BLDE

(Deemed to be University)
Vijayapura- 586103

Declared as Deemed to be University u/s 3 of UGC Act, 1956
Accredited by NAAC with 'A' Grade

School of Applied Science & Technology

DEPARTMENT OF LIBRARY &

INFORMATION SCIENCE

Choice Based Credit System (CBCS)

Academic Regulations, Curriculum and

Syllabi Governing

MASTER OF
LIBRARY & INFORMATION SCIENCE

Master of Library and Information Science Program Overview

Libraries are an integral part of the society. Libraries, as gateways to knowledge and culture, provide the basic conditions for lifelong learning, independent decision-making and cultural development of individuals and social groups. Institutions in all sectors of the economy, be it the education sector, research sector, service, corporate or public sector, need libraries. Educational institutions need libraries to support formal and informal education learning, support literacy, check the digital divide and help shape new ideas and perspectives. Communities need libraries to create awareness among under-privileged sections for their empowerment, for information on upcoming opportunities in the market for skill development, employment in societal institutions, opportunities for their engagement in social and economic sectors. Society needs libraries so that people can become well-informed citizens and play an active role in societal development. Library and information science graduates are required in all sectors, including educational institutions, corporate libraries, public libraries, archive centres, publishing houses and research centres.

In view of the present trend and demand for Library and information science graduates, BDE (Deemed to be University) decided to start the Department of Library and Information Science at BLDE (Deemed to be University) and offer a postgraduate programme in Library and Information Science.

Preamble to the Syllabus

The Master of Library and Information Science (M.L.I.S) program is a minimum of 96 credits (14 Hard Core Courses of 56 credits + 15 Soft Core Courses with 30 credits, and project 6 credits and 2 open elective courses with 4 credits) spread over four semesters. This program is offered at the Department of Library and Information Science, BLDE (Deemed to be University), Vijayapura, Karnataka. The Choice Based Credit System to be implemented through this curriculum would allow students to develop a strong base in the fundamentals and specialize in the disciplines of their liking and abilities.

The application of information and communication technologies has revolutionised the whole concept of libraries and opened new vistas for information storage, retrieval, and ways to access information. In order to equip the students to be employable in academics as well as industry, the program emphasises both theory and modern application of library and information science. The program has unique features, such as web-based applications in

libraries and practical exposure to specialised computer software to organise their work and handle these technological devices to navigate the digital world, handle information properly and enable users to access it easily.

The objective of teaching and training of postgraduate students in M.L.I.Sc. is to prepare the student to get a good foundation in its theory for successful practice in the profession. The goal of Library and Information Science (LIS) education is, therefore, to prepare personnel for the task of successful performance at different levels of competence as managers in different types of libraries and as teachers in the schools of LIS.

Objectives of the Course

1. To familiarise the learners with the basic concepts of information and its communication in society.
2. To produce quality manpower for collecting, organising and disseminating information products and services in and beyond conventional libraries and information centres, thereby training students for a professional career in Library & Information Sciences.
3. To teach the latest techniques in information processing and develop the capability to retrieve information efficiently for library and information professionals.
4. To sensitise the learners and enable them to resolve the major issues associated with the development of new technology in the libraries and information centres;
5. To introduce modern tools and techniques to students to manage libraries and information centres effectively and prepare the library and information professionals for the changing electronic and networked era and knowledge society.
6. To get the students acquainted with the activities and services of different information systems and introduce them to packaging and consolidation techniques;
7. To impart ICT-based skills using open source software in order to make them serve competently in an automated and networked environment and
8. To impart high-level skills and training necessary for those aspiring to hold higher positions in library and information centres within the country and abroad.

Program Outcomes (POs)

PO1	Ability to carry out research /investigation independently in specialized area of Library & Information Science
PO2	Ability to write and present a substantial technical report/document.
PO3	Ability to demonstrate a degree of mastery in the area of Information Sceince to enable them in collaborative and multidisciplinary research.
PO4	Learn to recognise the need for continuous learning and will prepare oneself to create, select, learn and apply appropriate techniques, resources, and modern instrumentation to carry out complex technological activities with an understanding of the limitations.
PO5	Ability to manage projects efficiently and economically with intellectual integrity and ethics for sustainable development of society.

Program Specific Outcomes (PSOs)

PSO1	Apply knowledge and theories of information organisation, retrieval, and access to design and manage information systems in various library and information centre settings.
PSO2	Analyse information needs of diverse user groups and develop user-centred information services and programs to meet those needs effectively.
PSO3	Utilise information technology and digital tools to curate, manage, and disseminate information resources in different formats.
PSO4	Demonstrate critical thinking, problem-solving, and research skills to evaluate information sources and navigate the information landscape ethically.
PSO5	Students will be able to critically evaluate and curate scientific information resources in the fields of a universe of knowledge.
PSO6	Students will be able to design and implement information retrieval strategies to support research in health sciences, including areas like genomics, proteomics, and metabolomics.
PSO7	Students will be able to effectively communicate complex scientific information to diverse audiences, including researchers, students, and the general public.

Academic Regulations

1. Title

These Regulations shall be called "Regulations Governing the Post- Graduate Program under the **"Choice Based Credit System"** for Department of Science & Technology, BLDE (*Deemed-to-be University*), VIJAYAURA.

2. Commencement

These Regulations shall come into force with effect from the academic year 2023-2024.

3. Definitions

In these Regulations, unless otherwise provided:

"Academic Council" means the Academic Council of the college constituted according to the UGC Guidelines for autonomy.

Board of Studies" means P.G. Board of Studies in Chemistry, Biochemistry,

Biotechnology, Microbiology, Psychology and Master of Library & Information Science.

"Compulsory Course" means fundamental paper, which the student admitted to a particular Post-Graduate Programme should successfully complete receiving the Post-Graduate Degree in the concerned subject.

"Course Weightage" means a number of credits assigned to a particular course.

"Credit" means the unit by which the coursework is measured. One Credit means one hour of teaching work or two hours of practical work per week. As regards the marks for the courses 1 credit is equal to 25 marks, 2 credits are equal to 50 marks, 3 credits are equal to 75 marks and 4 credits are equal to 100 marks.

"Cumulative Grade Point Average (CGPA)" refers to the Cumulative Grade Point Averages weighted across all the semesters and is carried forward from first semester to subsequent semesters.

"Degree" means Post-Graduate Degree in respective course offered by Department of Science & Technology, BLDE (Deemed-to-be University), VIJAPURA.

"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 course by the candidate in both Internal Assessment and Semester-end Examinations,

"Grade Point Average (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.

"Open Elective Course" means a paper offered by a Department to the students of other departments.

"Post Graduate Programme" means semester based Master's Degree Programme.

"Student" means the student admitted to the post graduate programme.

"University" means Department of Science & Technology, BLDE (*Deemed-to-be University*), VIJAYAPURA.

4. Minimum Eligibility for Admission

A candidate who has successfully completed Any Bachelor's degree of this University or of other Universities considered as equivalent thereto any other University recognised as equivalent to their College shall be eligible for admission to the Post Graduate.

Programmes in science provided to the candidate also satisfy the conditions like the minimum percentage of marks and other eligibility conditions prescribed by the University from time to time.

5. **Duration of the Programme**

The study duration for the Post-Graduate Degree program in the respective stream shall extend over two consecutive academic years, each academic year comprising two semesters and each semester comprising sixteen weeks with a minimum of ninety-six working days.

However, the students who discontinue the programme after one or more semesters due to extraordinary circumstances are allowed to continue and complete the programme with due approval from the Register. Candidates shall not register for any other regular course other than Diploma and Certificate courses being offered on the campus during the duration of P.G. Programme.

6. **Medium of Instruction and Evaluation**

The medium of instruction shall be English.

7. **Programme Structure**

The students of the Post-Graduate Programme shall study the courses as approved by the Board of Studies, the Academic Council of the College from time to time, which is subjected to minimum and maximum credits as outlined in these regulations.

There shall be categories of courses, namely,

Core Courses and Open Elective Courses.

Components of the Programmes

Master's Degree Programmes consist of the following courses:

Core Course (Mandatory): Course that is fundamental and **compulsory** in requirement for a subject of study in a particular Programme with the content of required national and international level of knowledge. The core course prescribed for study in a Programme shall not be replaced by studying any other course(s). A minimum of 50% of the courses of a programme shall be core courses.

