Interview: Meaning, Importance, Characteristics, Requirements, Interview Process, Types of Interview, Interview Problems and Evaluation of Interview Method. - Observation: Importance, Characteristics, Types, Planning Observation, Observation Tools, Advantages and Limitations **Sampling Techniques** - Sample: Basic Concept, Types of Sampling - Probability Sampling or Random Sampling Techniques: Simple, Systematic, Stratified, Cluster, Multistage, Area, Multi phase etc. - Non-Probability: Convenience, Purpose, Quota and Snowball	8 Hours 6 Hours

Unit 5: Analysis and Interpretation of Data	
- Functions of Statistics, Types - Graphical Presentation of Data: Types of Graphs – Bar, Pie, Line Histogram etc. - Measurement Scales: Descriptive Statistics – Measure of Central Tendency: Mean, Mode and Median - Inferential Statistics: Measures of Dispersion – Standard Deviation - Chi-Square Test, ANOVA, Regression Analysis, Co-efficient of Variation - Statistical Packages – PASW	8 Hours
Unit 6: Bibliometrics, Scientometrics and Informetrics	
- Concept, Definition, Historical Development - Citation Databases: Scopus and Web of Science - Bibliometric Laws: Bradford's, Zipf's and Lotka's - Bibliometric / Scientometric / Infometrics Indicators - Growth of Literature, Relative Growth Rate (RGR), Doubling Time (Dt.) - Academic Footprints: H-Index and Impact Factor	8 Hours
Unit 7: Research Reporting	
- Research Reporting: Concept, Characteristics of a Report, Functions of a Research Report, Planning Report Writing, Types of Research Report - Organization of Report: Structure, Style, Language - Guidelines of Research Reports - Reference Style Manuals: APA, MLA, Chicago etc. and Reference vs. Citation - Methods of Research Evaluation	6 Hours
REFERENCES	
1. Busa, Charles, H. and Harter, Stephen S. (1980). Research Methods in Librarianship: Techniques and Interpretation. Orlando: Academic Press. 2. Fowler, F.J. (1993). Survey research methods. New Delhi: Sage 3. Jackson, Sherri L. (2009). Research Methods and Statistics. New Delhi: Cengage Learning Indian Pvt. Ltd. 4. Kothari, C.R. (2009). Research Methodology: Methods and Techniques. New Delhi: New Age International.	

5. Krishan Kumar (1992). Research Methods in Library and Information Science. New Delhi: Vikas.
6. Krishnaswami, O.R. (1993). Methodology of Research in Social Sciences. Bombay: Himalaya.
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10. Ravichandra, Rao, I.K. (1985). Quantitative Methods for Library and Information Science. New Delhi: Wiley Eastern.

Paper Code and Name	PG44T304: APPLICATIONS OF INFORMATION TECHNOLOGY (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the basics of Library Automation.
CO 2	Learn different Library Software Packages including Open-Source Software.
CO 3	Understand the use of Communication Technology and Network Systems in Providing Library Services.
CO 4	Get acquainted with different kinds of Databases and understand their structure and components.
CO 5	Know about emerging technologies including Barcode, Smart card and Artificial Intelligence.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Library Automation	
- Automation: Meaning and Definitions - Historical developments in Library Automation - Planning of Library Automation - Integrated Library System (ILS): Basic requirements, steps and implementation - Components of Automated Library System: Acquisition, Cataloguing, Circulation, Serials Control Systems and OPAC	10 Hours
Unit 2: Library Automation Software Packages	
- Development of Library software - Library Automation Standards - Library Automation Software: Functional Requirements - Types of Library Software, Proprietary Software and Open-Source software: SOUL, Koha, NewGenlib - Trends and Future of Library Automation Software's.	10 Hours

Unit 3: Communication Technology	
- Communication Technology: Meaning, Definition and its Significance - Evolution of Communication Technology. - Chronological developments - Telecommunications: Different Media and Channels. - Communication Networks: Public Switched Telephone Network (PSTN) and Public Data Network (PDN), Wireless Communication, Cell phone.	10 Hours
Unit 4: Database Management System (DBMS)	

