CURRICULUM OF **M.Lib.I.Sc (2 Years)** 2022-23

Master of Library and Information Science (M.Lib.I.Sc 2 Years)

CURRICULUM
(Revised with effect from 2022-2023 onwards)

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

MANONMANIAM SUNDARANAR UNIVERSITY

TIRUNELVELI – 627 012

ManonmaniamSundaranar University, Tirunelveli – 12

Course Outcome based Curriculum

Vision of the University

To provide quality education to reach the un-reached

Mission of the University

- To conduct research, teaching and outreach progrmmes to improve conditions of human living.

- To create an academic environment that honours women and men of all races, caste, creed, cultures, and an atmosphere that values intellectual curiosity, pursuit of knowledge, academic freedom and integrity.

- To offer a wide variety of off-campus educational and training programs, including the use of information technology, to individuals and groups.

- To develop partnership with industries and government so as to improve the quality of the workplace and to serve as catalyst for economic and cultural development.

- To provide quality / inclusive education, especially for the rural and un-reached segments of economically downtrodden students including women,socially oppressed and differently abled.

REGULATION FOR

M.Lib.I.Sc (2 YEARS)

Name of the Course:

M.Lib.I.Sc (Master of Library and Information Science) . This course is designed with lectures / tutorials / computer laboratory/ Internship/ field work / seminar / practicals and Library Automation and software training / assignments / term paper or report writing etc., to meet effective teaching and learning requirements**.**

Department offering the Course:

The Department of Library and Information Science has been offering the course since 2018.

Eligibility for admission:

A pass in any degree as approved by AIU/UGC/any recognized University.

Duration of the course:

The duration of PG programme is two years. Each year shall consists of two semesters, *viz*. Odd and Even semesters. Odd semester shall be from June/July to October/November and Even semester shall be from November/December to April/May. There shall be not less than 90 working days which shall comprise **450** teaching clock hours for each semester (exclusive of the days for the conduct of University end-semester examinations).

Course Fees:

Each student admitted to the Master of Library and Information Science degree course will pay Tuition, Lab, Special, Stationery, computer and other fees as decided by the University from time to time. The students have to pay additional fees prescribed by the University for recognition, matriculation *etc***. In addition, the student has to pay a sum of Rs.1,000/- as Laboratory Caution Deposit, which would be refunded depending upon breakages *etc*., at the end of the course**.

Board of Studies:

The Board of Studies for academic programme, syllabi *etc*., will consist of all the members of the faculty of Department of Library and Information Science and external experts

including academician, industrialist and alumni. The Head of the Department of Library and Information Science will be the Chairman.

Syllabus:

The Syllabi for the various courses are designed keeping in view the usefulness of the course to the students for (1) continuation of academic activity leading to research, (2) employability in Library and Information Science, Data Science, e-Content Resources and Information Systems related vocations and (3) self-employment.

Academic visits to institutions and/or industries related to the courses during the semesters of study will form part of the curriculum. The students depending on their performance and choice would either have to carry out a project or undergo training or submit a report at the end of the final semester in an area of Library and Information Science.

From the academic year (2016-2017) **Choice Based Credit System** (**CBCS**) is introduced in all departments of the University. According to this system the Master of Library and Information Science Course requires a student to earn 90 credits in four semesters. The basic course structure and the scheme of examinations are given in tables that follow. A student has to take five core courses including practical in the first semester and four core courses including practical and two elective courses in the second and third semesters. The fourth semester would be entirely devoted to the Internship, Semester Exam and project work.

Semesters:

In each semester, this PG course is offered in 15 teaching weeks and the remaining 5 weeks are to be utilized for conduct of examinations and evaluation purposes. Each week shall have 30 working hours spread over 5 days a week.

Credits:

The term "Credit" refers to the Weightage given to a course, usually in relation to the instructional hours assigned to it. For instance, a six hour Course is assigned four to six credits, four/five hour Course is assigned three to five credits. However, in no instance the credits of a Course can be greater than the hours allotted to it. The total minimum credits required for awarding all PG programmes is 90.

Examinations:

The question paper setters for the examinations in theory will be from out of a panel of examiners suggested by the course teachers and the board of studies. There will be a single valuation of the theory papers by the external examiner. There will be two examiners for each practical course examination of whom one will be internal. There will be combined evaluation of the students by the two examiners. Each practical course examination will include a viva-voce component.

i. There shall be examinations at the end of each semester, for odd semesters in the month of October/November; for even semesters in April/May.

ii. A candidate who does not pass the examination in any course(s) may be permitted to appear in such failed course(s) in the subsequent examinations to be held in October/November or April/May. However, candidates who have arrears in Practical's shall be permitted to appear for their arrears Practical examination only along with Regular Practical examination in the respective semester.

iii. A candidate should get registered for the first semester examination. If registration is not possible owing to shortage of attendance beyond condonation limit/regulation prescribed OR be lated joining OR on Industries and corporate, the candidates are permitted to move to the next semester. Such candidates shall re-do the missed semester after completion of the course.

iv. Candidates shall submit the two copies of dissertation to the Department through the Supervisor not earlier than 5 months but within 6 months from the date of start of the fourth semester. If a candidate is not able to submit his/her dissertation within the period stated above, he / she shall be given an extension time of 4 months in the first instance and another 4 months in the second instance with penalty fees. The dissertation shall be valued by both external examiner and concerned Supervisor for a Maximum of 100 marks and the average shall be taken. The valuation of Master of Library and Information Science. Dissertations and *viva voce* examination shall be done on the same day by both the external and internal examiners at the Department. The maximum marks for the *viva* shall be 50 (joint evaluation) and the average mark should be handed over to the chairman of examination on the same day.

v. The results of all the examinations will be published through the department where the student underwent the Course.

Condonation:

Students must have 75% of attendance in each semester to appear for the examination. Students who have attendance between 65% and 74% shall apply for condonation in the prescribed form with the prescribed fee. Students who have attendance between 50% and 64% shall apply for condonation in prescribed form with the prescribed fee along with the Medical Certificate. Students who have attendance below 50% are not eligible to appear for the examination. They shall re-do the semester(s) after completion of the Programme (i.e. 2 years).

Question Paper Pattern:

Time: 3 Hours Max. Marks = 75

Part A: 10 Questions x 1 Mark = 10 Marks
(Answer all questions, Two questions from each unit)

Part B: 5 Questions x 5 Marks = 25 Marks
(Answer all questions Choice A or B and one set of questions from each unit)

Part C: 5 Questions x 8 Marks = 40 Marks
(Answer all questions Choice A or B and set of questions from each unit)

(Question paper has to be set as per the RUPASCE model)

Evaluation:

The performance of a student in each Course is evaluated in terms of percentage of marks with a provision for conversion to grade points. Evaluation for each Course shall be done by a Continuous Internal Assessment (CIA) by the Course teacher concerned as well as by an end semester examination and will be consolidated at the end of the semester. The components for continuous internal assessment are:

Theory

Best 2 Internal tests out of 3	- 15 Marks
Seminar	- 5 Marks
Assignments	- 5 Marks
Total	- 25 Marks

Practical

Continuous performance	- 20 Marks
Model practical	- 20 Marks
Record	- 10 Marks
Total	- 50 Marks

Passing Minimum:

A candidate shall be declared to have passed in each course if he/she secures not less than 40% marks in the University Examinations and 40% marks in the CIA and not less than 50% in the aggregate, including CIA and University Examinations marks.

Candidates who have secured the pass marks in the end-semester Examination (U.E.) and in the CIA, but failed to secure the aggregate minimum pass mark (U.E. + C.I.A.) are allowed to secure aggregate minimum pass mark only by appearing for University Examination.

Candidates who have failed in the Internal Assessment are permitted to appear for their Internal Assessment marks in the subsequent semesters (two chances will be given) by writing the CIA tests and assignments.

A candidate shall be declared to have passed in the Project work if he/she gets not less than 40% in each of the Project Report and Viva voce but not less than 50% in the aggregate of both the marks for Project Report and Viva voce.

A candidate who gets less than 40% in the Project must resubmit the Project Report. Such candidates need to defend the resubmitted Project at the Viva voce with in a month. A maximum of two chances will be given to the candidate.

Grading System:

Once the marks of the CIA and end-semester examinations for each of the courses are available, they will be added. The marks, thus obtained will then be graded as per the scheme provided in Table 1.

From the second semester onwards the total performance within a semester and continuous performance starting from the first semester are indicated by **Semester Grade Point Average (GPA)** and **Cumulative Grade Point Average (CGPA)**, respectively. These two are calculated by the following formulae:

$$\text{GPA} = \frac{\sum_{i=1}^{n} C_i G_i}{\sum_{i=1}^{n} C_i}$$

$$\text{WAM (Weighted Average Marks)} = \frac{\sum_{i=1}^{n} C_i M_i}{\sum_{i=1}^{n} C_i}$$

where 'C_i' is the Credit earned for the course i; 'G_i' is the Grade Point obtained by the student for the course i. 'M' is the Marks obtained for the course I and 'n' is the number of Courses **passed** in that semester.

CGPA = GPA of all the courses starting from the first semester to the current semester.

GRADING OF THE COURSES – Table 1

Marks	Grade point	Letter Grade
96 and above	10	S+
91-95	9.5	S
86-90	9.0	D++
81-85	8.5	D+
76-80	8.0	D
71-75	7.5	A++
66-70	7.0	A+
61-65	6.5	A
56-60	6.0	B
50-55	5.5	C
Below 50	0	F

FINAL RESULT – Table 2

CGPA	Letter Grade	Classification of Final Result
9.51 and above	S+	First Class – Exemplary
9.01 – 9.50	S	
8.51 - 9.00	D++	First Class - Distinction
8.01 - 8.50	D+	
7.51 - 8.00	D	
7.01 - 7.50	A++	First Class
6.51 - 7.00	A+	
6.01 - 6.50	A	
5.51 - 6.00	B	Second Class
5.00 - 5.50	C	
Below 5.00	F	Fail

Conferment of the Master Degree:

A candidate shall be eligible for the conferment of the Degree only after he/she has earned the minimum required credits for the Programme prescribed thereof (i.e. 90 credits for all P.G. Programmes).