Dissertation / Essential Field work practical leading to report writing and project/dissertation of the main programme of study shall be treated as core course.

Open Elective Course: Course/s offered by any Department of Studies and Research other than the parent department. The school offers such courses to provide exposure to students to other disciplines. The students from a particular department must enroll themselves for

the courses offered by some other departments as open elective interdisciplinary courses. One elective in second semester and in the third semester.

- Program shall have a set of Compulsory Courses, as stipulated in the program regulations that a student must complete to get the degree.
- Department shall offer Open Elective courses for students of other Departments. The students of a Department shall choose Open Elective course prescribed by the College and selected by the Department from time to time. Qualified teachers shall teach such Open Elective courses.
- The Open Elective Courses shall have only theoretical component or as specified by the respective Board of Studies. The number of students admitted to the course shall be commensurate with the availability of infrastructure.
- The credits for each of the Compulsory Courses may vary from 2 to 4; for Specialization Course, from 2 to 4; and for Open Elective Course, from 2 to 4.
- Wherever project work/field work/practical are involved in the course, the credits may extend up to 6.
- The minimum credits for P.G. Programmes in the respective stream are 100
- The students shall undertake Review and project/field work during the programme as a compulsory course or in lieu of a Core or Specialization Course if so specified by the concerned Board of Studies.
- The detailed program structure for postgraduate studies and Research in the respective stream shall be as prescribed and shown in Annexure-I, Annexure-II - II, Annexure-II- III, Annexure-II -and Annexure-V.

8. **Project**

It is a method of imparting education that consists of hands-on experience/ laboratory experiments, which equip students to acquire the required skill component.

Dissertation/Project work: A Dissertation/Project work is a course with a wider scope involving the application of knowledge in solving/analysing and exploring a real-life situation problem.

9. Attendance

Each course shall be taken as a unit to calculate attendance. Each student shall maintain a minimum attendance of 75% and maintain a register in the department for each course for every hour/unit of teaching/practical. The course teachers shall submit the monthly attendance report to the Chairperson of the Department, who shall notify the same on the notice board of the Department during the second week of the subsequent month.

A student shall be considered to have satisfied the required attendance for each course if he/she has attendance that is not less than 75% of the total number of instructional hours during the semester.

The students who do not satisfy the prescribed attendance requirement shall not be eligible for the ensuing examination. Such candidates may seek admission afresh to the given semester. Such candidates who have participated in State/National level Sports, Cultural activities and other related activities as stipulated under the existing regulations shall be considered for giving attendance for the actual number of days utilised in such activities including travel days) subject to the provision of certificates from the relevant authorities within two weeks after the event.

Sl. No.	Course Components	Number of Credits	
		Min.	Max.
1	Core Course	2	4
2	Dissertation/Project Work/Field	2	6
3	Review dissertation	2	4
4	Open-Electives Interdisciplinary	1	4

Tutorial or learner-centric approaches: A supplementary practice to any teaching-learning process that may consist of participatory discussion/self-study/desk work/seminar presentations by students and other novel methods that make a student absorb and assimilate the contents delivered in the lecture classes more effectively. Seminars, Case Studies, Discussion Sessions, etc., are part of Tutorial or learner-centric approaches.

10. Examination

i. Registering for the semester-end examination:

- There shall be an examination conducted by the college at the end of the each semester as notified by the college from time to time.
- A student shall register for all the prescribed papers of a semester when he/she appears for the examination of that semester for the first time.
- A student who fails to satisfy the attendance requirement during the prescribed semester

shall not be allowed to appear for the semester-end examinations.

ii. **Examination Manual:** The Controller of Examination shall prepare a manual for the entire process of examination. It shall include registration of candidates, eligibility and schedule of examinations, constitution of BOAE & other examination processes, results, issue of marks list/cards, and maintenance of records.

iii. Board of Appointment of Examiners: There shall be a Board of Appointment of Examiners (BOAE) to be constituted as a subcommittee of the Academic Council; it shall comprise the Dean of Academic Affairs/Chairman BOS & one senior staff of the concerned subject & one faculty from outside or as per University norms. The BOAE shall constitute a panel of Examinations for the respective subjects.

iii. Semester Examination

There shall be a Board of Examiners to set, scrutinise and approve question papers.
The Board of Examiners (BOE) shall consist of following members

Chairman of BOS

- External faculty member
- Internal faculty member
- There shall be three sets of question papers for each course of which an external examiner should set at least one. The BOE shall scrutinize the question papers and approve the question papers and submit the same to the office of the Controller of Examination.
- The office of the Controller of Examination shall conduct the Examinations according to the Schedule announced by the College.
- As far as practicable, it will be ensured that 50% of the paper setters and examiners are from other Universities/ Research Institutes.
- Each answer script 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. A third examiner shall assess such a script if the difference in marks between two evaluations exceeds 15% of the maximum marks. The marks allotted by the third examiner's hall be averaged with the nearer award of the two evaluations.
- Provided that in case the number of answer scripts to be referred to the third examiner in a

course exceeds a minimum of 5 or 20% of the total number of scripts at the odd/even semester-end examinations, such answer scripts shall be valued by the Board of Examiners on the date to be notified by the Chairperson of the Board of Examiners and the marks awarded by the Board shall be final.

- Wherever dissertation/project work is prescribed for a programme, the same shall be evaluated by both internal and external examiners.
- The evaluation shall be as per faculty-specific regulations
- In the case of programmes with practical examination, details of maximum marks, credits, or duration may vary from Department to Department and will be as per Faculty Specific Regulations (CBS) or Rules as approved by the Academic Council.
    - The office of the Controller shall process and announce the results.

11. Evaluation

Each course shall have two evaluation components: internal assessment (IA) and semester-end exams.

The IA component in a course shall carry 30%, and the Semester End Examination shall carry 70%, respectively, as the case may be. However, in the case of project work, the distribution of marks for Internal Assessment and Examination shall be left to the discretion of the concerned BOS.

Internal Assessment (IA) shall be based on written tests, practicals and seminars. However, the number of IA components per course per semester shall not be less than two.

The IA marks list shall be notified on the Notice Board as and when the individual IA components are completed, and the consolidated list shall be submitted to the Office of the Controller of Examination before the commencement of the semester-end examination.

The tests shall be written in a separately designated answer book /IA supplied by the College, which shall be open for inspection by the students after evaluation. There is no provision for seeking improvement of Internal Assessment marks. The department shall preserve the IA records pertaining to the Semester Examination for a period of one year from the date of the semester examination.

An internal and external examiner shall conduct the dissertation/project work viva voce.

Submission:

The responsibility of allocating the topic for the dissertation/project, specifying the duration

for the field work and methods, the time for submission of the same to the department, etc., shall be decided by the Departmental Council.

Right from the initial stage of defining the problem, reviewing the literature, progressing the work, etc., the candidate should have regular discussions with the concerned supervisor/guide and submit the progress reports periodically.

Evaluation of Dissertation/Project Reports

The candidate has to submit the Dissertation/Project Report before the closure of a respective Semester to facilitate the Evaluation process.

The dissertation shall be evaluated by a panel of two examiners, of whom one shall be an external examiner.

The total marks for the dissertation are 150, or as per the requirement of the respective department.

1	Literature review/Review article (IA)	50 Marks
2	Dissertation & Presentation (University examination)	100 Marks
Total Marks		150 Marks

Both examiners shall enter the marks for the Dissertation evaluation in separate Marks Sheets (as done in theory examinations) and submit the same to the concerned in a sealed cover. The *viva-voce* examination marks shall be awarded jointly by the examiners, and they should be submitted to the Office of Registrar Evaluation on a sealed cover.

Maximum duration for completion of the Programme

A candidate admitted to a postgraduate programme shall complete it within a period which is double the duration of the programme from the date of admission.

Whenever the syllabus is revised, the candidate reappearing shall be allowed to take the examinations only according to the new syllabus.

Standards of Passing:

- There shall be no minimum marks for passing the continuous Internal Assessment
- There shall be 40% minimum marks for passing the semester-end examination both in theory & practicals for each paper.
- However, there shall be 50% aggregate marks in CIA & SEE together for passing both theory & practicals in all subjects together.

Gracing Rule

In case the candidate fails in one or more than one subject by not more than 5 marks, in all the subjects together, then 5 marks shall be graced for passing

14. Declaration of Results

The minimum for a pass in each course shall be 40% of the total marks, including both the IA and the semester-end examinations. Further, the candidate shall obtain at least 40% of the marks in the semester-end examination. There is no minimum for the IA marks.