- Concept, Functions of Database.
- Components and Structure of Databases.
- Categories of Databases:
  - Single User Databases, Multiple User Databases, Centralized Databases, Distributed Databases, Hierarchical Databases, and
  - Relational Database.
- Types of Databases – Bibliographic, Numeric, Full text, Image and Multimedia Databases.
- Database Management Tools.
- Databases in Library and Information Centres.
- Creation of Database.
	12 Hours

Unit 5: Emerging Technologies	

- Concept, Meaning and Definitions of Barcode
- Barcode Symbologies-
  - Linear (1D) Symbologies and
  - Matrix (2D) Symbologies.
- Barcode technology and its application in Libraries and Information centers.
- Radio Frequency Identification (RFID): Concept, and Characteristics.
- Components of an RFID Library Management System:
  - RFID tags / transponder, Readers or Sensors, Antenna, Server,
  - RFID Label Printer, Handheld Reader, Self-Check Unit.
- External Book Return (Book Drops Stations)
- Types of RFID Tags: Active Tag and Passive Tag.
- Advantages and Disadvantages of RFID and its application in Libraries
- Barcode Vs RFID.
- RFID and Smartcard Technology
	10 Hours

Unit 6: E-Publishing	

- Meaning, Definition, Significance - DTP vs E-Publishing - Types of E-publishing - Digital copyright issues - Open Access movement and its impact on Scholarly Communication	6 Hours
Unit 7: Artificial Intelligence	
- Concept, Growth and Development. - Purpose and Use of Artificial Intelligences. - Expert System, Natural Language Processing, and Pattern Recognition. - Advantages of Artificial Intelligence. - Robots in Artificial Intelligence. - Top Used Applications in Artificial Intelligence. - Artificial Intelligence in Library and Information Services.	6 Hours

REFERENCES

1. Chakravarthy, R. C. and Murthy, P. R. S. (2011). Information Technology and Library Science. New Delhi: Pacific Publications.
2. Chakravarthy, R. C. and Murthy, P. R. S. (2011). Information Technology and Library science. New Delhi: Pacific Publications.
3. Curtin, Dennis and others (1999). Information Technology: The breaking Wave. New Delhi: McGraw Hill Education.
4. ITL Education Solutions Limited (2012). Introduction to Information Technology. New Delhi: Pearson.
5. ITL Education Solutions Limited (2012). Introduction to Information Technology. NewDelhi: Pearson.
6. Kulkarni Parag and Joshi Prachi. (2015). Artificial Intelligence: Building an Intelligent System. NewDelhi: PHI
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9. Turban, Rainer and Potter (2006). Introduction to Information Technology. New Delhi: Wiley.
10. Vishwanathan, Thaigarajan. (2005). Telecommunications switching system and networks. New Delhi: Prentice Hall of India.

Paper Code and Name	PG44P305: APPLICATIONS OF INFORMATION TECHNOLOGY (PRACTICAL)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the basics of different Library Management Software and their application.
CO 2	Install and operate different library automation software.
CO 3	Manage the Acquisition, Catalogue, Circulation Control and Serial Control modules.
CO 4	Create document records using MARC-21 format.
CO 5	Search and Import the Bibliographic data from Standard Bibliographic Databases.

PARTICULARS	Teaching Hours (Max. 64)
- Library Manager (Free Software: Installation of Library Manager and Working with different Modules	6 Hours
- Software for University Libraries (SOUL): Acquisition, Catalogue, Circulation, Serials Control, OPAC and their features	12 Hours
- KOHA: Installation of Koha using live DVD.	4 Hours
- Creating a Library, create a Super Librarian, Add an Item type, Patron Category, adding Patrons, Assigning Rights.	6 Hours
- Modifying Bibliographic Framework.	4 Hours
- Creating Document records with MARC21 format	8 Hours
- Cataloging, Circulation, OPAC	6 Hours
NEWGENLIB: Installation of NewGenLib Software and its components - Working with Different Modules.	12 Hours
- Searching and Importing Bibliographic data from WorldCat and IndCat to Koha and NewGenLib.	6 Hours