University Ranking:

A candidate shall be eligible for the conferment of the University Ranking Certificate only after he/she scores top in the University Examinations.

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DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
MANONMANIAM SUNDARNAR UNIVERSITY
TIRUNELVELI-627012

MASTER OF LIBRARY AND INFORMATION SCIENCE

Courses of Study and the Scheme of Examinations
2 Years (4 Semesters) Programme
Choice Based Credit System (CBCS)
(Applicable to Candidates admitted from the Academic Year 2022 - 2023 onwards)

	Subject code	Paper	Inst. Hours / Week	Exam Hours	Marks			Total
					Credit	Int.	Ext.	
Semester- I		Core Course: 1.1 – Information, Communication and Knowledge Society	6	3	4	25	75	100
		Core Course:1.2 – Information Resources	6	3	4	25	75	100
		Core Course: 1.3 – Knowledge Organization (Theory) - Classification and Cataloguing	6	3	4	25	75	100
		Core Course: 1.4 – Knowledge Organization (Practice - I) - DDC/CC	6	3	4	50	50	100
		Elective Course:1.5 –Information Technology in Libraries (Theory)	6	3	4	25	75	100
		Value Added Course:1.6 Quality Assurance in Libraries	3	3	2	25	75	100
Semester- II		Core Course: 2.1 – Management of Library and Information Centers	6	3	4	25	75	100
		Core Course: 2.2 Information Systems and Services	6	3	4	25	75	100
		Core Course –2.3 Information Processing and Retrieval Systems	6	3	4	25	75	100
		Core Course: 2.4 – Knowledge Organization (Practice – II): – AACR-II and UDC	6	3	4	50	50	100
		2.5 – Elective (any one) A. Soft Skills B. Information Literacy	6	3	4	25	75	100
Semester- III		Core Course: 3.1- Research Methods and Techniques	6	3	4	25	75	100
		Core Course: 3.2 – Digital Library and Web Technology	6	3	4	25	75	100
		Core Course: 3.3 Library Automation and Digital Library (Practice)	6	3	4	50	50	100
		Elective course: 3.4 a. Web based Information Services (or) b. E – Publishing	6	3	4	25	75	100
		Elective course: 3.5 a. Green Library Technology (or)	6	3	4	25	75	100

		b. Electronic Resource Management System						
Semester- IV		**Core Course: 4.1 – Knowledge Management**	**6**	**3**	**4**	**25**	**75**	**100**
		Core Course: 4.2 - Internship and Field Work Project (Internship and Field work Report Valuation = 60 Marks]-Viva= 40 Marks)	**6**	**-**	**8**	**50**	**50**	**100**
		Core Course: 4.3 Project and Dissertation = 80 Marks Viva= 20 Marks	**-**	**-**	**10**	**50**	**50**	**100**
		Elective course: 4.4 **a. Marketing of Information Products and Services (or)** **b. Intellectual Property Rights**	**6**	**3**	**4**	**25**	**75**	**100**
		Elective course: 4.5 **a. Informetrics and Scientometrics (or)** **b. Corporate Information System**	**6**	**3**	**4**	**25**	**75**	**100**
		Core Course:4.6 **Resource Description**	**6**	**3**	**4**	**25**	**75**	**100**
				Total Credits	**96**			**2200**

IInd Semester

Value Added Course: 2.6 **Research Ethics and Metrics**	**3**	**3**	**-**	**25**	**75**	**100**

IIIrd Semester

Value Added Course : 3.6 **Heritage Documentation**	**3**	**3**	**-**	**25**	**75**	**100**

The above two value added course certificate issue separately

M.Lib.I.Sc IV Semester Core Course: Resource Description added newly instead of MOOC Value added course for 2022-2023 onwards

Revision of Programme structure Credits and Hours

Programme Outcomes

- Awarding Professional Post Graduate Degree in Library and Information Science.
- Making the learners to acquire professional Skills, Caliber and Maturity in order to enter the government, HEI and Research organizations, NGO organizations and Industry and corporate as entry level academicians or officers both national and global organizations.
- Developing the capabilities of the learners to venture as entrepreneur.
- Getting the learners acquainted with basic knowledge on higher academic and research tools and techniques.
- Enabling the learners to develop professional, personal, communication skills and leadership qualities in order to perform better in a competitive environment globally.
- Motivating the learners to carry out innovative research in LIS field and make users as life-long learners.
- Making the learners to gain social credibility.
- Making the learners responsible to make the citizens well informed through which any common man can utilize information and take better decisions.

Programme Specific Outcomes

- Eligible to become a researcher and to avail the national and international research fellowship in the field of Library and Information Science, Information Technology, Knowledge Management and Higher Education.
- Attain the skills and knowledge on competitive exams, national and state level eligibility tests and other equivalent competitive examinations in the field of Library and Information Science.
- Capability of getting employment as Librarian, Information Officer, Knowledge Manager, Digital Archivist, e content and e-learning professional, Trainer on ICT, Information Managers and many more positions in Government, Inter Government, Private and Corporate Administration.
- Placement of middle level technical positions in public, national, district libraries, research and the institutions of national importance at state and central level.
- Eligible to become Programmer, Information Systems Manager, Information Analyst at various organizations by acquiring technology based courses.

- Attain the capabilities to design and implement Academic, Research and Generic Information Systems for any type of organization to adopt web and mobile enabled technologies.
- Attain the complete professional skills and abilities for organizing information systems and services.
- Prepare to impart training and induction to the stakeholders in order to make use of the knowledge resources optimally.

OBJECTIVES OF LIS IN DLIS: MANONMANIAM SUNDARANAR UNIVERSITY

Educate and capacitate every Master of Library and Information Science product to demonstrate awareness of the ethics, values, and foundational principles of the information profession, and discuss the importance of information/data literacy and intellectual freedom within the LIS profession and an overall research attitude by helping them

- To obtain an thorough knowledge about the organizational settings both in hybrid and digital library systems affiliated to Academic, Public, Special organizations in which information professionals practice;
- Recognize the diversity (such as cultural and economic) in the information needs of the clientele and employees of an organization and become familiar with matching information/data services;
- To apply the principles to information system and services; design, query, and evaluate information as well as databases and retrieval systems;
- To use the basic concepts and principles related to the selection, evaluation, organization, archiving and preservation of traditional documents and digital information materials;
- Demonstrate the understanding of basic principles and standards of planning, organizing, management, marketing, and advocacy involved in organization and management of data/information such as classification and controlled vocabulary systems, cataloging systems, metadata schemas as well as other systems for promoting recall and precision towards promoting user satisfaction; demonstrate proficiency in identifying, using, and

evaluating current and emerging information and communication technologies applicable to Library and Information services;

- Use service concepts, principles, and techniques to precisely enunciate and connect individuals or groups with accurate, relevant, and appropriate data/information;
- Describe the fundamental concepts of information-seeking behaviors; design instructional programs based on learning principles and theories;
- Demonstrate understanding of quantitative and qualitative research methods, the ability to design a research project, and the ability to evaluate and synthesize research literature besides knowledge about plagiarism checker software;
- Demonstrate oral and written communication skills necessary for professional work including collaboration and presentations; evaluate programs and services using measurable criteria;
- Identify ways in which information professionals can contribute to the cultural, economic, educational, and social well-being of our global communities;

These competencies are supplemented by statements specific to the school's career pathways.

- The DLIS/MSU provides structured opportunities and activities for the development of desirable personal attributes and qualities. As articulated by professional associations, the school strives to develop commitment to service, flexibility, leadership, vision, communication, self-motivation, collaboration, mutual respect and trust, independence, respect for diversity, courage, tenacity, critical and creative thinking, professional involvement, networking and personal career planning.

- To have enhanced practical skills in ICT and also to face the crucial challenges of their application so as to become professionally fit as ‘ready-to-work’.

- Capability of getting employment as Librarian, Information Officer, Knowledge Manager, Digital Archivist, Trainer on ICT, Information Managers and such other positions in the Government, Inter Government, Private and Corporate Administration.

- Placement of middle level technical positions in academic, public, research and special libraries at the district, state, national levels as well as institutions of national importance at state and central level.

- Eligible to become Programmer, Information Systems Manager, Information Analyst at various organizations besides research wings of the IT industry by acquiring technology based courses.

- Acquire professional skills and attain the capabilities to design, organize, and implement Academic, Research and Generic Information Systems affiliated to different type of organizations that require the adoption of web and mobile enabled technologies.

- Prepare to impart training and induction to the stakeholders in order to make use of the knowledge resources optimally.

SYLLABUS

SEMESTER – I

Course –1.1: Information, Communication and Knowledge Society
Course Code:

Course Objectives:

- To enable the students to understand the concept of Information, features of different types of Library systems and Information centres.
- To enable the students to understand the Communication Channels and its barriers.
- To enable the students to understand the importance of information in the context of social, political, cultural, economical and industrial environments.
- To enable the students to understand the relevance of Library profession.

Course Outcomes:

By the end of learning this Paper, the students will be able to know about the broader perspectives of library systems, information and its importance to the development of information society and right use of information.

1. Acquire the knowledge on the concepts of information and characteristics of library systems, and Information centres and their roles and functions
2. Understand the Communication Channels and barriers to communication
3. Visualize information science as a discipline.
4. Understand the importance of information in the context of social, political, cultural, economic and industrial environments.
5. Learn S.R.Ranganathan's five laws and its implications on library and soceity
6. Become familiar with the roles and functions of Library associations at the state, national and international levels.

Mapping with PSO

(H-High, M-Medium, L-Low)

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	M	H	M	M	M	M
CO2	H	H	M	M	H	L	H	M
CO3	H	M	M	M	L	H	M	H
CO4	M	M	M	H	H	M	H	H
CO5	H	H	M	H	H	M	M	M
CO6	H	M	M	H	H	L	H	M

Unit –I

Information - Definition, Notion and Nature. DIKW model (Data- Information-Knowledge-Wisdom). Information Science and Information Society. Models of Information, Factors influencing growth of Information, Information Transfer Cycle-generation. Impact on socio-economic and cultural Changes and Technology transfer.

Unit –II

Communication - Concepts, Definition, Theories and Models, Information Diffusion, Channels of and Barriers to Communication.