Candidates shall secure a minimum of 50% in aggregate in all courses of a programme in each semester to successfully complete the programme.

Candidates shall earn the prescribed number of credits for the programme to qualify for the PG Degree.

For the purpose of announcing the results, the aggregate of the marks secured by a candidate in all these master examinations shall be taken into account. However, Ranks shall not be awarded in case the candidate has not successfully completed each of the semesters on the first attempt or has not completed the programme in the stipulated time or has applied for improvement of results.

Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses under gone & earned by a student, i.e.,

SGPA (Si) = $\sum$(Ci x Gi) /$\sum$Ci

Where, Ci is the number of credits of the it's course and Gi is the grade point scored by the student in the it's course.

ii. The CGPA is also calculated in the same manner taking into account all the courses under gone & earned by a student overall the semesters of a program, i.e.

CGPA=$\sum$(CixSi)/$\sum$Ci

Si is the SGPA for the semester, and Ci is the total number of credits for that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

Thus,

$$\text{CGPA} = \frac{20\text{x}6.9+22\ \text{x}6.8+\ 25\ \text{x}\ 6.6\ +\ 26\ \text{x}6.0+26\ \text{x}\ 6.3\ +25\text{x}8.0}{144} = 6.75/\text{B+}$$

ii. Transcript: Based on the above recommendations on letter grades, grade points, SGPA,

and CGPA, the transcript for each semester and a consolidated transcript indicating performance in all semesters may be issued.

Marks, Credit Points, Grade Points, Grades and Grade Point Average: the grade points and the grade letters to candidates in each course shall be awarded as follows:

Percentage of marks	**Grade Points**	**Grade Letter**
75 and above, up to 100.00 %	7.50 to 10.00	**A+**
60 and above but less than 75 %	6.00 and above but less than 7.50	**A**
50 and above but less than 60 %	5.00 and above but less than 6.00	**B**
40 and above but less than 50 %	4.00 and above but less than 5.00	**F**

Credit Point (CP): The credit point for each course shall be calculated by multiplying the grade point obtained by the course credit.

The award of Grade Point Average (GPA) for any student is based on the performance in the whole semester. The student is awarded Grade Point Average for each semester based on the Total Credit Points obtained and the total number of credits opted for. The GPA is calculated by dividing the total credit points earned by the student in all the courses by the total number of credits of those courses of the semester.

The Cumulative Grade Point Average (CGPA) shall be calculated by dividing the total number of credit points in all the semesters by the total number of credits in all the semesters.

- **CGPA for the I Semester** = Sum of the CP of the I Semester + Sum of the credits of the 1 Semester
- **CGPA for the II Semester** =Sum of the CP of the I Semester + Sum of the CP of II Sem. / Sum of the credits of the I Semester + II Semester
- **CGPA for the III and IV Semesters** shall be computed accordingly.

The Grade Card at each semester examination shall indicate the courses opted by the student, the credit for the course chosen by the student, the credit points obtained in each course, the grade letter and the grade point average. No class shall be awarded for each semester and the same would only be awarded at the end of all the semesters based on Cumulative Grade Point Average. Class shall be awarded to the successful candidates based on the Cumulative Grade Point Average (CGPA) as specified below

Cumulative Grade Point Average (CGPA)	Class to be awarded
7.5 to 10.0	First class with Distinction
6.0 and above but below 7.5	First Class
5.0 and above but below 6.0	Second Class

15. The Program structure of the Master of Science Degree shall be as follows

Semester	No. of Compulsory & Specialization courses	Total credits for compulsory & Specialization courses	No. of Open elective course (credits/course)	Total credits of open elective course	Total credits for the Semester
Sem. **I**	T: 04(04) =16 P: 04(02) =08	24	--	--	24
Sem. **II**	T:04 (04) =16 P: 04 (02) =08	24			24
Sem. **III**	T: 03(04) =12 P :04 (04) =08	20	Th:01(04) = 04	04	24
Sem. **IV**	T: 03 (04) =12 P :02 (03) =06 CP: 01 (06) =06	24	--	--	24
Total	T: 15 (3) =60 P:15(03) =30 CP: 01(06) =06	92	01(04) = 04	04	96

Abbreviations: T = Theory; P = Practical; CP = Core Project;

16. Examination Scheme

Theory question paper pattern for University Semester Examination under CBCS.

Question Types	No of questions	Marks/question	Question X marks	Total marks
Section 1				
Long answer	2 out of 3	10	2 X 10	20
Section 2				
Short answer-I	6 out 7	5	6 X 5	30
Short answer-II	10 out 11	3	10 X 3	30
Total				80

Practical question paper pattern for University Semester Examination under CBCS.

Exercise	Description	Marks
Q No 1	Major Question	15
Q No 2	Minor Question	05
Q No 3	Journal	05
Q No 3	Viva Voce	10
Total		35

Internal theory question paper pattern

Question Type	No of questions	Marks	Question X Marks	Total marks
Long Answer	1	10	1 X 10	10
Short Answer	2	5	2 X 5	10

Internal practical question paper pattern

Exercise	Description	Marks
Q No 1	Major Question	07
Q No 2	Minor Question	04
Q No 3	Viva Voce/Journal	04
Total		15

BLDE (DEEMED TO BE UNIVERSITY)
Master of Library and Information Science

[Time: 3 Hours] **[Max. Marks: 80]**

SEMESTER
Subject
QP CODE:

Your answer should be specific to the questions asked.
Write Question No. on the left side of the margin.

Long Questions (Any – 2) **10 X 2 = 20 Marks**

1.
2.
3.

Short Essays: (Any – 6) **5 X 6 = 30 Marks**

4.
5.
6.
7.
8.
9.
10.

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.

Curriculum Program Structure
SEMESTER-I

Course Code	Course type	Course Name	No. of courses	No Hrs/week	Duration of Exam (hrs)	Marks			Credits
						IA	Exam	Total	
BLDE LST-101	Hardcore	Foundations of Library and Information Science	T	4	3	20	80	100	4
BLDE LST-102		Information Sources	T	4	3	20	80	100	4
BLDE LST-103		Library Classification	T	4	3	20	80	100	4
BLDE LST-104		Basic Computer & Internet	T	4	3	20	80	100	4
BLDE LSP-105	Softcore	Library Classification	P	4	3	15	35	50	2
BLDE LSP-106		Basic Computer	P	4	3	15	35	50	2
BLDE LSP-107		Information Sources	P	4	3	15	35	50	2
BLDE LSP-108		Basics of Internet	P	4	3	15	35	50	2
Total								600	24

SEMESTER-II

Course Code	Course type	Course Name	No. of courses	No hrs/ week	Duration of Exam (hrs)	Marks			Credits
						IA	Exam	Total	
BLDE LST-201	Hardcore	Management of Libraries and Information Centres	T	4	3	20	80	100	4
BLDE LST-202		Library Cataloguing	T	4	3	20	80	100	4
BLDE LST-203		Library Automation	T	4	3	20	80	100	4
BLDE LST-204		Information Services & Literacy	T	4	3	20	80	100	4
BLDE LSP-205	Softcore	Management of Libraries and Information centres	P	4	3	15	35	50	2
BLDE LSP-206		library cataloguing	P	4	3	15	35	50	2
BLDE LSP-207		Library Automation	P	4	3	15	35	50	2
BLDE LSP-208		Information Literacy	P	4	3	15	35	50	2
	Total							600	24

SEMESTER-III

Course Code	Course type	Course Name	No. of courses	No hrs/ week	Duration of Exam (hrs)	Marks			Credits
						IA	Exam	Total	
BLDE LST-301	Hardcore	Information Retrieval	T	4	3	20	80	100	4
BLDE LST-302		Digital Libraries	T	4	3	20	80	100	4
BLDE LST-303		Research Methodology	T	4	3	20	80	100	4
BLDE LST-304A BLDE LST-304B	OES	a) Academic library systems & services OR b) Health Science Information System	T	4	3	20	80	100	4

		systems & services							
BLDE LSP-305	Softcore	Information Processing and Retrieval	P	4	4	15	35	50	2
BLDE LSP-306		Digital Libraries	P	4	4	15	35	50	2
BLDE LSP-307		Academic Library	P	4	4	15	35	50	2
BLDE LSP-308		Research Methodology	P	4	4	15	35	50	2
Total								600	24