REFERENCES

1. Amant, Kirk St. and Still, Brian. Handbook on research on open-source software: Technological, economic, and social perspective. Hershey: Information Science Reference, 2007.
2. Banerjee, Kyle, & Parks, Bonnie. (2017). Migrating Library Data: A Practical Manual. Neal-Schuman Publishers. ISBN: 978-0838915035.
3. Cohn, John M., Kelsey, Ann L., & Keith Michael Fiels. (1998). Planning for library automation: A Practical Handbook. London: Library Association
4. Dania Bilal. (2015). Library Automation: Core Concepts and Practical Systems Analysis, / 3rd ed., Libraries Unlimited;

5. Hilal Ahmed. (2016). Integrated Library Management Systems: An Indian Scenario of Modern Library Automation / 1st ed., EssEss Publications
6. Jost, Richard M. (2016). Selecting and Implementing an Integrated Library System: The Most Important Decision You Will Ever Make / 1st ed., Chandos Publishing
7. Judy Brooks. (2014). Practical Systems Analysis in Library Automation and Management. Koros Press Limited.

Paper Code and Name	PG44O306: INFORMATION LITERACY (OPEN ELECTIVE)
COURSE OUTCOMES (COs)	
Students who complete this paper will be able to:	
CO 1	Understand the importance of Information.
CO 2	Recognize the information need and retrieve relevant information by accessing potential sources of information.
CO 3	Develop Internet search strategies by making use of different tools and techniques.
CO 4	Appropriately use the web for research, including critical evaluation of information.
CO 5	Understand the importance of Life Long Learning.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Information Literacy (IL)	
- Fundamentals of IL: Meaning, Definitions and Concepts, Historical perspective, - Developments in Agrarian Society, Industrial Society, Information Society Essence of Information Literacy in the Knowledge Society	14 Hours
Unit 2: Types of Information Literacies	
- Technology Literacy, Media Literacy, Computer Literacy, Digital Literacy - Research Literacy	12 Hours
Unit 3: Information Literacy Standards, Guidelines and Models	
- ALA, ACRL and IFLA Guidelines - Information Literacy Standards - Ellis model, Kuhlthau model, SCONUL and Empowering 8TM models - Partners of Information Literacy	12 Hours

Unit 4: Information Literacy and Libraries	
- Role of Libraries in Information literacy - Developing Digital literacy skills among Librarians - Information literacy instructions in different types of Libraries, Academic, Public and Research - Integration of information literacy in different levels of education - Bridging the Digital Divide through IL	12 Hours
Unit 5: Life Long Learning and Information Literacy	
- Meaning, Definition, Importance - Life Long Learners - Major Drivers of lifelong learning - Role of Information Literacy in higher education - Global Perspectives of Information Literacy - National Information Literacy Missions, Forums and Task forces - Information Literacy Initiatives and Programmes in India	14 Hours

REFERENCES

1. Eisenberg, M. B., Lowe, C. A. and Spitzer, K. L. (2004). Information Literacy: Essential Skills for the information age. London: Libraries Unlimited.
2. Gilster, P. (2007). Digital Literacy. NewYork: Wiley.
3. Godwin, P. And Parker, J. Ed. (2008). Information Literacy Meets Library 2.0. London: Facet Publishing.
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6. Martin, A. and Madigan, D. Ed. (2006). Digital Literacies for learning. London: Facet Publishing.
7. UNESCO (n.d.), "Information Literacy". http://portal.unesco.org/ci/en/ev.php.
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10. Association of college and Research Libraries (2000). Information Literacy Competency standards for higher education. Available at: www.ala.org

Paper Code and Name	PG44T401: NETWORKING AND INTERNET TECHNOLOGY (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the different computer networks like LAN, MAN and WAN.
CO 2	Learn different topologies of networks.
CO 3	Acquaint themselves with popular library networks- INFLIBNET, DELNET and DESINET.
CO 4	Understand the different Web Browsers and Search Engines.
CO 5	Provide services such as Bulletin Board Service and Document Delivery Service using Internet.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Introduction to Networks	
- Computer Networks: Meaning, Definitions and Characteristics. - Network media: - Twisted-Pair Cable, Unshielded Twisted-Pair (UTP) Cable, Shielded Twisted-Pair (STP) Cable, Coaxial Cable, Optical fibre, - Network Components- Ethernet Cable, Network Interface Cards, Hubs, Routers, Gateway, Modem. - Network types: LAN, WAN, MAN, CAN, PAN, Wireless Networks: WiFi.	10 Hours
Unit 2: Topologies of Network	