Unit – III

Types of Libraries – academic, Public, special and corporate; Functions and Services; Five Laws of Library Science and their implications; Professional Ethics -- qualities of a librarian; Role of Professional Associations in Library and professional development; Regional Library Associations, National and International Level Associations– ILA, IASLIC, IATLIS, IFLA, ALA, and FID.

Unit -IV

Library Movement and Legislation in India- Model Library Bill, Library cess; Delivery of Books and Newspapers Act; Copy right Act; Intellectual Property Rights –Right to Information Act; Tamil Nadu Public Libraries Act 1948.

Unit – V

Promotional agencies of Library and Information Services – UNESCO, RRRLF; Library Extension Activities and Services; Development of LIS Schools in India. National Knowledge Commission (NKC) and its reports on library's role and development. Forms of Mobile communication- Case Study

Selected Readings:

1. Baman (P). Studies on information systems, services and programs in India andabroad. 1993. Ajanta, Delhi.
2. Barua (B P). National policy on library and information systems and servicesfor India: perspectives and projections. 1992. Popular Prakashan, New Delhi.
3. Burahohan, A. (2000).Various aspects of librarianship and Information Science. New Delhi: ESSESS.
4. Chapman, E.A. and Lynden, F.C. (2000). Advances in librarianship. 24th Vol. San Diego:Academic Press.
5. Gates, J.K. Guide to the Use of Libraries and Information Sources, 7th ed. (McGraw, 1993).
6. Gravey, William. D. Communication: Essence of Science facilitating information exchange among libraries, Scientists, Engineers and students. Oxford: Perganton Press, 1979
7. IFLA (1977). IFLA standards for Library service, 2nd Ed. Munich: Verlag.
8. Isaac, K.A. (2004). Library legislation in India: A critical and comparative study of state Library acts book description: New Delhi: EssEss Publication.

9. Kent (A). Resource sharing in libraries: why, how, when next action step. 1974.Marshal Dekker, New York.
10. Khanna, J.K (1987). Library and Society. Kurushektra: Research Publication.
11. Kumar, P.S.G. (2003) Foundations of Library and Information Science. Paper I of UGC Model Curriculum. New Delhi: Manohar.
12. Lester J, Koehler WC. Fundamentals of information studies: understanding information and its environment. New York, NY: Neal-Schuman, 2003.
13. Mount, Ellis. Special Libraries and Information Centers, 3rd ed. (Special Libraries, 1995).
14. Ranganathan, S.R. (1957). Five laws of Library Science. 2nd Ed., Bangalore: SaradaRanganathan Endowment for Library Science.
15. Rayward, Boyd. 1983. "Library and Information Sciences." In The Study of Information: Interdisciplinary Messages. Edited by Fritz Machlup and Una Mansfield. New York: Wiley, 343–363.
16. Reitz, Joan M. Dictionary for Library and Information science. Libraries Unlimited, 2004.
17. Richard E.R. (2000). Foundations of Library and Information Science. Neal-Schuman.
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19. Rubin, Richard E. Foundations of Library and Information Science.Neal Schuman Publishers, Inc., 100 Varick St., New York, NY 10013, 1998.
20. Rudinow, J. &Graybosch, A. (2000). Ethics & Values in the Information Age. NY.
21. Sadhu, S.N. &Saraf, B.N. (1967). Library legislation in India. Delhi: Sagar, 1967.
22. Sharma, P.S.K.(1992). Library and society. 2 Ed. Delhi: ESS ESS.
23. Stieg, M.F. Change and Challenge in Library and Information Science Education (ALA, 1991).
24. Surendra S. &Sonal Singh. Ed. (2002).Library, Information and Science and society. New Delhi:ESS ESS.
25. Velaga V. &Madhusudhan, M. (2006). Public Library legislation in the new millennium: NewModel Public Library Acts for the Union. Bookwell.
26. Venkatappaiah, V. (1990). Indian Library legislation. 2nd Vol. New Delhi: Daya.
27. Vickery, A. & Vickery, B. (1988): Information Science - Theory and Practice, London: Bowker-Saur.
28. Budd, John (2001), Knowledge and Knowing in Library and Information Science: APhilosophical Framework, Scarecrow Press.
29. Henderson, Kathrine A. (2009), Case Studies in Library and Information Science Ethics,McFarland.
30. Prashar, Ram Gopal (1997), Library and Information Science: Information science,
Information technology and its application, Concept Publishing Company.
31. Rubin, Richard (2010), Foundations of Library and Information Science, Neal-Schuman
Publishers, Incorporated.

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Course - 1. 2 : INFORMATION RESOURCES

Course Code:

Objectives:

1. To introduce types of information sources
2. To enable the students to get acquainted with the types of sources of information.
3. To enable the students to evaluate and use the resources
4. To make understand the students on the relevance of scholarly information resources

Course Outcome

At the end of learning program of this paper, students should have

1. Become familiar with the resources on academic, R& D and other scholarly resources.
2. Attained practical exposure to the different forms of resources.
3. Understood the categories of information and their specific use.
4. Gained knowledge on the reputed scholarly publishers and scientific societies.
5. Skills on searching right information from various reference sources.
6. Gained evaluation capabilities of information resources in general and for libraries in particular.

Mapping with PSO:
(H-High, M-Medium, L-Low)

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	M	H	H	M	H	M	M	H
CO2	H	H	M	M	M	H	M	H
CO3	M	H	M	M	M	M	H	M
CO4	M	M	H	M	H	H	H	H
CO5	M	H	H	M	H	M	M	H
CO6	M	H	M	M	M	H	H	H

Unit-I

Types of Information resources – Documentary – Non Documentary – Formal and Informal - Characteristics – Scope. Primary, Secondary and Tertiary sources; Conventional Vs Non-conventional Sources; Human sources of Information – Invisible colleges.

Unit –II

Ready Reference Sources –Types and Values - Dictionaries, Encyclopedias, Annuals, Biographical Sources, Patents and Standards, Handbooks and Manuals, Geographical sources.

Unit-III

Bibliographical sources – Bibliographies, **INB, BNB,** List of Serials - Union Catalogues, OCLC, INDCAT, NUCSSI, Indexing and Abstracting sources; LISA, LISTA, Indian Science Abstract, INSPEC and Compendex.

Unit –IV

Digital Information Resources: E-Books, E-Journals, Database: Bibliographic, Full Text, Numeric. Electronic Theses and Dissertations; Subject Gateways; Web Portals.

Unit-V

Evaluation of Information Sources – Print and E-Resources., Recent trends on pattern Databases: India, Europe and US-ETDs -NDL Shodhganga, Protocols- PubMed.

Selected Readings:

1. Alan Poulter, Gwyneth Tseng and Goff Sargent: The Library and Information Professional's Guide to the World Wide Web. London : Facet Publishing, 1999.
2. G. G. Chowdhruy and SudattaChowdhury : Searching CD-ROM and Online Information Sources. London: Facet Publishing, 2001.
3. Gopinath, M.A: Information Sources and Communication Media. DRTC Annual Seminar, Bangalore-1984 .
4. Grogan, Dennis: Science & Technology : An Introduction to Literature, London, Clive Bingley,1982.
5. Higgens, Gavin. Printed Reference Meterials. London: Library Association,1980
6. Jogender Singh Burman, Libraries and Reference Services, New Delhi, Rajat Publications, 2007.
7. Katz, W.A: Introduction to Reference Work, McGraw-Hill Humanities/Social Sciences/Languages; 8th edition 2001.
8. Kundangodia, Electronic Services in Library and Information Science, New Delhi, Adhyayan Publishing & Distributors, 2007.
9. Linda S Katz Library Users and Reference Services (Reference Librarian) Routledge (May 2013)
10. Madan Mohan Sinha Use of New Technology in Library Reference Services, Anmol Publications (2012), New Delhi
11. S. K. Bajpai Reference Services In Libraries, Friends Publications (2008), New Delhi

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Course - 1.3: KNOWLEDGE ORGANIZATION (THEORY) - CLASSIFICATION AND CATALOGUING

Course Code:

Objectives:

1. To enable the students to understand the concept of knowledge organization.
2. To know the basic concepts of Information Retrieval Systems
3. To understand the importance of various Information Retrieval Systems and techniques
4. To enable students to acquaint with different classification schemes, cataloguing codes and to know various standard bibliographic formats.

Course Outcome

At the end of learning program of this paper, students should have

1. Gained knowledge about the concepts of knowledge organization.
2. Learnt the basic tools of Knowledge Organization
3. Acquired capabilities of various KO systems and techniques
4. Exposure on classification schemes, cataloguing codes and standard bibliographic formats.
5. Acquired the knowledge on the online classification schemes
6. Acquired the theoretical knowledge on classifying the print and electronic resources

e. Mapping with PSO:

(H-High, M-Medium, L-Low)

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	H	H	M	H	M	M
CO2	M	H	H	M	M	M	H	M
CO3	H	M	H	M	M	M	M	H
CO4	H	H	M	M	M	H	H	M
CO5	M	H	H	H	M	H	M	M
CO6	M	H	H	H	M	M	H	L

Unit - I

Universe of Knowledge: Structure and Attributes-Modes of Formation of Subjects

Unit-II

General theory of Library Classification: Normative Principles and their applications; Canons and Facet Analysis; Fundamental Categories, Systems and Specials

Unit – III

Schemes of Library Classification: Introduction, Features and Application- CC, DDC, UDC and LC

Unit –IV

Cataloguing: Purpose, structure, types; normative principles, Canons & Laws; Standard Codes of Cataloguing – CCC and AACR 2; Copy Cataloguing.