SEMESTER-IV

Course Code	**Course type**	**Course Name**	**No. of Courses**	**No hrs/ week**	**Duration of Exam (hrs)**	**Marks**			**Credits**
						IA	**Exam**	Total	
BLDE LST-401	Hardcore	Information Communication Networks	T	4	3	20	80	100	4
BLDE LST-402		Web Technology	T	4	3	20	80	100	4
BLDE LST-403		Webometrics, Informetrics & Scientometrics	T	4	3	20	80	100	4
BLDE LSP-404	Softcore	Information Communication Networks	P	4	4	20	80	50	2
BLDE LSP-405		Web Technology	P	4	4	15	35	50	2
BLDE LSP-406		Webometrics, Informetrics & Scientometrics	P	4	4	15	35	50	2
BLDE LSPRO-407	Project	Project	P	6	3	50	100	150	6
Total								600	24

Syllabus of M.L.I.S
First Semester

Course Code	Course type	Course Name	No. of courses	No Hrs/week	Duration of Exam (hrs)	Marks			Credits
						IA	Exam	Total	
BLDE LST-101	Hardcore	Foundations of Library and Information Science	T	4	3	20	80	100	4
BLDE LST-102		Information Sources	T	4	3	20	80	100	4
BLDE LST-103		Library Classification	T	4	3	20	80	100	4
BLDE LST-104		Basic Computer & Internet	T	4	3	20	80	100	4
BLDE LSP-105	Softcore	Library Classification	P	4	3	15	35	50	2
BLDE LSP-106		Basic Computer	P	4	3	15	35	50	2
BLDE LSP-107		Information Sources	P	4	3	15	35	50	2
BLDE LSP-108		Basics of Internet	P	4	3	15	35	50	2
Total								600	24

LST-101 FOUNDATION OF LIBRARY AND 1NFORMATION SCIENCE

Unit-1	Libraries in Social context, Social and historical foundations of library, Role of libraries in formal and informal education. Types of libraries: objectives, functions and Services. Five laws of library science and their implications. Book day out.
Unit-2	Library Development: History of Library movement, Growth and development of libraries in India. Library cooperation: resource sharing, networking and consortia.
Unit-3	Information and Communication: Information: definition, characteristics, nature and use. Conceptual differences between Data, Information, Knowledge. Information transfer cycle: Generation, collection, storage and retrieval. Information communication: channels, models and barriers.
Unit-4	Information Science: Evolution, Definition, Scope and current status. Information Science as a discipline, Influence of Information Science on other disciplines.
Unit-5	Library Legislation: need, purpose and essential features. Library legislation in India: Problems and Prospectus, Overview of Public Library Acts in India. Detailed study of Karnataka Public Library, Act,1965. Press and Registration Act, Intellectual Property Rights: Copyright Act, Delivery of Books and Newspaper (Public libraries) Act, 1956, Right to Information Act, 2002.
Unit-6	Library and Information Profession: Professional associations, Role in library development, Attributes of a profession. Librarianship as a profession: Professional ethics in Librarianship, LIS education and research in India. Professional Associations: State, National and International level, State level: KALA. National level: ILA, IASLIC, IASLIC & RRRLF. International level: IFLA, ALA, CILIP and UNESCO.

Selected Readings:

Burahohan, A. (2000). Various aspects of librarianship and Information Science. New Delhi: ESSESS.

Chapman, E.A. and Lynden, F.C.(2000). Advances in librarianship. 24thVol.SanDiego: Academic Press.

Isaac, K.A. (2004).Library legislation in India: A critical and comparative study of state Library acts book description: New Delhi: Ess Ess Publication.

Kumar, P.S.G.(2003)Foundations of Library and Information Science. Paper of UGC Model Curriculum. New Delhi: Manohar.

LST 102: INFORMATION SOURCES

Unit-1	Information sources: Meaning, Definition, Importance, Characteristics, Functions and Evolution.
Unit-2	Types of Information Sources: Documentary and Non-Documentary Sources. Primary Sources: Periodicals, Thesis and Dissertation, Conference Proceedings, Technical Reports, Patents ,Standards and Specifications, Trade, Literature, Reprints and Preprints. Secondary Sources: Dictionaries, Encyclopaedias, Biographical sources, Bibliographical sources, Geographical sources, Year books and Almanacs, Handbooks and Manuals. Tertiary sources : Directories, Bibliography of Bibliographies, Union Catalogues.
Unit-3	Human Sources: Technological Gatekeepers, Subject experts/ Resource persons, Invisible Colleges, Information consultants, Common Man (Village head, Priest, Postman and receptionist).
Unit-4	Institutional Sources: Government Ministries and Departments, R & D organisations, Learned societies, publishing houses, Press, Broadcasting stations, Data banks/ centres, Information analysis centres, Exhibitions and Trade fairs, Organisational websites.
Unit-5	E-resources: Internet information sources, E-books, E-journals, Online forums, Open access resources: PLOS, DOAJ and DOAB, e-reference sources, Subject gateways, Wikipedia, IEL (IEEE electronic Library), Emerald, EBSCO, PubMed central, J-gate, Citation Database: Google scholar.
Unit-6	Criteria for evaluation of Printed and e-resources.

Selected Readings:

Chowdhury, G.G and studatta Chowdhury. (2001), Searching CD-ROM and online Information Sources, London; Facet publishing,

Chowdhury, G.G. and Sudatta Chowdhury, (2001). Information Sources and Searching on the World Wide Web, London: Facet Publishing.\

Kumar, Krishan (2003), Reference services, Ed, 3. New Delhi: Vikas.

Kumar,PSG.Ed. (2001). Indian Encyclopedia of Library and Information Science, New Delhi: S. Chand & Co.

Rao, I.K.R (2001). Electronic Sources of information, Bangalore; DRTC

Sewasingh (2001), Handbook of International Sources on Reference and Information New Delhi: crest Publication.

Sharma, J.S & Grover,D.R (1998), Reference Service and Sources of Information, New Delhi: ESS ESS

Subramanayam, k. (1981). Scientific and Technical Information Resources, New York: Marcel Dekker.

LST-103: LIBRARY CLASSIFICATION

Unit-1	Library Classification: Meaning, Definition, objectives, need and purpose. Evolution of the theory of Classification: Descriptive and Dynamic theory, Knowledge Classification, Book Classification, Species of Library Classification.
Unit-2	Universe of Knowledge: concept, definition, structure, attributes. Modes of formation of Knowledge, Different types of Subjects, Universe of Knowledge as mapped in CC, DDC and UDC.
Unit-3	Planes of Work and Canons of Classification. Normative Principles of Classification and their Application.
Unit-4	Fundamental Categories: Principles for Facet Sequence, Phase Relations, Common Isolates.
Unit-5	Classification Schemes: Standard Schemes of Classification and their features: CC, DDC, UDC. Major contributions of S.R. Ranganathan to classification theory, Design and Development of Schemes of Library Classification.
Unit-6	Notational System: Need, Functions, Types, Qualities. Devices used in CC. Mnemonics, Call Number, Systems and Specials, Rounds and Levels, Method of Residue. Trends in Library Classification.

Selected Readings:

Ranganathan,S.R.(1989). Prolegomena to LibraryClassification. Bangalore,SRELS.
Kumar, Krishan. (2005) Theory of Library Classification. New Delhi, Vikas.
Ranganathan, S.R.(2000).ColonClassification.Ed6,SRELS,(Reprint).
Foskett, A.C.(1991.Subject approach to information.5thEd.
Maltby, A. (1996). Sayer's Manual of Library Classification. London: Clive Bingley.

LST-104: BASICS OF COMPUTER AND INTERNET

Unit-1	Information and Communication Technology (ICT): Meaning, Definition, Evolution and Scope. Computers: Concept, Types, Generations, Characteristics and limitations.
Unit-2	Computer Hardware: Components of a Computer, Memory - Internal Storage: ROM and RAM, Cache memory, External Storage Devices: Magnetic Devices - Hard Disk and Floppy Disk, Optical Devices: CD, DVD. Pen drive, Input/output Devices.
Unit-3	Computer Software: Systems Software, Operating Systems: MS-DOS, MS-WINDOWS, Language Processors: Compilers and Interpreters; System utilities: Editors, loader and linkers, debuggers. Application Software Package: MS Office - Word, Excel and PowerPoint
Unit-4	Data Representation and Data Manipulation: Data Representation: Bits, Bytes, Codes-BCD, EBCDIC and ASCII. Number system: Decimal and Binary, Addition, Subtraction. Logic gates: AND, OR, NOT, NAND, NOR .
Unit-5	Programming: Steps in Programing, Algorithms, Flow-Charting. Basic programming languages: C, C++, Java, HTML. File Organization: Concept, Types and their advantages and disadvantages.
Unit-6	Internet: Origin, History and Evolution. Internet-based library and information services. Web Browsers: Internet Explorer, Google Chrome, Mozilla Firefox. Search engines: Need and importance, Types, Search strategies, Criteria for evaluation.