- Concept of Topology
- Types: Bus, Ring, Mesh, Star, Tree etc.
- Data Networks:
  - Integrated Services Digital Network (ISDN),
  - Digital Subscribers Line (DSL),
  - Asynchronous Transfer Mode (ATM), etc.
	8 Hours

Unit 3: Library and Information Centre Networks	

- Evolution, Need, Characteristics and Types of Library and Information Networks.
- Functions of Library Networks
- Classification of Networks.
  - Resource sharing network.
  - Data sharing network.
  - Communication and data exchange networks.
- Library application Networks: INFLIBNET, DELNET, ADINET, CSIRNET, DESINET etc.
	10 Hours

Unit 4: Library and Information Networks at the International Level	
- Online Computer Library Center (OCLC) - Research Libraries Group (RLG) — RLIN - Joint Academic Network (JANET) - Consortium of University Research Libraries (CURL)	8 Hours
Unit 5: Internet Technology	
- Meaning and Definitions - History and Development of Internet - Internet Technology: Tools and Protocols- TCP/IP and others. - Internet, Extranet and Intranet. - Web Browsers: Types, Software, Book Marking, Caching, etc. - Internet security: Firewall and Proxy servers - Web 2.0 and Web 3.0 Technologies - Semantic Web and Invisible Web.	10 Hours
Unit 6: Search Engines	

- Meaning and Definitions, Concept of Search Engines
- Types of Search Engines:
  - General Search Engines
  - Meta Search Engines
  - Intelligent Search Engines,
  - Subject Specific Search Engines.
- Comparison of Different Search Engines.
- Search Technologies and Strategies.
	10 Hours

- Benefits and Limitations of Search Engines.	
Unit 7: Internet Services	
- E-mail, File Transfer Protocol (FTP), Remote Login, WWW, - Teleconferences, Video conferencing. - Bulletin Board Services and e-Document Delivery Service. - Data Mining and Data Warehousing. - Trends in Networking	8 Hours

REFERENCES

1. Andrew, Judith. Digital Libraries: Policy Planning and Practice. Hampshire: Ashgate, 2004.
2. Brophy, Peter. Libraries without walls: The distributed delivery of Library and Information Services. London: Facet Publishing, 2004.
3. Chwan-Hwa (John) Wu. Introduction to Computer Networks and Cybersecurity. New Delhi, CRC Press, 2013.
4. Janczewski, Lech. Internet and intranet security management: risks and solutions. Hershey: Idea, 2000.
5. Kurose, James F. and Ross, Keith W. Computer Networking: A Top-Down Approach. 6th Ed. New York: Pearson, 2012.
6. Pandian, Paul M. and Jabhekar, Ashok: Internet for Libraries and Information Centres, New Delhi: McGraw Hill, 2001.
7. Schwartz, D. T. et. al. Internet based organizational memory and Knowledge Management. London: Ida Group publisher, 2000.

Paper Code and Name	PG44T402: DIGITAL LIBRARY AND MULTIMEDIA (THEORY)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Get Familiarize with internet and digital library.
CO 2	Understand the design and organisation of digital library for accessing information online.
CO 3	Know the scripts and standards required for web design.
CO 4	Understand the cyber laws and its implications on digital libraries.
CO 5	Identify computer hardware, software and other infrastructure required to develop digital library and Multimedia products.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Introduction to Digital Library	
- Digital Library - Nature, Meaning and Definitions, Objectives, Characteristics, - Digital Library Components: Identifiers – Handles – Digital Object Identifier (DOI) Persistent Uniform Resource Locator (PURL) Interoperability. - Digital Resources: Nature, Characteristics and types, Digital Library Services.	6 Hours
Unit 2: Design and Organisation of Digital Library	
- Architecture: Distributed, Federated, Service Oriented and Component based - Architectures. - Protocols and Standards. User Interfaces: Multilingual, Personalization and Visualization. - Social, Economic and Legal Issues. Challenges and Concerns for Digital Library. Skilled manpower. Advantages and dis- advantages of Digital library.	8 Hours
Unit 3: Digital Library Initiatives	