Unit – V

Subject cataloguing –Subject Heading lists - SLSH, LCSH. Bibliographic Control –ISBD(G) and UBC. Trends in classification: Automatic classification, Classification in online system and Web; Knowledge Organization for Digital Libraries; Ontologies; Advancement study for LOC, Online DDC,

Selected Readings;

1. Anglo-American Cataloguing Rules. (1988). 2nd rev. ed. Chicago: American Library Association**.**
2. Austin, D. (1984). PRECIS. A Manual of Concept Analysis. 2nd Ed. London: British Library. p
3. Austin, D. and Digger, J. (1985). PRECIS: The Preserved Context Index System. In: Chan, L.M., (ed.). Theory of Subject Analysis. Littleton Col.: Libraries Unlimited. pp. 369-89.
4. Bhattacharyya, G.(1981). Elements of POPSI. In: Rajan T.N., (ed.). Subject Indexing System. Calcutta:. IASLIC.
5. Chan, Lois Mai (1986). Library of Congress Subject Headings. 7th ed. Colorado: Libraries Unlimited.
6. Chan, Lois Mai (1994). Cataloguing and Classification: An Introduction. 2nd ed. New York : McGraw-Hill.
7. Chan, Lois Mai [et al.] (1996). Dewey Decimal Classification: A Practical Guide. 2nd ed. revision for DDC-21. Albany, New York: Forest Press/OCLC, pp. 1-24.
8. Coates, E.J. (1988). Subject Catalogues. London: Library Association.
9. Library Association. Comaromi, John P. and Satija, M.P. (1990). Exercises in the 20th Edition of the Dewey Decimal Classification. New Delhi: Sterling.

10. Foskett, A.C. (1996). The Subject Approach to Information. 5th ed. London : Library Association Publishing.
11. Hunter, E.J. and K.G.B. Bakewell. (1993). Cataloguing 2nd ed. London :Clive Bingley.
12. Hunter, Eric J. (2002). Classification made simple. 2nd edition. Aldershot: Ashgate.
13. Husain, Shabahat (1993). Library Classification: Facets and Analysis. New Delhi: Tata McGraw-Hill. pp. 272-277.
14. Kishan Kumar (1993). Theory of Cataloguing. New Delhi: Har-Anand.
15. Krishan Kumar (1988). Theory of Classification. 4th ed. New Delhi: Vikas Publishing.
16. Mcllwaine, I.C. (2000). The Universal Decimal Classification: a guide to itsuse. London: BSI Business Information.
17. Needham, C.D. (1977). Organising Knowledge in Libraries: An Introduction to Information Retrieval. 2nd rev. ed. London : Andre Deutsch.
18. Parkhi, R.S. (1972). Library Classification, Evolution of a Dynamic Theory. New Delhi :Vikas Publishing House.
19. Raju A.A.N. (1991). UDC (IME, 1985): A Practical and Self Instructional Manual. Madras: T.R. Publications
20. Raju, A.A.N. (1984). Decimal, Universal Decimal and Colon Classification: A Study in Comparison. Delhi: Ajanta Publications.
21. Ranganathan, S. (1987). Colon Clasifi6ation. 7th ed. Edited by M.A. Gopinath. Bangalore SaradaRanganathan Endowment for Library Science.
22. Ranganathan, S.R. (1962). Elements of Library Classification. 3rd ed. Bombay: Asia Publishing.
23. Ranganathan, S.R. (1989). Prolegomena to Library Classification. 3rd ed. Bangalore :SaradaRanganathan Endowment for Library Science.
24. Ranganathan, S.R. (1992). Classified Catalogue Code with Additional Rules for Dictionary-Catalogue. 5th ed. reprint. Bangalore: SaradaRanganathan Endowment for Library Science.
25. Rowley, Jennifer and Farrow, John (2000). Organizing knowledge. 3rd edition. Aldershot: Gower
26. Satija, M.P. and Comaromi, John P. (1998). Exercises in the 21st Edition of the Decimal Classification. New Delhi: Sterling.
27. Sen Gupta, B. (1974). Cataloguing: Its Theory and Practice. 3 rd ed. Calcutta: World Press. Viswanathan, C.G. (1983). Cataloguing Theory and Practice. 5th ed: Lucknow: Print House.
28. UDC: International Medium Edition - English Text (BS IOOOM: 1985). Londcn: British StandardsInstitution.
29. Universal Decimal Classification: Abridged Edition. (2003). London: BSIBusiness Information.
30. Wynar, Bohdhan, S. (1985). Introduction to Cataloguing and Classification. 7th Ed. Littleton, Colorado: Libraries Unlimited.

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2. Comaromi, John P (1989).Dewey decimal classification and Relative Index. 20th ed. 4 Vol. New York: Forest Press.
3. Custer, Benjamin A. (1979). Dewey decimal classification and Relative Index. 19th ed. 3 Vol. New York: Forest Press.
4. Comaromi, John P. and Satija, M.P. (1990). Exercises in the 20th Edition of the Dewey decimal classification. New Delhi: Sterling.
5. Kumar, P S G (2003).Knowledge Organization: Information Processing and Retrieval Practice. New Delhi: B.R Publishing
6. Satija, M.P. and Comaromi, John P. (1998). Exercises in the 21st Edition of the Decimal Classification. New Delhi: Sterling.
7. Ranganathan, S. R (1963). Colon Classification. 6th ed. Bangalore: SaradaRanganathan Endowment for Library Science.
8. Sachdev, Mohan Singh (1983).Colon Classification; Theory and Practice. NewDelhi: Sterling
9. Khanna,J K(1982).Colon Classification; Theory and Practice. New Delhi: EssEss
10. Chan, Lois Mai [et al.] (1996). Dewey decimal classification: A Practical Guide. 2nd ed. revision for DDC-21. Albany, New York: Forest Press.

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Course - 1.5: Course - 1.5: Information Technology in Libraries
Course Code:

Objectives:

1. Help students to learn the basic concepts of Information Technology
2. To train the students in applying Information Technology to library routines and services in Libraries and Information Centers.
3. To understand the concepts of Networking, DBMS and Web Technology.

Course Outcome

At the end of learning program of this paper, students should have

1. Gained practical knowledge to classify the documents using CC and DDC
2. Become thorough with the classification rules and apply relevant principles on document and knowledge classification
3. Learnt how to get online support for classifying the documents
4. Earned skills how to organize the documents in a classified order
5. Earned skills for classifying all documents including non book materials and micro documents
6. Examined how to make familiar the various ICT practices applied in Library services

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	M	M	H
CO2	H	H	M	M	H	H	M	H
CO3	H	H	M	M	H	H	H	M
CO4	H	M	M	H	H	M	M	H
CO5	H	H	H	H	M	H	M	M
CO6	H	H	H	M	H	H	L	H

Unit -I

Information Technology: Concept, Definition and Components, Types of Computer; Components of a computer: CPU, Storage, I/O Devices, Network Architecture, Client-Server and Web-Clients

Unit -II

Introductory level: Cloud computing: Basics - concept and definition; types of cloud services. Data Curation: Basics - concept and definition. Big data: Basics – concept and definition.

Unit –III

Computer Software: System Software and Application Software; Programming Concepts: Open source and Propriety, Operating Systems: Windows, LINUX and Mobile based Operating System.

Unit –IV

File Organization: Database Management System; Relational Database Management System(RDBMS)

Unit –V

Office Management tools: Word Processing: fixing footnotes and endnotes, Spreadsheet, Presentation Software and Access. Recent trends in Database Management in Libraries, Latest development of Mobile Apps in Libraries

Selected Readings:

1. Arvind Kumar. Ed. Information Technology For All (2 Vols.) New Delhi, Anmol, 2006.
2. Bansal, S.K. Information Technology and Globalisation, New Delhi: A.P.H. Publishing corporation, 2005.
3. Basandra, S.K: Computers Today and Globalisation, New Delhi, Golgotia, 2002.
4. Deeson, Eric. Managing with Information Technology, Great Britan, Kogan page Ltd. 2000.
5. Forrester W.H. and Rowlands, J.L. The Online searcher's companion. London, Library Association, 2002.
6. Gupta, Vikas, Rapidix computer course, New Delhi, PustakMahal, 2005.
7. Hunter & Shelly: Computers and Common sense, New Delhi, Prentice-Hall, 2002.
8. Kashyap, M.M: Database Systems, New Delhi, Vikas, 2003.
9. ITL Education Solution. Introduction to Information Technology, Pearson Education. Singapore, 2006. (Google E-Book)
10. Rajaraman, V. Introduction to Information Technology, PHI Learning, New Delhi, 2013. (Google E-Books)

Course - 1.6: Quality Assurance in Libraries
Course Code:

Objectives:

The purpose of this study is to generally examine the implementation of quality assurance in libraries and library system. Specifically the objectives are to:

1. Determine the extent to which the information resources and services available in Academic libraries are relevant to the teaching, learning, research and community services functions.

2. Identify the quality assurance mechanisms available and used in the libraries.

Course outcome

- used to examine quality assurance strategies used
- helps to determine challenges and innovativeness related to quality assurance
- used to map out quality indicators used to measure quality in libraries
- Earned skills how to organize the documents in a classified order
- Earned skills for classifying all documents including non book materials and micro documents
- Examined how to make familiar the various ICT practices applied in Library services

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	M	M	H
CO2	H	H	M	M	H	H	M	H
CO3	H	H	M	M	H	H	H	M
CO4	H	M	M	M	H	M	H	H
CO5	H	H	H	M	M	H	M	M
CO6	H	H	M	M	H	H	L	H

(H-High, M-Medium, L-Low)

UNIT-I

Quality Assurance concept; Need and purpose; challenges

UNIT-II

Quality assurance in libraries; Quality parameters; Quality assurance framework; Enhancement of Quality; Methods to Ensure Quality.

UNIT-III

SERVQNAL; LIBQUAL; ISO Standards; Academic Library Standards; Quality assurance implications for Libraries; Quality Assurance Assessment and its Mechanism.

UNIT-IV

Library National Indicators; NAAC; NBA; NIPF; Quality Assurance and Academic Libraries; Quality Assurance Issues in Libraries; Implementation of Quality Assurance and IT in Academic Libraries.