Selected Readings:

Terrence, W Pratt and Marvin, V Zelkowlts: Programming Languages: Design and Implementation. New Delhi, Prentice Hall of India Pvt. Ltd., 2000.
Bansal, S.K.(2005). Information technology and globalisation, New Delhi: A.P.H. Publishing corporation.
Basandra , S.K(2002). Computers today, New Delhi: Golgotia.
Curtin, D.P. & others: Information technology: The breaking wave. New Delhi: TMH, Latest Edition.
Decson, E.(2000). Managing with Information technology. Great Britan: Koganpage Ltd.
Dhiman, A.K.(2003). Basics of Information technology for librarians and Information scientists, Vol.1. New Delhi: ESS ESS.
Hunter & Shelly (2002). Computers and common sense, New Delhi: Prentice-Hall.
Kashyap, M.M. (2003). Database systems. New Delhi: Vikas.
Satyanarayana, R. (2005).Information technology and its facets. Delhi: Manak

LSP 105: BASICS OF COMPUTER

Acquaintance with operating systems, word processing, spreadsheets, and presentation packages, including hands-on experience and work assignments.
(Each student shall compulsorily maintain a practical record and submit the same at the time of the practical examination).

LSP. 106 INFORMATION SOURCE

Acquaintance with various sources of information and evaluation of information sources. (Each student shall compulsorily maintain practical record and submit the same at the same time of the practical examination)

LSP. 107: LIBRARY CLASSIFICATION

Classification of documents according to DDC (Latest edition)
(Each student shall compulsorily maintain a practical record and submit the same at the time of practical examination).

LSP 108: BASICS OF INTERNET

Acquaintance with Web browsers: Internet Explorer, Google Chrome, Mozilla Firefox, Search Engines and meta-search engines, search strategy, and custom search engine.
(Each student shall compulsorily maintain a practical record and submit the same at the time of practical examination).

SEMESTER-II

Course Code	Course type	Course Name	No. of courses	No hrs/ week	Duration of Exam (hrs)	Marks			Credits
						IA	**Exam**	Total	
BLDE LST-201	Hardcore	Management of Libraries and Information Centres	T	4	3	20	80	100	4
BLDE LST-202		Library Cataloguing	T	4	3	20	80	100	4
BLDE LST-203		Library Automation	T	4	3	20	80	100	4
BLDE LST-204		Information Services & Literacy	T	4	3	20	80	100	4
BLDE LSP-205	Softcore	Management of Libraries and Information centres	P	4	3	15	35	50	2
BLDE LSP-206		library cataloguing	P	4	3	15	35	50	2
BLDE LSP-207		Library Automation	P	4	3	15	35	50	2
BLDE LSP-208		Information Literacy	P	4	3	15	35	50	2
	Total							600	24

LST 201: MANAGEMENT OF LIBRARIES AND INFORMATION CENTRES

Unit-1	Management: Concept, Meaning, Definition and scope. Management styles and approaches. Functions and Principles of Management. Organisational structure: Principles. Organizational structure of LIC.
Unit-2	Collection development: Types of Documents. Selection and Acquisition: tool, procedure and policies. Problems of collection development. Technical processing and preparation of documents for use: shelving, circulation work, methods of book circulation-charging and discharging system.
Unit-3	Human Resource Management: Meaning, Definition, need and Importance. Personnel management in LIC: job analysis, job description and job specification. Selection and recruitment: Procedure and methods. Motivation, Training and Development, Performance appraisal, Qualities of librarians.
Unit-4	Financial Management: Importance, Sources of Finance, Budgeting methods and Techniques, Budgeting control, Cost benefit analysis.
Unit-5	Library Building, Furniture and Equipment: Planning, Design and Maintenance. Performance evaluation of librarian, information centres and services: TQM, PERT, CPM, SWOT analysis. Library case studies: Library of Congress, BLDSC, CISTI, National library of India, Kolkata, Sheshadri Iyer Memorial Library-Bangalore.
Unit-6	Maintenance: Proceedure, policies and techniques, library records. Annual Reports: Compilation, contens and style. Library rules and regulations. Marketing of Information Products and Services: Meaning, definitions, need. Market segmentation, Positioning, Market Mix, 4P's. Promotion, Marketing audit, Role of librarian in marketing of LIS products and services.

Selected Readings:

Chapman, Liz: Managing acquisitions in library and information services. London, Library Association, 2001.

Evans, G. E.: Management techniques for librarians, 2nd ed. New York, Academic Press, 1983.

Garter, Edward D. (ed.): Advances in library administration and organization. Amsterdam, Elsevier, 2005.
Gupta, S. R.: Stock verification in libraries: problems and solutions. Delhi, Ken Publication, 1990.
Hubbard, William J.: Stock management: a practical guide to shelving and maintaining libray collections. Chicago, A.L.A., 1981.
Jones, Noragh& Jordan, Peter: Staff management in library and information work , 2nd ed., Aldershot, Gower Pub., 1987.
Krishna Kumar, Library administration and management. New Delhi, Vikas Pub. House, 1987.
Prajapati, C. L., Conservation of documents: problems and solutions. New Delhi, Mittal Publications, 2005.
Prasher, R. G.: Developing library collection. New Delhi, Medallion Press, 1993.
Ranganathan, S.R., Library administration 1954.

LST 202: LIBRARY CATALOGUING

Unit-1	Library Catalogue: Meaning, Definition, Need, objectives and functions. Current developments: OPAC, Web OPAC
Unit-2	Organization of Information Resources and Bibliographic elements of documents, Evolution of Catalogue codes - from Panizzi to RDA
Unit-3	Forms of document Cataloguing : Inner forms and outer forms.
Unit-4	Subject Cataloguing : Chain Procedure, Subject heading lists- Sear's list and LCSH, Normative Principles: Laws, Canons and Principles
Unit-5	Standards for Bibliographic description: MARC, ISBD, UNIMARC, CCF, ISO 2709, Z 39.50,Metadata standards and Dublin-Core, FRBAR-RDA,BIBFRAME
Unit-6	Resource sharing: Centralized, Co-operative and Union cataloguing, OCLC and its activities including worldCat.

Selected Readings:

Ranganathan,S.R (1989). Classified catalogue Code, Eds, SRELS, (Reprint).
Girija Kumar and Krishnan Kumar. (1983) .Theory of Library Cataloguing New Delhi, Vikas.
Viswanathan, C.G (1990), Cataloguing theory and Practice.
Anglo-American Cataloguing Rules, 2nd ed., 1986.
Kaplan, Allison. (2009), Crash Course in Cataloging for Non-Catalogers: A Casual Conversation on organizing Information, Libraries unlimited
Mary L. Kao (2001). Cataloging and Classification fore Library Technicians,Second Edition, The Haworth Press: 2nd ed.,
Anne Welsh and Sue Batley (2012). Practical Cataloging: AACR2, RDA and MARC21, Neal-Schuman Publishers: 1st ed.
Sam. Oh. Ontology-based Metadata Systems: Design And Implementation (Third Millennium Cataloging) ,Place: Libraries Unlimited, 2013
Miller, Steven J. (2011) Metadata for Digital Collections (How-to-Do-It) Manual (How to Do it Manuals for Librarians), Neal –Schuman Publishers: Pap/Psc Edition.
Smiraglia, Richard. (2005). Metadata: A Catalogue's Primer, Routledge,

Tillett, Barbara and Cristian, Ana Lupe. (2009). IFLA Cataloguing Principles: The Statement of International Cataloguing Principles (ICP) and its Glossary, In 20 Languages (Ifla Series on Bibliographic Control), K.G. Saur Verlag: 1st ed.