- Evolution of Digital Libraries, DLI-I and DLI-II, E-Lib Programme, - Digital Library Initiatives at International level and in India. - Digital Library Software: GSDL, D-Space, E-Prints and Fedora. - Institutional Repositories.	10 Hours
Unit 4: Digital Resource Management	
- Building Digital Library Resources – Born Digital and Digitized, - Digital Content (Image and Text) Creation: general issues, - Digitization process, standards, file formats, Unicode, Metadata. - Selection and Acquisition of materials for Digitization. - Storage and retrieval/usage of Digital Resources. Digital Library Evaluation. - Digital Collection Management and Evaluation – Issues and Strategies, - Digital Rights Management.	8 Hours 10 Hours
Unit 5: Overview of Multimedia	
- Nature, Meaning and Definition, Historical Development, - Branches of Multimedia: Web Designing, Animation. - Formats: Visual-Image Formats, Audio-Image Formats, Internet-Related Formats, - Graphics and drawing packages, Image editing and animation software. - Overview of multimedia software's: Omnipage, Flash, Photoshop etc	8 Hours
Unit 6: Web Technology	
- Features and functions of Web 1.0, web 2.0 and web 3.0. - RSS feeds, tag clouds, blogs, social book marking. - Web protocols: SOAP, Open URL, W3 standards. - Online learning courses: Concept, need and importance: MOOCs and SWAYAM	6 Hours
Unit 7: Library Web Page Designing	
- Website-meaning and types; - Website Designing tools: HTML, XML, SGML. - Contents of Library webpage. - Website evaluation criteria. - Web Tools and Web Apps for LIS. Web servers, Scripting languages.	8 Hours

REFERENCES

1. Xavier, C. World Wide Web Design with HTML. New Delhi: TMH, 2000.
2. Cooper. Michael D. Design of Library Automation System: File Structure, Data Structures and Tools. New York: John Wiley, 1996.
3. David Baker Wendy Evans, Digital Library Economics (Chandos Information Professional Series) 9781843344032, Chandos Publishing.
4. Diane Kresh , The Whole Digital Library Handbook :9780838909263 , ALA Editions 2015
5. Diane Kresh, WHOLE DIGITAL LIBRARY HANDBOOK: 9788184082326, Indiana Publishing House 2015.
6. G. G. Chowdhury. Introduction to Digital Libraries. London: Facet Publishing, 2013.

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Paper Code and Name	PG44T403A: PUBLIC LIBRARY SYSTEM
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Identify and understand the role of public libraries in the modern society.
CO 2	Understand the organization and management of various types of resources and services.
CO 3	Identify the type of human resources required to serve in the public libraries.
CO 4	Understand the importance of Library Legislation in the promotion of public libraries in India.
CO 5	Recognise the importance of application of ICT for the modernization of public Libraries in India.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Public Libraries	
- Meaning, Definitions, Origin, Objectives, Functions and Services. - UNESCO Public Library Manifesto: 1972, 1994 and 2004. - Growth and Development of Public Libraries in USA, UK and India. - Role of Public Libraries in Modem Society: Socio-Economic Development of a Nation.	12 Hours
Unit 2: Collection Development and Management	
- Collection Development: Policies and Procedures. - Selection and Acquisition of different types of documents including non-book materials. - Book Selection Tools and Principles of Book Selection.	8 Hours
Unit 3: Organisation and Management of Information Resources and Services	
- Organization of Library, Staff Manual, Statistics, Work Measurement and Standards. - Organisation of Information Resources. - Planning and Organisation of various types of Information services to the different categories of users including the Physically Challenged.	10 Hours