UNIT-V

Library Standards International-THE Ranking and QSS World Ranking. Case studies on best practices in libraries**.**

Selected Readings:

1. ALA Standards for University Libraries: evaluation of performance. 1989. [Online]. http://sacs.uah.edu/documents/policies/
2. Salmon_Library_ala. (Accessed 16 September 2010).
3. Balog, KP. 2009. Measuring Croatian public and academic library culture. Performance Measurement and Metrics.
4. CHELSA. 2006. Guide to the self review of university libraries. Prepared by the members of the Quality Assurance Subcommittee of the Committee for Higher Education Librarians of South Africa.
5. Department of Education (South Africa). 1997. Education White Paper 3. A Programme for the transformation of HigherEducation. General notice. Notice 1196 of 1997.
6. American Library Association (2006). Guidelines for university library services to undergraduate students. Chicago: ALA.
7. Ashman, J. (1995).Disaster planning for library and information services. London: ASLIB.
8. Bean, P. (1992). An overview of crime in libraries and information services. In Channey, M., & MacDougal, A.F. (Eds.). Security and crime prevention in libraries. Aldershot: Gower.
9. Budd, J.M. (1998). The academic library: Its context, its purpose, and its operations. Littleton, Colo.: Libraries Unlimited.

10. Ifidon, S.T. (1985). Essentials of Management of African University Libraries. Lagos: Libriservice Ltd.

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Unit - I

Management: Concept, Definition, Scope, Principles and Functions of Management; Schools of Management Thought; Systems Analysis and Design

Unit- II

Planning and planning strategies: Library Planning - Concept, Definition, Need, Types and Steps in Planning – MBO.

Unit-III

Human Resource Management: Concept, Need, Purpose and Functions; Job Description and Job Analysis – Selection, Recruitment, Staff Formula, Training and Development, Leadership – Team building – Motivation and Decision Making; Total Quality Management.

Unit-IV

Financial Management: Planning and Control – Resource Generation. Budget: Types and Budgetary Control Techniques – Cost Effective and Cost Benefit Analysis in Libraries.

Unit-V

Resource Management: Collection development: Print and digital – Policy, Issues; Library Routines, Circulation, Maintenance Preservation and Conservation - Evaluation. Case Study- MSU, DCL, St. John's College, St Xavier college, (Acquisition, Circulation, Periodicals and Technical Processing)

Selected Readings:

1. Bakewell, K. G. B. Library And Information Services For ManagementLondon : Clive Bingley, 1968.
2. Brophy, Peter and CourlingKote. Quality Management for Information and Library Managers. Bombay: Jaico, 1997.
3. Bryson, J.O. Effective Library and Information Management. Bombay: Jaico, 1996.
4. Dutta, D N.Manual of library management, Calcutta The World Press Private Ltd. 1978.
5. Kumar P.S.G. Management of Library and Information Centres.Delhi: B. R. Publishing corporation, 2003.
6. Lowell, Mildred Hawksworth, The management of libraries and information centres, New Jersey: The Scarecrow Press, Inc., 1968.
7. Mittal, R.L Library Administration: Theory and Practice. New Delhi: S.S Publication, 2007.
8. Mookerjee, Subodh Kumar Library organisation and library administration, Calcutta: The world press private ltd. 1972.
9. Narayana, G. J. Library and information management. New Delhi : Prentice-Hall of india, 1991.
10. Paliwal, P.K. Compendium of Library Administration. New Delhi: EssEss, 2000.
11. Panwar, B. S; Vyas, S. D. Library management, Delhi : B. R. Publisher, 1986.
12. Sharma, Lokesh. Library management, New Delhi: ShriSai Printographers, 2003.

13. Siwatch, Ajit Singh. Library Management: Leadership style strategies and organizational climate. New Delhi: Shree, 2004.
14. Stuert, Robert D. and Moran, Barbara B. Library and Information Center Management. Colorado: Libraries unlimited, 2004.
15. Ranganathan, S. R. Library Administration. ESS Publications, 2006.

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Unit-I

Information System: Concept, purpose, types and levels. Components of Information System: Regional, National and International.

Unit –II

Information Services; References Services: concept and definition; Information Alert, News Clippings, CAS, SDI, Abstracting and Indexing Services. Document Delivery Service, Translation Service, Referral Service.

Unit-III

Digital Information Services; Institutional Repository, Web OPAC, EDDS, Citation and Indexing Services; Digital Reference Services. Recent Trends and case study activities on Documentation services- J-gate- Indian science Abstract-Dissertation Abstract-Mail forum-Online Information Display- Display through Library Websites.

Unit –IV

Global Information System: UNISIST, AGRIS, INIS, ENVIS, MEDLINE
National Information Systems; NISCAIR, DESIDOC, NASSDOC, MedIND, SENDOC

Unit – V

Library Consortia: National and International- Importance and Objectives; Resource Sharing and Library Networks: National –INFLIBNET: E-Shodhsindhu Shodhganga, DELNET and International - OCLC, RLG, JANET, CALIS,

Selected Readings:

1. Atherton, P. Handbook of Information Systems and Services, 1977.
2. Burch, J.C. and Stretev, F.R. Information Systems: Theory and Practice, 1974.
3. Choudhary, G. G. and Choudhary, S. Searching CD-ROM and online information sources, 2001
4. Colin, H. Ed. Management Information Systems in Libraries and Information Services. London: Tayler Graham, 1989.
5. Fourie, D. and Dowell, D. Libraries in the information age. New York, Libraries unlimited, 2002
6. Guha, B. (1983). Documentation and Information: Services, techniques and systems. Calcutta:World Press.
7. Gupta, B.M. and others(1991). Handbook of Libraries, archives, Information centres in India.New Delhi: AdityaPrakshan.
8. Gurdev Singh Information Sources Services and Systems PHI, New Delhi, 2013

9. Kochtanek, Thomas R. and Mathews, Joseph R. Library and Information Systems: From Library automation to distributed information access solutions. West port: Libraries unlimited, 2004.
10. Krishan Kumar (1990). Reference service. New Delhi, Vikas.
11. Lucas, Amy. Ed.(1989). Encyclopaedia of Information systems and services. Detriot: Gale Research.
12. Neelameghan (A): Information Systems, Networks and services in India. 2 vols.,RanganathanCentres for Information Studies, Chennai, 1998.
13. Neelameghan A. and Prasad, K.N. Eds. (2005).Information systems and services in India. Bangalore: SRELS.
14. PrashantKaushik Library Information Services and Systems Anmol Publisher, New Delhi, 2006,
15. Sewa Singh. Handbook of International sources on reference and information, 2001
16. Sherman, C. and Price, G. The invisible web: uncovering Information Sources Search engines can't see. 2001
17. SunithaAsija(1998). Documentation services in India: A review of some selected documentationcentres. New Delhi: Academic Publications.
18. U.S. Jadhav and Suresh Jange Library and Information Sources and Services Regency Publications A Divison of Astral International (P) Ltd. New Delhi, 2013
19. Vickery, B.(1987). Information systems. London: Butterworths.

Course –2.3: INFORMATION PROCESSING AND RETRIEVAL SYSTEMS

Course Code:

Objectives:

1. To enable the students to familiarize with various Metadata Standards,Digital Object identifiers and Mark up languages.
2. To familiarize with various indexing systems
3. To develop skills of information search strategies
4. To know the information retrieval models

Course Outcomes

1. Familiarize with various Metadata Standards, and web 2.0
2. Discussed the Digital Object identifiers and Mark up languages
3. Familiarize deep knowledge with various indexing systems
4. Learned the develop skills of information search strategies how to implement the library services.
5. Emphasized the types of information retrieval models
6. Learned the knowledge of indexing systems and thesaurus and vocabulary control

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	M	M	M
CO2	M	H	H	M	M	H	M	H
CO3	H	H	H	H	M	M	M	H
CO4	M	H	H	H	M	M	M	H
CO5	H	H	H	M	H	H	H	H
CO6	H	H	M	H	H	H	H	L

Unit –I

Information Retrieval System – concepts – Tools and Techniques; Models Indexing systems – General Theory of Indexing languages. Indexing: Pre coordination and Post coordination, Keyword Indexing, Evaluation of Indexing System, thesaurus and vocabulary control; Web Indexing

Unit – II

Recent Trends on Structured Text Retrieval Models; Text Operations: document pre-processing (word stemming, stop words, thesauri), document clustering; Linguistic aspects

Unit-III

Organization of digital resources – Metadata standards – Dublin core, MARC21, ISO 2709, UNIMARC, CCF and DOI (Digital Object identifier)

Unit- IV

Query formulation - search process; Search Techniques and strategies in Web of Science, Scopus, BLAISE, INSPEC, MEDLINE.

Unit -V

Evaluation of Information Retrieval Systems: Purpose – Criteria; Recall and Precision and steps in evaluation – Major Evaluation Studies – MEDLARS and SMART Retrieval.

Selected Readings:

1. Aitchison, J. (1970). The Thesaurofacet: A Multipurpose Retrieval Language Tool. Journal of Documentation. 26; 187-203
2. Aitchison, J. and Gilchrist, A. (1987). Thesaurus Construction: A Practical Manual. 2nd ed. London : ASLIB. Aldershot: Gower
3. Atchison, Jean & Gilchrist, Alan. Thesaurus construction: a practical manual. London: Aslib. 1972.
4. Austin, D. Precis, A manual of concept analysis and subject indexing. 2nd ed. 1984.
5. B. C. Vickery. Techniques of information retrieval. London: Butterworths, 1970.
6. Bikowitz.,W R. Knowledge Management. Delhi: PHI, 2000.
7. Brown, A.G. (1982). Introduction to Subject Indexing. 2nd ed. London: Clive Bingley.
8. Cataloging Electronic Resources: Olson manual. http://www.library.cornell.edu/ tsmanual/CIRM/Intro.html
9. Chakraborty, A.R. and Chakraborty, Bhubaneswar (1984), Indexing : Principles, Processes and Products. Calcutta: World Press.
10. Chowdhruy, G G. Introduction to Modern Information Retrieval. 2nd edn. London, Facet Publishing, 2003.
11. Chowdhury, G.G. (2004). Introduction to modern information retrieval. 2nd Ed. London: Facet Publishing.
12. Chowdhury, G.G. and Chowdhury, S. (2001). Information sources and searching on the World Wide Web. London: Library Association Publishing.
13. Chowdhury, G.G. and Chowdhury, S. (2001). Searching CD-ROM and online information sources. London: Library Association Publishing.
14. Hunter, Eric J. (1985). Computerized Cataloguing. London: Clive Bingley.
15. Lancaster, F. W. (1985). Vocabulary Control for Information Retrieval. 2nd ed. Arlington, Va. : Information Resources Press.
16. Lancaster, F.W. (2003). Indexing and abstracting in theory and practice. 3rd ed. London: Facet Publishing.
17. Machine-Readable Bibliographic Information Committee (MARBI). (1996). The MARC21 formats: background and principles. Revised. http://www.loc.gov/marc/ 96principl.html#one
18. MARC21 formats: background and principles. http://lcweb.loc.gov/marc/ 96principl.html
19. Rowley, Jennifer E. (1998). Abstracting and Indexing. 2nd ed. London: Clive Bingley.
20. Sarkhel, J.K. (2001). Information analysis in theory and practice. Kolkata: Classique Books.
21. Soergel, D. (1974). Indexing Language and Thesauri: Construction and Maintenance. Los Angeles, California Melville Publishing.