LST-203: LIBRARY AUTOMATION

Unit-1	Library Automation: Meaning and Definition, Genesis, History, Need and Importance, Areas of Library Automation.
Unit-2	Strategies for Library Automation:Factors- Internal and External, Prerequisites, Library automation Tasks.
Unit-3	Infrastructure requirements: Manpower, Hardware, Software, Cost, physical equipment and furniture.
Unit-4	Automation of Housekeeping Operations: Acquisition, Cataloguing, Circulation and Serials Control. Subsystems and Interface, File and Data Structure.
Unit-5	Application of Barcode, RFID and NFCT Technology for Library functions. Discovery tools, Applications of Artificial Intelligence to Library and Information Centres, Retrospective Conversion: Strategies and Techniques.
Unit-6	Library Automation Software Package: SOUL, Libsys, NewgenLib, Koha. Criteria for Evaluation.

Selected Readings:

Dhirman, A.K.(2003).Basics of Information technology for librarians and Information scientists. ESS ESS.

Haravu, L.J.(2004), Library automation: Design, principles and Practice. London: Allied Publishing .

Kumar, P.S.G (2004). Information technology: Applications (Theory and Practice),Delhi: B.R.Publishing.

Lucy, A, T.(2005) An Introduction to computer based Library system. 3rd Ed. Chichester; Wiley.

Ravichandra Rao(1996). Library automation. New Delhi: New Age International.

Kochar, R.S.(2007). LibraryAutomation:Issues and Principles. New Delhi;APH publishing Corporation.

Rajinder Singh Aswal (2006), Library Automation for 21st Century. New Delhi: ESS ESS Publication.

LST 204: INFORMATION LITERACY

Unit-1	Information Literacy: Meaning, Definition, Need, Importance, Historical perspective of Information literacy.
Unit 2	Types of Information Literacy: Library Literacy, Computer literacy, Media Literacy, Web Literacy and Digital literacy, Research Literacy.

Unit 3	Information Literacy Models and Components: SCONUL Empowering 8, B-6, Seven Pillar, ELLIS.
Unit 4	Information literacy standards: ALA, IFLA, ACRL. Taskforces and forums. Information Literacy and Libraries: Information Literacy and Higher Education, Role of Libraries in Information literacy.
Unit 5	Information Literacy skills and Competencies: Challenges of Information literacy Programs. Information literacy initiatives in global perspective.
Unit 6	Trends in Information Literacy: Current trends in Information literacy. Information Literacy and Lifelong learning, Information literacy in India.

Selected Readings:

1. American Library Association. Final Report of Presidential Committee on information Literacy. http://www.ala.org/acrl/publications /whitepapers/ presidential
2. Barker, K. and Londsale, R. Ed. (1994), Skills for lifer the Value and meaning of literacy, London : Taylor Graham.
3. Bawden, D.(2001). Information and digitial literacies: a review of concepts. http://arizona.openrepository.com/arizona/bitstream/10150/105803/1/bawden.pdf
4. Eisenberg,M.B., Lowe, C.A & Spitzer, K.L (2004) ,Information literacy Essential Skills for information age. London : Libraries unlimited.
5. Meadows, A.J. Ed. (1991) Knowledge and Communication: essays on the information chain , London: literacy
6. Pantry, Sheila and Griffiths, Peter (2002), creating a successful e-Information service, London: Facet.
7. Ercegovac, Zorana (2008),Information Literacy: Search Strategies, tools & resources for high school students and college freshman, California: ABC-CLIO.

LSP 205: MANAGEMENT OF LIBRARY AND INFORMATION SCIENCE

Acquaintance with the Budgeting – Preparation of Library budget, Acquisition-Book recommendation form, placing the order, certification for payment, Accessioning- entry, Preparation of Library committee meeting proceedings, Preparation of annual report of library, Preparation of Library rules and regulations.

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

LSP 206:LIBRARY CATALOGUING

Preparation of cataloguing entries for Single author, Two Authors, Three Authors and more than Three Authors, Shared Responsibility, Edited books with edition and without edition, Mixed Statement of Responsibility, Pseudonyms documents, Government Publications, Corporate author Publications and Conference Proceedings, Serials Cartographic Materials: Atlas **,** Sound Recordings**,** Video Recordings**,** Motion Pictures**,** Computer Files

LSP207: LIBRARY AUTOMATION

Acquaintance with Installation, Configuration and working Koha/Soul automation software (depending on the availability)
(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).

SPP-208: INFORMATION LITERACY

Applications of B-6 skills in problem solving,
(Each student shall compulsorily maintain practical record and submit the same at the time of practical examination).

Semester -III

Course Code	Course type	Course Name	No. of courses	No hrs/ week	Duration of Exam (hrs)	Marks			Credits
						IA	Exam	Total	
BLDE LST-301	Hard core	Information Retrieval	T	4	3	20	80	100	4
BLDE LST-302		Digital Libraries	T	4	3	20	80	100	4
BLDE LST-303		Research Methodology	T	4	3	20	80	100	4
BLDE LST-304A BLDE LST-304B	OES	a) Academic library systems & services OR b) Health Science Information System systems & services	T	4	3	20	80	100	4
BLDE LSP-305	Soft core	Information Processing and Retrieval	P	4	4	15	35	50	2
BLDE LSP-306		Digital Libraries	P	4	4	15	35	50	2
BLDE LSP-307		Academic Library	P	4	4	15	35	50	2
BLDE LSP-308		Research Methodology	P	4	4	15	35	50	2
Total								600	24

LST-301: INFORMATION USERS AND SERVICES

Unit-1	Information processing and Retrieval: Meaning, Definition, Functions, components. Information transfer cycle.
Unit-2	Indexing: Concepts, theories, methods and importance. Indexing as profession, Indexing languages: Vocabulary control, Semantics and Syntax. Thesaurus: Meaning, Definition, importance, Design and construction.
Unit-3	Indexing System: Pre-coordinate and post-coordinate. PRECIS, POPSI, KWIC and its variations, UNITERM Indexing, Citation indexing: Chain Indexing, Science Citation Index, Social Science Citation Index.
Unit-4	Information Users and their needs: Categories of information users; User studies -Need, and importance scope, purpose, objectives Methods and techniques of user study. User Education: Definition; need, Objectives, Technique and methods of user education programme. Information-seeking behaviour- models.
Unit-5	Information Services: Meaning and definition, Need and Importance. Reference Service: Concept, Definition. Types: SDI, CAS, Translation and DDS, Referral Service, Indexing and Abstracting Service, Newspaper Clipping Services.
Unit-6	Information as a resource, Economic value of information. Marketing of Information Products and Services; Meaning, Definition and Need. Market Segmentation, Positioning, Market Mix, 4p's- Product, price, place, promotion, Marketing Audit, Role of Librarian in Marketing of LIS.

Selected Readings:

Atchison, J. &Gilchrist, A.(1972). Thesaurus construction: a Practical manual, London: Aslib

Austin, D.(1984), PRECIS: A manual of concept analysis and subject Indexing. 2nd ed.

Chowdhury, G.G (2003), Introduction to modern Information retrieval, 2nd ed. London: Facet publishing

Cleaveland, D. B. (2001) Introduction to Indexing and abstracting, 3rd Ed. Englewood, colo.; Libraries Unlimited.
Ghosh,S.B, And Biswas, S.C. (1998). Subject Indexing systems; Concepts, methods and techniques, Rev . ed. Calcutta; IASLIC.
Lancaster, F.W.(2003), Indexing and Abstracting in Theory and Practice, London; Facet publishing.
Pandey , S.K Ed, (2000), Library Information retrieval. New Delhi : Anmol.
Van,R.C.J.(1970). Information retrieval, 2nd ed. London: Butterworths.

LST- 302: DIGITAL LIBRARIES

Unit 1	Digital Resources: Concept, characteristics and types: Born digital, legacy documents and online resources, Electronic documents: e-books, audio books, e-journals, e-reference sources files and file formats. Study of different file formats. PDF: features, creation of PDF files.
Unit 2	Digital Libraries: conceptual framework, definition, characteristics; advantages and challenges; digital libraries vs. traditional libraries; evolution of digital libraries- study of digital library initiatives and Organizations contributing to development of DL. Digital library conferences- JCDL, TPDL (ECDL) and ICADL. Role of DL in education and research.
Unit 3	Design and development of digital library: Digital library architecture, Interoperability, Compatibility, Protocols and standards. Digital Content creation - Digitization; scanning, OCR.
Unit 4	Digital content management: Persistent identifiers – handle system, DOI, Open URL, Cross Ref . Metadata and resource discovery issues. Digital Rights Management, Digital Preservation and Archiving.
Unit 5	Digital library software: Greenstone, DSpace, and EPrints- Comparative evaluation.
Unit 6	Open Access Movement and Institutional repositories. Study of select digital Libraries and IRs –Project Gutenberg, California Digital Library, Alexandria Digital Library, Shodhganga, NDLTD, Internet Archive, Digital Library of India, National Digital Library (NDL).