- Extension and Publicity Activities.	
Unit 4: Human Resource Planning, Management and Development	
- Nature, Size, Selection & Recruitment and Qualifications. - Duties and Responsibilities. - Service conditions, - Training and Education. - Motivation and control.	8 Hours
Unit 5: Library Legislation	
- Library Legislation: UK, USA and India. - Karnataka Public Libraries Act, 1965 and its features. - Comparative and Critical Study of Public Library Acts in India.	12 Hours
Unit 6: Financial Management	
- Concept, Meaning and Definitions. - Financial resources of Public Libraries. - Mobilization and Estimation of Public Library Finance. - Budget: Meaning, Definitions and Functions. - Different types of Budget and application of PPBS in Public Libraries.	6 Hours
Unit 7: Library Automation and Library Users	
- Computerization of different divisions of Public Libraries. - Networking: National and Regional Levels of Public Libraries. - Resource sharing: Problems and Prospects in India. - Study of Users and their needs. - User Education/ Orientation Programme. - IFLA Public Library Standards.	8 Hours
REFERENCES	
1. Beardwell, Ian and Holden, Len. Ed. Human Resource Management: Contemporary Perspective. New Delhi: McMillan, 1996. 2. Bilal, D. Library Automation: Core Concepts and Practical Systems Analysis. Ed. 3. Libraries Unlimited, 2014. 3. Iyer, V. K. Library Management of Staff Training and Development. Delhi: Rajat, 1999. 4. Kesavan, B.S. National Library of India, Calcutta. National Library, 1961.	

5. Kumar, M. G., & Sethunath, V S. Public Libraries. Crescent Publishing Corporation. 2012.
6. Mittal, R.L. Public Library Law, Delhi: Metropolitan, 1971.
7. Ranganathan, S.R. Library Development Plan: A 30 year Programme for India with Draft Library Bill, Delhi: Delhi University, 1950.
8. Venkatappaiah, Velega. Public Library Legislation in the New Millennium. Bookwell, 2007
9. Goulding, Anne. Public Libraries in 21st Century: Defining Services and debating the future. Ashgare. United Kingdom. 2012.
10. http://egyankosh.ac.in/

Paper Code and Name	PG44T403B: ACADEMIC LIBRARY SYSTEM
COURSE OUTCOMES (COs)	
At the end of this Paper students will be able to:	
CO 1	Understand the importance of Academic Libraries and their role in imparting education at different levels.
CO 2	Know about the role of UGC in the development of University and College libraries in India.
CO 3	Understand the concepts of Collection Development, Resource sharing, and Human Resource Planning & Management.
CO 4	Understand the different sources of finance and budgeting techniques to be adopted in Academic Libraries
CO 5	Plan and develop new services and facilities for the Academic library Users by Conducting User Survey.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Academic Libraries	
- Meaning, Definition, Importance, Functions. - Types of Academic Libraries: School, College, University Libraries - Role of Libraries in Higher Education.	10 Hours
Unit 2: Development of Higher Education and Libraries in India	

- Higher Education and Libraries in India during pre- independence and post-independence periods - Role of Academic Libraries in the present electronic environment. - Challenges of Academic Libraries in the Digital Environment	10 Hours
Unit 3: Regulatory Bodies and their Role in Promotion of Libraries in India	
- Establishment of UGC. - Role of UGC in the Development of Academic Libraries. - Powers and Functions of UGC. - Committees Constituted by UGC for the development of College and University libraries. - Role of other regulatory bodies in the promotion of libraries in India.	10 Hours
Unit 4: Collection Development and Management in Academic Libraries	
- Ideal Characteristics of Academic Library collection - Meaning and Definitions of collection development - Book selection procedure - Collection development policy in the digital environment - Problems of collection development - Copyright uses in the digital environment -	10 Hours
Unit 5: Academic Library Services	
- Digital Reference Services (DRS). - Current Awareness and SDI Service (CAS & SDI) - E-mail Altering Services. - Electronic Document Delivery Services (EDDS) - Database Services. - User Education and Information Literacy.	8 Hours
Unit 6: Academic Library Management	
- Human Resource Development (HRD) and Financial Management in Libraries - HRD: Meaning, definitions and importance. - Manpower planning and training: Continuing Education Programmes (CEPs) for Librarians. - Financial Management: Types of Budgeting, Lump sum Budget, Zero Based	8 Hours

Budget (ZBB) and Program Planning Budgeting System (PPBS).	
Unit 7: Library Networking and Consortia	
- Library/ Information Networking: Definition, need and importance. - Information Network Development in India: DELNET, INFLIBNET, ERNET - Library Consortia: Emerging Trends, E-Shodha Sindhu, Shodha Ganga, FORSA, INDEST	8 Hours