Course - 2.4: KNOWLEDGE ORGANIZATION PRACTICE-II: (AACR - II and UDC)
Course Code:

Objective:

- To enable the students to classify and catalogue the library documents using **AACR-II and UDC**
- Prepare them to efficiently integrate metadata with library OPAC for e-documents.

Exercise

1. Classification of titles of Books and Periodical articles according to UDC
2. Cataloguing of Documents: Print and Non-Print using AACR - II
3. Help the students familiarize in cataloguing and indexing various types of traditional as well as digital objects by assigning the call number using AACR-II and UDC
4. Help the students observe the principles relevant to the indexing schemes while classifying
5. Help them prepare a record of their understanding and performance in the prescribed classification schemes
6. Help them to identify the online support available on the internet

Course Outcome

At the end of learning program of this paper, students should have

1. Acquired capabilities in organizing the knowledge in the appropriate sequence sharpening the focus of the contents of the document with book numbers.
2. Learnt the knowledge how to Classification of Books and Periodicals according to UDC (Standard Edition)
3. Attained the elaborate knowledge how to Cataloguing of library Documents, Print and Non-Print sources using through AACR-II
4. Elaborate discussion how to do Classification and Cataloguing using AACR II
5. Attained the knowledge of classifying the documents using Colon Classification Schemes
6. Learnt the knowledge of information organization on traditional and digital environment

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	H	H	M	M	M
CO2	M	H	H	H	H	M	M	H
CO3	H	H	H	H	M	M	M	M
CO4	M	M	H	H	H	H	H	H
CO5	H	H	H	H	H	M	M	M
CO6	H	H	H	H	H	H	H	L

Selected Readings:

1. Mcllwaine, I.C. (2000). The Universal Decimal Classification: a guide to its use. London: BSI Business Information.
2. Raju A.A.N. (1991). UDC (IME, 1985): A Practical and Self Instructional Manual. Madras: T.R. Publications
3. UDC: International Medium Edition - English Text (BS IOOOM: 1985). London: British Standards Institution.
4. Universal Decimal Classification: Abridged Edition. (2003). London: BSI Business Information.
5. Anglo-American Cataloguing Rules. (1988). 2nd rev. ed. Chicago: American Library Association

   Lal, C and Kumar, K. Practical Cataloguing AACR-2. ESS Publications, New Delhi. 2006.

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ELECTIVE – I:
Course - 2.5: (A) SOFT SKILLS
Course Code:

Objectives

1. Help the Students comprehend the various facets of soft skills and different types of communication as a means to develop their professional personality
2. Help the students develop Leadership qualities, Motivation and Professional efficiency.
3. Help the students to develop their reporting and presentation skills
4. Help the students to understand facets related to work culture and Time Management skill, Reading and Writing skills.

Course Outcome

At the end of learning program of this paper, students should have

1. Acquired knowledge on the basics of verbal and written communication.
2. Understood the components of Visual and Tele communication.
3. Skills to use digital gadgets and internet communication.
4. Understood the facet of library and professional communication.
5. Learnt on the reading and report writing skills.
6. Acquired knowledge on time saving techniques and developing overall professional personality.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	M	H	H	M
CO2	H	H	H	H	H	H	H	M
CO3	H	H	H	H	H	H	H	M
CO4	H	H	H	H	H	L	M	M
CO5	H	H	L	H	H	M	M	H
CO6	H	H	H	H	M	M	H	H

(H-High, M-Medium, L-Low)

Unit-I

Soft Skills: Concept and its Significance; Communication Skills: What, Why, How? Why Communication fails? How to be an Effective Communicator? Mastering the Process of Communication, Oral Communication Skills, Body Language, Optimistic Approach, Managing Conflicts, Gaining Confidence, Methods of Communication: One Way and Two Way Communication; Verbal – Modes, Oral and Written, Nonverbal Communication – Categories and Features; Formal and Informal Communication; Visual Communication, Telecommunication and Internet.

Unit-II

Listening and Speaking Skills: What, Why? Why we don't listen? How to develop our Listening Skills? Speaking - What is speaking? Accepting invitation to speak, Setting Objectives; Know your Audience, Research the Material, Planning and Writing, Use of Audiovisual aids, Delivering speech, Style of speech and improvement.

Unit-III

Reading and Writing Skills: What is reading? Purpose of reading, Types of reading, Reading ways, 4R Method and SQ3R Method; Writing – Written Communication, Stages in Effective Writing, Styles of Writing – Choice of Words and Phrases, Sentence Structure and length, Paragraph Structure and Length, Principles of Paragraph, Characteristics of Good Writing and Basic tools of writing.

Unit-IV

Time Management Skills: Understanding Time Management, Time Management Principles – Identifying Time Loss, Urgency and Importance, Effective Decision Making, Setting your Goals, and Defining Your Objectives;

Unit -V

Time saving Techniques; Organizing your Work Space, and Communicating Effectively; Dealing with Stress – Understanding Overload, and Negotiating your Workload; Practical Time Planning – Planning your Day, Using Activity Network, Critical Path Analysis, Effective Resource Sharing and Preparing Planning Diagrams. Case Study- TCS Soft Skills Course; MOOC Soft Skills Course

Selected Readings:

1. Amer, Beverly. Soft Skills at Work: Technology for Career Success, CengageLearning, 2008, pp90.
2. Butterfield, Jeff. Written Communication: Soft Skills for Digital Work Place,Cengage Learning, 200, pp134.
3. Klaus, Peggy. The Hard Truth about Soft Skills: Work Place Lessons Smart People Wish They'd Learned Sooner. Collins, 2008, pp208.
4. Mitchell, Geana Watson. Essential Soft Skills for Success in the Twenty First Century Workforce as perceived by Alabama Business/marketing Educators. ProQuest, 2008, pp134.
5. Rao, M.S. Soft Skills Enhancing Employability: Connecting Campus with Corporate.K. International Pvt Ltd, 2010, pp 256.

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ELECTIVE – I:

Course - 2.5: (B) INFORMATION LITERACY
Course Code:

Objectives

- To enable the students to understand the concept of information literacy
- To orient on preparation of library promotional materials.
- To teach the methods of digital and online literacy.
- To orient on national and international standard and models of information literacy.

Course Outcomes

At the end of learning program of this paper, students should have

1. Acquired skills on basic search strategies
2. Acquired skills on search in library OPAC, Web OPAC and Scholarly databases.
3. Understood the concept of library literacy and information literacy.
4. Learnt use of web and mobile management tools.
5. Become familiar on preparation on library promotional materials.
6. Acquired knowledge on the standard on information literacy digital information literacy.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	M	M	H
CO2	M	H	M	M	M	H	M	H
CO3	H	H	H	H	M	M	M	H
CO4	M	M	H	H	M	M	M	H
CO5	H	H	H	L	L	H	H	H
CO6	H	H	M	H	H	H	H	H

Unit-I

Fundamentals of Information Literacy: Concept, Need and Objectives. Historical perspective of Information literacy. Types of Information Literacy: Technology literacy, media literacy, computer and digital literacy. Levels of Information Literacy: Entry level, Mid level, High level, Advance level.

Unit-II

Lifelong learning and its components. Partners of Information literacy. Information Literacy Products: Library Brochure, Database Brochure, Web-based Access Instructions, Information Bulletin

Unit-III

Models of Information literacy. Information Literacy for users. Information literacy for professionals. Scope of Information Literacy Programme; National Programs in Information Literacy, International Programs in Information Literacy

Unit-IV

Information literacy programmes. Role of Libraries in Information literacy. Information literacy instructions in different types of Library and Information centers. Information Literacy for Users; Information Literacy for Professionals, Information Literacy for Research and Development.

Unit-V

Current trends in Information literacy, Digital and Web Literacy, Study of Information literacy programs in the world. Information Literacy Competencies. Challenges facing Information literacy. Information Literacy models – SCONUL;.ACRL Case Study-Library Virtual Tours, Awareness on Publishers Tutorials (Springer, Elsevier and Clarivate Analytics)

Selected Readings:

1. American Association of School Librarians and Associations For Educational Communications and Technology. Information Standards for Student Learning. (1998) American Library Association, Chicago.
2. American Library Association. Information Literacy: a position paper on information problem solving (2000). available at:www.ala.org/assl.positions/PS_infolit.html
3. Association of College And Research Libraries. Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians.(2001). ACRL,available at : www.ala.org/acrl/guides/objinfolit.html.
4. Association of College and Research Libraries. Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians. (2001). ACRL, available at : www.ala.org/acrl/guides/objinfolit.html.
5. Baldwin V A. Information Literacy in Science & Technology Disciplines. Library Conference Presentation and Speech. (2005). University of Nebraska, Lincoln. http://digitalcommons.unl.edu/library_talks/11
6. Barker, K. and Londsale, R. Ed. (1994). Skills for life: the value and meaning of literacy.
7. Bawden, D. (2001). Information and digital literacies: a review of concepts. http://gti/edu.um.es.8080/gomez/hei/intranet/bawden/pdf.
8. Delcourt (M) and Higgins (CA). Computer technologies in teacher education: the measurement of attitudes and self-efficacy. Journal of Research and Development in Education. (1993). 27; 31-7.
9. Eisenberg (M B) et al. Information Literacy: Essential Skills for the Information Age. 2nd ed. (2004), Libraries Unlimited,Westport.