Selected Readings:

Arms, W. Y. (2005). *Digital libraries*. New Delhi: Ane Books.
Bose, Kausik. (1994). Information Networks in India: Problems and Prospects. New Delhi: Ess Ess,
Chowdury, G.G. (2003). Introduction to Digital Libraries. London: Facet Publishing,
Cohn, John M., Kelsey, Ann L., and Fiels, Ketih Micheal. (1998). Planning for Library Automation: A Practical Handbook. London: Library Association.
Papy, F. (2013). *Digital Libraries*. Somerset: Wiley.
Pedley, Paul. (2001). The invisible Web: Searching the hidden parts of the Internet. London: Aslib.
Xavier, C. (2000). World Wide Web Design with HTML, New Delhi: TMH.

LST-303: RESEARCH METHODOLOGY

Unit-1	Research: Concept, Meaning, Need, importance. Types: Fundamental and Applied including interdisciplinary and multidisciplinary approach, Role of Research in the development of Scholarship.
Unit-2	Research Design Conceptualization and Operationalisation, Types of Research Design, Identification and Formulation of problem; Review of literature: literature search, Hypotheses: Nominal and Operational Definition, Designing Research Proposal, Ethical aspects of Research, Literature search-print, and electronic sources.
Unit-3	Research Methods: Scientific Method, Historical Method, Descriptive Method, Survey Method, Case Study Method, Experimental Method, Delphi Method and Participatory research, Triangular Research, and Bibliometric laws.
Unit-4	Research Techniques and Tools: Questionnaire, Schedule, Interview, Observation, Checklists, Sampling Techniques: Types, advantages and Disadvantages,
Unit-5	Data analysis and Interpretation: Descriptive Statistics: Measure of Central Tendency: Mean, Median, Mode, and Standard Deviation, Tabulation, Generalization; Graphical presentation of data: Bar, pie, line graphs, Histograms.
Unit-6	Research Reporting: Structure, Style, Contents. Guidelines for Research Reports, Style Manual-Chicago, MLA, APA, E- Citation: Mendely, Evaluation Criteria.

Selected Readings:

Bush, C.H. and Harter, S.T.(1986).Research methods in Librarianship

Kumar, Krishna. (1992). Research methods in Library and information Science.

Kothari, C.R. (1990). Research Methodology.

Rao, I K. (1983) Quantitative methods in Library and Information Science.

Goode and Hatt. (1968).Methods of Research.

LST-304A: ACADEMIC LIBRARIES

Unit 1	Academic Libraries. Meaning, Objectives and Functions. Types of academic Libraries.Role of UGC in academic Library development.
Unit 2	Collection development and collection management – Book selection principles andpolicies, procedures and problems.
Unit 3	Academic Library services: Virtual Reference Services, Documentation and Information services, Current awareness services, SDI services. Abstracting and Indexing services, Information product development services, ILL document delivery services. Literature survey and bibliography.
Unit 4	Academic Library Finance and Budgeting. Human Resource Management. Library Buildings and Equipments.
Unit 5	Academic Library networks. Library co-operations: Resource sharing, networks and consortia. International and National scenario. Academic networks: INFLIBNET andits services and activities. OCLC – Its activates and functions.
Unit 6	Institutional repositories: Meaning, definitions, need, and benefits. Overview of IRprojects. IR software.

Selected Readings:

Applegate, R. (2010). Managing the small college library. Santa Barbara, Calif.:Libraries Unlimited.

Bavakutty, M. (1986). College libraries in India: a case study (Vol. 7). Bradford, Eng.: MCB University Press.

Bavakutty, M.(1988). Libraries in higher education. New Delhi: ESS ESS. Cowley, John. (1982). Personnel management in Libraries.

Gelfand, M. A. (1968). University libraries for developing countries. (Paris, tr. Switzerland): Unesco.

Henry, M. & Morgan, S. (2002). Practical strategies for modern academic Library. London: Aslib-IMI.

Isaac, D. et.al. (1993). Academic Libraries: Role in the national development. Jenkins, C. & Mary, M. (1996). Collection development in Academic Libraries. Mathu, M. V. & Arora, R. K. Indian University Library System revitalization. Saini, (1976). Library organisation for higher education.

Singh, S., & Arora, M. (1995). Handbook of college Libraries: Problems, finance and related aspects.

Srivastava, S. N., & Verma, S. C. (1980). University Libraries in India. New Delhi:Vikas.

Trehan, G. L. (1985). College Library development. London : Bingley.

LST-304B: HEALTH SCIENCE LIBRARIES

Unit 1	Introduction to Health Science Libraries: Growth and development of health Science Libraries.Types of Health Science Libraries/Information Centers.
Unit 2	Information services: Current Awareness Service, SDI service, Indexing and abstracting service, Literature search. Users of Health Science Information.
Unit 3	Health Science Information sources: Sources of Information - Print, Non-print and Electronic media, Institutional Sources of Information. Electronic Sources – e-journals, e-books, databases, Websites – identification, Selection and access. Open Access Sources

Unit 4	Health Science Information Institutions: National Medical Library. WHO. UNICEF, ICMR. Department of Biotechnology. Council of Ayurveda and Siddha. Council of Homeopathy. National Institute of Health and Family Welfare. CDRI. CFRI. CFTRI. NIN.NII.NIC
Unit 5	Information Systems and Networks: HELLIS, MEDLARS, BIOSIS. Trends in Health ScienceInformation System. Application of Hypertext, Hypermedia, Multimedia.
Unit 6	Expert System and Artificial Intelligence- PubMed, Open access in Biomedical. Health Information Networks and Resource Sharing and Consortia approaches. HELINET Consortium, HeLLIS, Northeast Florida Health Information Consortium

Suggested Readings

Bakewell, K. G. B. (1969). *Industrial libraries throughout the world*. Oxford, New York:ergamon Press.

Carmel, M. (1995). *Health care librarianship and Information work*. (2nd ed.). London: LA.Dixit, R. P. (1995). *Information management in Indian medical Libraries*. New Delhi: New Concepts.

Gupta, S. P., & others (1993). *Information technology and health Science (ed.). Libraries*.MLAI Special Publication.

Malinowsky, H. R. (1994). *Reference sources in Science, engineering, medicine andagriculture*. OryxPress.

Prudence, W. (1993). *Library trends: Libraries and Information services in the healthSciences, Summer 1993*.(ed.). University of Illinois Graduate School.

Sasikala, C. (1994). *Industrial library systems*. New Delhi: Reliance Publication House. Wood, M. S. (1994). *Reference and Information services in health Science Libraries.* (ed.). Scarecrow Press.

LSP 305: INFORMATION PROCESSING AND RETRIEVAL

Acquisition Section Work

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

LSP306: DIGITAL LIBRARIES

Acquaintance with :

Installation of Digital Library Software (DSpace), Creating communities and collections, Submission of documents,

Submission Workflow management, Metadata Harvesting using OAI-PMH, Customization of Digital Library,

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

LSP307: HEALTH SCIENCE LIBRARY

Acquaintance with

Partnered with a physician to develop a web-based tutorial for medical students on effectively searching for the latest medical literature.