REFERENCES

1. Mathews, B. (2009). Marketing Today's Academic Library: A Bold New Approach to Communicating with Students. Chicago: American Library Association.
2. Petruzzelli, B. W. (2006). Real-Life Marketing and Promotion Strategies in College Libraries: Connecting with Campus and Community. London: Routledge.
3. Budd, J. M. (1998). The Academic Library: Its Context, Its purpose and Its operation. Englewood, Colorado: Libraries Unlimited.
4. Dayal, B. (2011). Managing Academic Libraries Principles and Practice. New Delhi: Isha Books.
5. Kumar, P. S. G. (2004). Information Sources and Services: Theory and Practice. Delhi: B. R. Publishing Corporation.
6. Mitchell, E. and Seiden, P. (2015). Reviewing the Academic Library: A Guide to Self-Study and External Review. Chicago: American Library Association.
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9. Dhiman, A. K. (2002). Academic Libraries. New Delhi: Ess Ess Publications.
10. Flemming, H. (1990). User Education in Academic Libraries. London.

Paper Code and Name	PG44T403C: SPECIAL LIBRARY SYSTEM
COURSE OUTCOMES (COs)	
At the end of this Paper students will be able to:	
CO 1	Learn the basic information about the Special Libraries and types of Special Libraries.
CO 2	Plan, design and implement various information services to be implemented in Special Libraries.
CO 3	Understand the concepts of Resource sharing and Human Resource Planning & Management.
CO 4	Analyse the different Budgeting Techniques to be adopted in Special Libraries.
CO 5	Apply different use studies / techniques to solve user problems.

PARTICULARS	Teaching Hours (Max. 64)
Unit 1: Special Libraries	
- Meaning, Definitions, Characteristics, Aims, Objectives, Functions - Types of Special Libraries: Government, R & D Libraries, Industrial, Hospital, Prison, Newspaper, etc. - History and Development of Special Libraries in USA, UK and India	8 Hours
Unit 2: Collection Development and Resource Management	
- Meaning and Definitions, Purposes, Functions - Collection Development Process: Community Analysis and User studies, Collection Development Policy, Selection, Acquisition. - Resources Management: Meaning, Definitions, Storage, Evaluation and Weeding - Impediments and Guidelines for Collection Development	10 Hours
Unit 3: Planning of Various Information Services	
- Reference: Active, Passive and Short-range and Long range and Referral Services - Abstracting and Indexing Services	

- Current Awareness Services: Current Contents, Bulletin Board and etc. - Selective Dissemination of Information - News Paper Clipping Service - Digest Service, Reprographic and Translation Service - Literature Search and Bibliographic Service and others - Web based Information Services: E-mail, Use of Social Networking Sites	10 Hours
Unit 4: Resource Sharing, Networking and Consortia	
- Meaning, Definitions, Need, Objectives, Functions and Components - From Library Cooperation to Consortia - Areas of Resource sharing - Networking: Meaning, Definitions, Need, INFLIBNET, DELNET etc. - Consortia: Meaning and Definitions, Concept, Need, Purpose	10 Hours
Unit 5: Human Resource Planning and Management (HRP & HRM)	
- Human Resource Planning: Meaning, Definitions, Need, Purpose, Elements, Personal Policy, Training and Development, Advantages. - Human Resources Management: Concept, Meaning and Definitions, Need, Scope, Aims, Objectives, Functions: Job Analysis, Job Evaluation, Job Description, Selection and Recruitment, Qualifications, Duties and Responsibilities, Service Conditions, Motivation and Control	10 Hours
Unit 6: Financial and Space Management	
- Meaning and Definitions, Sources of Finance - Budgeting Techniques: Meaning and Definitions, Need, Purpose, Characteristics; Types of Budget: Line-item, Lump-sum, Programme Budget, PPBS, ZBB. - Methods of Financial Estimation and Allocation of Budget. - Planning and Principles of Library Building; Library Furniture and Equipment	8 Hours
Unit 7: Library Users and Use Studies	
- Types of Users: Distinction between need, want, demand and requirement.	8 Hours

- Types of Information Needs - Information Seeking Behaviour: Meaning and Definitions - User Studies: Meaning, Definitions and Importance - Use Studies: Concept, Need and Types	