10. Eisenberg, M.B. , Lowe, C.A. & Spitzer, K.L. (2004). Information literacy: Essential skills for Information age. London: Libraries unlimited.
11. Grassian (E S). Learning to lead and manage information literacy instruction.(2005) Neil Schuman Publishers, New York.
12. Grassin (E S) and Kaplowitz (J R). Information Literacy Instruction: Theory and Practice. (2001). Neal Schuman, New York.
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14. Lincoln. http://digitalcommons.unl.edu/library_talks/11London: Taylor Graham.
15. Meadows, A.J. Ed. (1991). Knowledge and communication: essays on the Information chain. London: Library Association.
16. Pantry, Sheila and Griffiths, Peter (2002). Creating a successful e-Information service. London: Facet.
17. Smith (S). Web-based Instruction. A Guide for Libraries. (2001). American Library Association, Chicago.
18. Tight (M).Lifelong Learning: Opportunity or Compulsion?. British Journal of Education Studies.Vol. 46; 3 September 1998; 251-263.www.ala.org/at/nill/litt1sthtml
19. ZoranaErcegovac (2008). Information literacy: search strategies, tools & resources for high school students and college freshmen. California: ABC-CLIO.

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Course - 2.6:
Research Ethics and Metrics
Course Code:

Objectives:

1. To make students to understand the concept and relevance of citation and Citation Analysis
2. To teach the students to calculate the citation metrics for individual, researchers and Institutions
3. To teach the students the application of indicators of citation to study the literature growth in different subjects.

Course Outcomes

- To understand the concept, theories, laws and parameters of citation metrics.
- To Evaluated how to understand the citation analysis operation research
- Attain the knowledge how to the application of bibliometrics to study the literature in different subjects.
- Learnt the basic metric studies on Librarmetrics, Concept, Scientometrics, Webometrics, Altmetrics, Netometrics
- Gained the knowledge Theory and Laws of Citation Tools and Techniques
- Gained the knowledge to applied and measured the Quantitative and Qualitative techniques: Types, Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	M	H	H	M
CO2	H	H	H	H	H	H	H	H
CO3	H	H	M	H	H	H	M	H
CO4	H	M	H	H	M	M	H	H
CO5	H	H	H	M	H	H	H	L
CO6	H	H	H	H	H	M	M	H

Unit -I

Citation and Citation Analysis: Concept, definition, evolution and applications.

Unit –II

Forms of citations, Bibliographic Coupling, Co-Citation, Citation Life – Citation Counts, Self –citation – Citation Index

Unit – III

Citation Databases: Scopus, Web of Knowledge, Google Scholar and Cross Reference

Unit –IV

Impact Factor, Discipline Impact Factor (DIF), h-Index, h-type index G-Index, g-h Index, h-b index, i10 Index, z-index, Exergy indicator and Citation Factor

Unit – V

Research Tools for Citation Metrics: Histcite and Bibexcel, PAJEK, VOS Viewer Recent Trends Metrics: Info graphics-SNIP-SJR-ALEXA - Webometric tools, Altmetrics Tools

Selected Readings:

1. Belikov, A.V.; Belikov, V.V. (2015). "A citation-based, author- and age-normalized,
2.]logarithmic index for evaluation of individual researchers independently of publication counts". F1000Research 4: 884. doi:10.12688/f1000research.7070.1
3. Braam, Robert R. (1991). Mapping of science: Foci of intellectual interest in scientific literature. DSWO Press. ISBN 90-6695-049-8.
4. *De Bellis, Nicola (2009)*. Bibliometrics and citation analysis: from the Science citation index to cybermetrics. *Scarecrow Press. p. 417*. ISBN 0-8108-6713-3.
5. Egghe, Leo; Rousseau, Ronald (1990). Introduction to Informetrics: Quantitative Methods in Library, Documentation, and Information Science. Elsevier. ISBN 978-0-444-88493-0.
6. Hamdaqa, M.; A Hamou-Lhadj (2009). Citation Analysis: An Approach for Facilitating the Understanding and the Analysis of Regulatory Compliance Documents. Las Vegas, NV: IEEE. pp. 278–283. doi:10.1109/ITNG.2009.161. ISBN 978-1-4244-3770-2.
7. Leydesdorff, L. A. (2001). The challenge of scientometrics: The development, measurement, and self-organization of scientific communications (2nd ed.). Boca Raton, FL: Universal Publishers.
8. Noyons, E. C. M. (1999). Bibliometric mapping as a science policy and research management tool. Leiden: DSWO Press, University of Leiden.
9. Wilson, Concepción S. (1999). "Informetrics". Annual Review of Information Science and Technology (Medford, NJ: Information Today) 34: 107–247.
10. Wolfram, D. (2003). Applied Informetrics for Information Retrieval Research. Libraries Unlimited.
11. Levine-Clark, M., & Gil, E. L. (2008). A comparative citation analysis of Web of Science, Scopus, and Google Scholar. *Journal of Business & Finance Librarianship, 14*(1), 32-46.

12. Aksnes, D.W. (2006), Citation rates and perceptions of scientific contribution. Journal of the American Society for Information Science and Technology, 57(2), p.169-185. ttp://dspaces.uok.edu.in/jspui/bitstream/1/193/1/Citation%20Analysis%20of%20Library%20Trends.htm

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SEMESTER - III

Course - 3.1 RESEARCH METHODS AND TECHNIQUES
Course Code:

Objectives

- To help students learn the basic concepts of research, their types, planning and Methods;
- Make the students become proficient in research methodology, sampling techniques and data collection tools.
- To help the students learn the statistical tools and techniques of analyzing, interpreting and reporting research.
- To Study the referencing and citation manuals and styles

Course Outcomes

At the end of learning program of this paper, students should have

- Learnt depth in the basic concepts of research, types, planning and methods
- Examined the methods and tools how to collect the research data.
- Learnt the knowledge of kinds of research tools and techniques for analyze and reporting
- Learnt the knowledge of the techniques of various data collection methods from population
- Learnt to write the research report and using knowledge to check the plagiarism
- Attained the knowledge for applying technical tools to data analysis and interpretation

Mapping with PSO

(H-High, M-Medium, L-Low)

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	M	M	H	H	H	H
CO2	H	H	M	H	H	M	H	H
CO3	H	H	H	M	H	M	H	H
CO4	H	H	H	M	H	H	M	M
CO5	H	H	H	M	H	H	H	L
CO6	M	H	H	H	M	H	H	H

Unit-I

Research: Definition, Concepts, Purposes and Types; Literature Review: Process and types; Selection and Formulation of Research Problems; preparation of Research Proposal

Unit-II

Research Design: Definition, Need, Types ; Sampling: Methods and Techniques ; Hypothesis: Definition, Types, Formulation and Testing.

Unit-III

Methods and tools for data collection: Survey, Experimental, Case-study, Questionnaire, Observation, Interview schedules and Delphi Technique.

Unit-IV

Analysis of Data: Measures and Scaling Techniques, Presentation of data, Interpretation, Inferences, Tabular, graphical representation; Infographs- Basics of R, PYTHON, SPSS and SOFA.

Unit –V

Report Writing: Components of Research Report; Style manuals Tools; Plagiarism. Case Studies-Survey-Information Needs: E-resources usage; Research profile compilation- Library website evaluation, Trends in LIS research.

Selected Readings:

1. Busha C H and harter S P. Research Methods in Librarianship. New York: Academic, Publishing House, 1993
2. Fowler F J Jr. Survey Research Methods. New Delhi: Sage, 1993
3. Glazer J D and Powell R R. Qualitative Research in Information Management.
4. Englewood: Libraries Unlimited, 1992
5. Goode Wj and Hatt P K. Methods in Social Science Research. Auckland: McGraw-
   Hill, 1981
6. Kin Robert K. Case Study Research: Design and Methods. New Delhi: sage Publications, 1989
7. Kraft D H and Royce B R. Operations Research for Libraries and Information Agencies. San Diego, CA: Academic Press, 1991
8. Krishnaswamy O R. Methodology for Research in Social Sciences. Delhi: Himalayan
9. Lancaster F W.If you want to evaluate Your Library. London: LA, 1993
10. Line M B. Library surveys. London: Clive-Bingley, 1967
11. McClure Charles R and Hernon Peter Eds.Library and Information Science Research:
    Perspectives and Strategies for improvement. NJ, Ablex, 1991
12. Powell R R. Basic Research Methods for Librarians. Norwood., NJ: Ablex1980
13. Simpson I S. How to Interpret Statistical Data. London: LA, 1990
14. Slater M. Research Methods in Library and Information Studies. London: LA, 1990.
15. Stevens R E (Ed).Research Methods in Librarianship. London: Clive-Bingley, 1971Busha, Charles, H. and Harter, Stephen, S. Research Methods in Librarianship. Techniques and Interpretation. Orlando, Academic press, 1980.
16. Charles, H. et.al. Research Methods in Librarianship: Techniques and Interpretations. New Delhi, Sage, 1993.
17. Goode.W.J&Hatt.P.K. Method of Social Research. McGraw Hill. Auckland, 1989
18. Kothari.C.R.. Research methodology: Ed2 Wishwa. New Delhi, 1990.