LSP-308: RESEARCH METHODOLOGY

Formulation of research objectives and hypotheses, Design of a questionnaire, Acquaintance and hands-on experience with SPSS: Co-relation, Chi-Square, Annova & T-Test

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

Semester -IV

Course Code	Course type	Course Name	No. of Courses	No hrs/ week	Duration of Exam (hrs)	Marks			Credits
						IA	**Exam**	Total	
BLDE LST-401	Hardcore	Information Communication Networks	T	4	3	20	80	100	4
BLDE LST-402		Web Technology	T	4	3	20	80	100	4
BLDE LST-403		Webometrics, Informetrics & Scientometrics	T	4	3	20	80	100	4
BLDE LSP-404	Softcore	Information Communication Networks	P	4	4	20	80	50	2
BLDE LSP-405		Web Technology	P	4	4	15	35	50	2
BLDE LSP-406		Webometrics, Informetrics & Scientometrics	P	4	4	15	35	50	2
BLDE LSPRO-407	Project	Project	P	6	3	50	100	150	6
Total								600	24

LST-401: INFORMATION AND COMMUNICATION NETWORKS

Unit-1	Telecommunication: Meaning and definition, Signals: Analog and digital. Components, Process: Modulation and Demodulation, Transmission media : Pair of wires, Coaxial cables, Optic fibres. Satellite communication, V-SAT, Microwaves.
Unit-2	Networks: Concept, Definition, Need, Uses, Network Topologies, Types of Networks: LAN, MAN and WAN. Network Architecture, Network protocols: TCP/lP, SMTP, HTTP, FTP.
Unit-3	Communication Networks: NICNET, BSNL and ERNET. Library Networks: INFLIBNET, DELNET and CALIBNET .
Unit-4	Electronic communication: E-mail, video conferencing, instant messaging, and fax. E-commerce: concept, need and Importance, Types, Applications.
Unit-5	Cybercrime: Concept, Types, Cyber Laws: IT Act, 2000 (Govt. of India) and its Amendments, Cyber Security: Need, Types: Antivirus, Firewall, Data backup, Password, Cryptography
Unit-6	Internet of Things: Concept, meaning, Characteristics and applications. Cloud computing: Concept, origin, architecture, models. Cloud service providers, advantages and disadvantages. Online Learning Courses: concept, need and importance, MOOCs, SWAYAM: courses, Quadrants, National Coordinators.

Selected Readings:

Andrew S.T.& David J.W (2011) Computer networks, Boston: Pearson Prentice Hall,

Balakrishnan, S. (2000), Networking and the future of Libraries, New Delhi: ESS ESS.

Bose, k. (1994), Information networks in India: Problems and Prospects New Delhi: ESS ESS

Jeanne, F.M. (2006). A librarian's guide to the Internet: A guide to searching and Evaluating information, Oxford: Chandos Publishing.

Kumar,P.S.G.(2004), Information technology: Applications (Theory and Practice). Delhi: B.R Publishing.

Zorkoczy , P. (2005) , Information technology: An introduction, London: Pitman2

Bell, A, (2009).Exploring Web 2.0: Second-generation internet tools blogs, Podcasts, wikis,

networking, virtual Worlds, and more. Georgetown, TX: Katy crossing Press.
Campesato, O., & Nilson, k. (2011), Web 2.0 fundamentals with Ajax, developmemt tools, and mobile platforms, Sudbury , Mass: Jones and Barlett Publishers,
Governor, J. Nickull, D., & Hinchcliffe, D. (2009), Web 2.0 Architectures, Sebastopol, C.A: O Reilly Media, Inc
Shah., S. (2008). Web 2.0 Security : defending Ajax, RIA, and SOA., Boston; Charles River Media.
Shelly, G.B., & Frydenberg, M. (2011), Web 2.0: concepts and applications.Boston, MA: course Technology.
Solomon, G., & Schrum, L. (2010). Web 2.0 how-to for educators Eugene, O.R : International Society fore Technology in Education.

LST-402: WEB TECHNOLOGY

Unit 1	Web: Evolution-Web 1.0, 2.0, and 3.0. Web resources: Meaning and definition, Growth and development, Types: e-journals, e-books, e- reference sources: e-dictionaries and encyclopaedia, Subject gateways and Portals, ETDs, citation databases: Web of Science, Scopus. Google Scholar. e-PG Pathshala.
Unit 2	Social networks: Need and Importance, Types: Wikis, Facebook, Twitter, Blogs, YouTube, Slideshare. Criteria for Evaluation Web Resources.
Unit 3	Web Designing: Markup Languages, Introduction to HTML, Elements and Attributes, Different Sections of HTML Document, Comments, Common Tags for Heading, Paragraphs, Horizontal Lines, Line Breaks, Formatting, Links, Images, Tables, Lists, Forms, Using Colors, Special Characters, Head, Meta, and Div tags.
Unit 4	Web content management systems: CMS terminology, PHP, MySQL, client-server architecture,
Unit 5	Open Source Web Content Management Systems: features, study of WordPress, Drupal, Joomla.
Unit 6	Web mining: Web log analysis, content mining, structure mining, Web Analytics, Big data.

Selected Readings:

Casey, M. E., & Savastinuk, L. C. (2007). Library 2.0: A guide to participatory library service. Medford, N.J: Information Today.
Courtney, N. (2007). Library 2.0 and beyond: Innovative technologies and tomorrow's user. Westport, Conn: Libraries Unlimited.
Jones, K. M. L., & Farrington, P.-A. (2011). Using WordPress as a library content management system. Chicago, IL: ALA TechSource.
Ndubisi, N. O. (2006). Content management systems. Bradford, England: Emerald Group Pub.
Vossen, G., & Hagemann, S. (2007). Unleashing Web 2.0: From concepts to creativity. Amsterdam: Elsevier/Morgan Kaufmann.
White, M. S. (2005). The content management handbook. Abingdon: Facet Pub.
Yu, H. (2005). Content and workflow management for library web sites: Case studies. Hershey, PA: Information Science Pub.

LST-403: BIBLIOMETRICS, SCIENTOMETRICS, INFORMETRICS AND WEBOMETRICS

Unit-1	Concept, Meaning, Definitions, Scope, Need and Purpose. Evolution from Librametrics to infographics
Unit-2	Sources of Data: Science Citation Index Expanded, Social Science Citation Index, PopLine, Arts and Humanities Citation Index, LISA, ScienceDirect, PubMed, Ovid, Emerald Insight, Scopus.
Unit-3	Bibliometric Laws: Concept, Bradford's Law; Zipf s Law and Lotka's Law
Unit-4	Growth of Literature Study: Growth of literature, Growth Models-Logistic, Power. Obsolescence
Unit-5	Scientific Productivity: Citation Analysis: Authorship Study, Collaboration, Techniques of authorship studies.
Unit-6	Webometrics: Concept, Meaning and Definitions, URL, Web decay, Link Checker, half-life, web archives.

Selected Readings:

Abraham, R.H.(1996). Webometry: Measuring the complexity of the World Wide Web. Visual Math Institute, University of California at Santa Cruz

Ajiferuke et al, (1988). Collaborative coefficient: A single measure of the degree of collaboration in research. *Scientometrics, 14*(5), 421 - 433.

Ashraf, Uddin & Vivek Kumar, Singh (2014). Measuring research output and collaboration in South Asian countries, *Current Science*, *107*(1)

Biradar, B.S. & Sampathkumar, B.T. (2003).Chemical Technology literature: An obsolescence study, *Annals of Library and Information Studies*, *50*(4), 156-162.

Castellano, K.E. & Ho, A. D. (2013). *A Practitioner's Guide to Growth Models*.CCSSO, 19.

Sangam, S.L. (2015). Scientometrics: Quantitative Methods for Library and Information Science, *Content Craft*, Dharwad.

LSP 404: INFORMATION AND COMMUNICATION NETWORKS

Acquaintance with :

E-mail: setting signature, creating filters, vacation responder, auto-forwarding

Group mail: creating and managing group mail

Creating online quizzes

Creating audio-visual content in the library and hosting

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

LSP-405: WEB TECHNOLOGY

Acquaintance with Web Designing: HTML Web content management system and hosting: WordPress, Joomla, Drupal, Social networks: YouTube, Twitter, Slideshare

LSP-406: BIBLIOMETRICS, SCIENTOMETRICS, INFORMETRICS AND WEBOMETRICS

Application of mathematical and statistical techniques to measure the Collaborative Coefficient, Degree of collaboration, Collaborative Index, h-Index, growth of literature, obsolescence of literature, impact factor of journals and institutions, and scientometric portraits of individual scientists.

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

LSPRO407: PROJECT

Students shall have to choose a topic for the Project and preliminary preparation to be carried out under the guidance of a teacher. The student shall have to submit the Project on the chosen topic before the commencement of the IV semester theory examinations.

INTERNSHIP: Each candidate shall compulsorily undergo **Three Week** Internship in a reputed library as part of IV Semester. The internship shall be undertaken immediately after the completion of IV Semester Examination (Theory and Practical)

Allotment of internal Assessment marks:
There shall be two tests in a semester for each paper, and each test shall be conducted for 10 marks.