REFERENCES

1. Ashworth Wilfred. (1985). Handbook of Special Librarianship and Information Work. Ed. 4. London: ASLIB.
2. Ashwrorth, Wilfred (1979). Special Librarianship. London: Clibe Bingley.
3. Burket, J. (1968). Trends in Special Librarianship. London: Clive Bingley.
4. Eva Semertzaki (2011). Special Libraries as Knowledge Management Centres. New Delhi: Chandos.
5. Jackson, E.B. (1985). Special Librarianship: A New Reader. Metuchen: Screcrow press.
6. James, M. Matarazzo and Toby, Pearlstein (2013). Special Libraries: A Survival Guide. Libraries Unlimited Inc.
7. Singh, S.P. and Krishan, Kumar (2005). Special Libraries in the Electronic Environment. New Delhi: Bookwell.
8. Krishan Kumar (1973). Research Libraries in the Developing Countries. New Delhi. Vikas.
9. Panda, B.D. (1992). Towards a Special Library System. New Delhi: Anmol.
10. Mishra, R.K. (2013). Special Library System and Information Services. Centrum Press.

Paper Code and Name	PG44T404: DIGITAL LIBRARIES AND MULTIMEDIA (PRACTICAL)
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the basics of Non-conventional Library services and activities.
CO 2	Understand different tools for developing Digital Library.
CO 3	Learn different Digital Library software.
CO 4	Create User community using D-Space.
CO 5	Learn to design website using content management software.

PARTICULARS	Teaching Hours (Max. 64)
– Digitization process: Input / capture devices: Scanners and Digital Cameras.	4 Hours
– Scanning and Digitization process.	6 Hours
– Text and Image capturing and editing.	6 Hours
– Optical Character Recognition for Text Editing.	6 Hours
– Installation of Greenstone	4 Hours
– Installation of D-Space.	4 Hours
– Building collection: Word and PDF files, Multimedia collection.	6 Hours
– Creating Metadata for the Word and PDF and Multimedia collection.	6 Hours
– Building communities and collections in D-Space. – Creating collection	6 Hours
– Content Management Software: Installation Content Management Software (Joomla/ Drupal/ WordPress).	6 Hours
– Creating Website with any one Content Management Software.	10 Hours

REFERENCES

1. Carter, Roger: The Information Technology Handbook, Heinemann, London, 1987.
2. Andrews, Judith and Law, Derek G. Digital Libraries: Policy, Planning and Practice. Ashgate Publishing, Ltd., 2004, pp 263.
3. Arms Williams. Digital Libraries. Cambridge: MIT Press, 2000
4. Christine I. Borgman from Gtenberg to the Global Information Infrastructure: Access to the Information in the Networked world. Cambridge: MIT Press, 2000
5. Chowdhury G G and Chowdhury Sudatta. Introduction to Digital Libraries, London,Facet Publishing,2003, PP359.
6. Deegan Marilyn and Tanner Simon. Digital Futures: Strategies for the Information Age. Chennai, Allied, 2002

7. Tedd, Lucy A and Large, J. A. Digital Libraries: Principles and Practices in Global Environment. Walter de Gruyter, 2005.
8. Lesk M. Practical Digital Libraries: Books, Bytes, and Bucks. San Francisco: Morgan Coffman, 1997

Paper Code and Name	**PG44D405: DISSERTATION (100 marks)**
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Understand the basics of research and its application.
CO 2	Know the different research methods of conducting research.
CO 3	Understand the different data collection tools and techniques.
CO4	Understand different sampling techniques
CO 5	Understand and analyse the different aspects of Report writing.

Paper Code and Name	**PG44D406A: DISSERTATION VIVA-VOCE (40 marks)**
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Spell out the important objectives of the research.
CO 2	Analyse and present the important outcomes of research
CO 3	Communicate the specific research results effectively.

Paper Code and Name	**PG44I406B: INTERNSHIP (50 marks)**
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Gain the practical knowledge of library house keeping activities.
CO 2	Understand the practical problems of library management.

CO 3	Develop leadership qualities.

Paper Code and Name	**PG44E406C: EDUCATION TOUR REPORT (10 marks)**
COURSE OUTCOMES (COs)	
After completing this paper, the students will be able to:	
CO 1	Gain exposure to different kinds of libraries and their services.