19. Krishna Kumar: Research methods in library in Social science. Vikas, New Delhi, 1992
20. Krishna Swamy, O.R. Methodology of research in social sciences. Himalaya, Bombay, 1993
21. Line, Maurice.B. Library surveys; An introduction to the use, planning procedure and presentation of survey. Ed2 Clive Bingley, London, 1982.
22. RavichandraRoa, I.K. Quantitative methods in library and information science, Wiley Eastern. New Delhi, 1988.
23. Slatter,Margaret, Ed. Research ,methods in library and information science. London, L.A, 1990.
24. Stevens, Rolland.E. Research methods in librarianship, Clive Bingley, London, 1971.
25. Tabuer, M.F and Stephens, I.R. Ed. Library surveys. Columbia University Press, New York, 1968.
26. Wilson, E.S. Introduction to scientific research McGraw Hill, New Delhi, 1952.
27. Young,P.V.Scientific social surveys and research. Ed4. Prentice Hall of India, New Delhi, 1982
28. John W. Creswell. Research Design: Qualitative, and Mixed methods Approaches. Sage Publications, 2013.
29. Ranjit Kumar. Research Methodology: a step-by-step guide for beginners. 2014. (Google E-Books)

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Course – 3.2: DIGITAL LIBRARIES AND WEB TECHNOLOGIES
Course Code:

Objectives:

- To help students in acquiring knowledge about the concept of Digital Libraries
- To enable the students gain knowledge about the facets involved in DL design
- To enable the students gain knowledge about DL softwares
- To enable the students gain knowledge about Online and electronic resources and institutional repositories

Course Outcomes:

At the end of the learning program of this paper, the students should have

1. Gained knowledge about the concepts of digital library, its organization, tools for digital information access.
2. Acquired knowledge in digital library design, architecture and DL softwares.
3. Attained knowledge about online databases and designing of institutional repository.
4. To teach the concepts of digital library, organization of digital information, latest web tools used in digital information access.
5. Learnt to write the research report and using knowledge to check the plagiarism
6. Attained the knowledge for applying technical tools to data analysis and interpretation

Mapping with PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	M	M	H	M	H	H
CO2	H	H	M	H	H	M	H	H
CO3	H	H	H	M	H	M	H	M
CO4	H	H	H	M	H	H	M	M
CO5	H	H	H	M	H	H	M	M
CO6	M	H	H	H	L	H	H	H

Unit-I

Digital Libraries: Definitions, Concept, Characteristics, functions and Advantages

Unit-II

Digital Library Components: Design, Architecture, Protocols, Standards and Interoperability,

Unit-III

Digital Library Software: DSpace, GSDL and E-Prints.

Unit- IV

Online Databases: E-Books, E-Journals, ETD and Courseware and online Publishers

Unit-V

Institutional Repository and Digital Achieves - Digital Library Initiatives. Creation of Tamil interface using D-Space, MERTOL-NPOR-SWAYAM

Selected Readings:

1. Jana Smith Ronan (2003), " *Chat Reference: A guide to Live Virtual Reference Services*", Rain Tree Publishing, pp.1-225.

2. Patricia Ingersoll and John Culshaw (2004), "*Managing Information Technology: A handbook for systems Librarians*", Rain Tree Publishing, pp. 1-199.

3. Ram Shobhit Singh (2008), "*Encyclopaedia of Library Information Systems and E-Journal Archiving*", Anmol Publications, pp. 1-269.

4. Jana Smith Ronan (2003), " *Chat Reference: A guide to Live Virtual Reference Services*", Rain Tree Publishing, pp.1-225.

5. Patricia Ingersoll and John Culshaw (2004), "*Managing Information Technology: A handbook for systems Librarians*", Rain Tree Publishing, pp. 1-199.

6. Ram Shobhit Singh (2008), "*Encyclopaedia of Library Information Systems and E-Journal Archiving*", Anmol Publications, pp. 1-269.

7. http://www.greenstone.org/
8. http://www.dspace.org/
9. http://epress.lib.uh.edu/pr/v8/n3/smit8n3.html
10. http://www.eprints.org/
11. http://moodle.org
12. http://joomla.org
13. http://drupal.org
14. http://scigate.ncsi.iisc.ernet.in/raja/
15. http://www.vidyanidhi.org.in/'
16. http://www.20search.com/
17. http://en.wikipedia.org/wiki/Web_2.0
18. http://www.oreillynet.com
19. http://en.wikipedia.org/wiki/Web_3.0
20. http://en.wikipedia.org/wiki/Main_Page
21. http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/InvisibleWeb.html
22. http://websearch.about.com

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Course: 3.3 - Library Automation and Digital Library (Practice)

Objectives:

- To impart practical training in the use software to develop bibliographic databases;
- To give practical training in the use of library automation software; and

To impart practical training in design & development of web pages and web blog

Course Outcomes

- comprehend the use of software to develop bibliographic databaes;
- understand the use of library automation software
- utilize design and development of web pages and web blog
- Learnt the basic metric studies on Librarmetrics, Concept, Scientometrics, Webometrics, Altmetrics, Netometrics
- Gained the knowledge Theory and Laws of Citation Tools and Techniques
- Gained the knowledge to applied and measured the Quantitative and Qualitative techniques: Types, Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis

Mapping with PSO

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	M	H	H	M
CO2	H	H	H	H	H	H	H	H
CO3	H	H	M	H	H	H	M	H
CO4	H	M	H	H	M	M	H	H
CO5	H	H	H	M	H	H	H	M
CO6	H	H	H	H	H	L	M	H

Unit-I

Introduction to Library Automation Software Packages – Proprietary and Free and Open Source Software (FOSS): KOHA, NEWGENLIB and SOUL.

Unit-II

Hands on Practice of DBMS - WINISIS or MS Access;

Unit-III

Introduction to Digital Library and Content Management System (CMS) Software – Proprietary and Free and Open Source Software (FOSS): DSpace, GSDL and Eprint.

Unit-IV

Hands on Practice on DSpace or GSDL.

Unit-V

Hands on Practice on CMS - Drupal or Joomla. Hands on Practice on KOHA.

References and Textbooks

Fārūqī, K. K. (1997). *Automation In Libraries*. Anmol Publications PVT. LTD..

Manohar Nanda (2006), *Library Automation*, Anmol Publications Pvt Ltd, New Delhi.

Piyushkanti Mahapatra & Bhubaneswar, Chakrabarti (1997). Redesigning the Library. New Delhi, EssEss Publications 1997.

Rajiv, Adhikari (2000). *Library Serial Automation*. Rajat Publication, Delhi.

Raman Nair. *Basics of CDS/ISIS for DOS*. Ess Ess Publications.

Rajat, Sinha (2011). *University Library Administration.* Mohit publications. New Delhi,

Vidya Sagar, P. (2005). *Networking in Library Science.* Sonali Publications, New Delhi.

Vinod Kumar Mishra. (2016). *Basic of Library Automation, Koha Library Management Software & Data Migration: Challenges with case studies*. Ess Ess Publications.

Course - 3.4: ELECTIVE-I

WEB BASED INFORMATION SERVICES
Course Code:

Objectives:

To help the students become familiar with a wide range of online web based services.

Course Outcomes:

At the end of learning program of this paper, the student should have

- Acquired a thorough knowledge about the online information resources required for research program of the institution and the clientele
- complete professional skills in identifying the relevant online source, retrieving and downloading data/information for the clientele and means of online information delivery.
- Become capable of working along with the scholars/researchers right from the initial bibliography compilation point to the end of report writing fulfilling participative research role of the librarian as well as help the scholars identify the appropriate channel to publish.
- The capability of educating the users on the significance of citation, impact factor and means to be a continuant in research publishing performance.
- Gained professional confidence in helping scholars to understand the significance of citation and its management with online software like Mendeley as well as the significance of Plagiarism checker softwares.
- Elaborate discussed on Technology for Multimedia: Hypermedia etc., music and sound, visualization, virtual reality, CAL, standards

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	M	M	M	M	M	H
CO2	M	H	M	M	H	M	M	H
CO3	H	H	H	M	H	M	H	H
CO4	H	H	M	M	M	M	M	H
CO5	H	M	M	M	M	H	M	H
CO6	M	H	M	H	M	H	M	L

Unit-I

Web OPAC, Mobile OPAC; Multi Web OPAC: OCLC
Information Alert; Online Display, E-Mail, and Mobile Casting.

Unit-II

Access to E-Books, E-Journal, ETD, Bibliographic Databases and online Coursewares

Unit-III

Compilation of Citation Profile: Impact factor, Citation, H-Index;

Research Information System; Profile Management System; Subject Expert System

Unit-IV

Reference Management Tools: Mendeley, Endnote, Zotero, Reference work etc.

Advance study on Webinars, Web OPAC, RSS Feeds, Group mail

Unit-V

Discussion Forum; Group mail, and online Feedback: Web Blog, Website,

Online Reference Service, Online SDI and Online Document Delivery Service, E-reference services.

Selected readings:-

1. Balas, Janet L. A Librarian's Work will never be done. Computer in Libraries. 19; 10,1999. 46-50p.
2. Das, Suchitra. Information Resources on Internet and Information Services in Library and Information Centers. SRELS Journals of Information Management. 37; 1, 2000. 49p
3. Green, Elisabeth and Head, Allison J. Web-based cataloguing. Online.22; 4, 1998. 98p.
4. Hartzer, Sandra., Paterson, Brian., Snyman, Dorette. Web Information Services at the University of South Africa Library. Library Trends. 47; 1,1998. 91-116p.
5. http://bulldog.unca.edu/~greene/webservices.html
6. http://www.oclc.org
7. http://www.ulh.ac.uk/ls/staff/jeb/bjlweb.html
8. Jagajeevan, V.K. Developing and electronic SDI Service at the IIT Kharagpur. Program.33; 2,1999.157-161p.
9. KAMATH,V.A. Computer Application in Library and Information Services . Current Problem and Trends in Library and Information Services. Ed by H.A.KHAN & S.R. IJARI. Varanasi. Indian Bibliographical Center.1990 . 199-211p.
10. Place, Emma. International collaboration on Internet Subject. IFLA Journal. 26; 1,2000.52-56p.
11. Trends in Library and Information Science. K.M. Shukla, K.J. Majmudar ed., Jaipur. RBSA.1995. 14-15p.
12. Wisdom, Aline C. Introduction to Library Services. New York . McGraw-Hill 1974. 48-51p.
13. www.bubl.ac.uk
14. www.nic.in

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Course - 3.4: Elective - II - (B) E- PUBLISHING
Course Code:

Objectives

- To orient on electronic publishing and the formats of content organization.
- Enable the students learn the coding and scripting languages.
- Enable the students learn the ePublishing methods and tools including relevant softwares.
- Enable the students to attain proficiency in DTP and related areas.

Course Outcomes:

At the end of the learning program of this paper, the student should have

- Gained knowledge and skills in ePublishing methods
- Gained knowledge in designing, marketing and promoting library information products and services by means of multimedia and ePublishing techniques and strategies
- Gained knowledge to design, maintain and manage storage and service functioning of library website, blogs of clientele supplemented and supported by multimedia techniques.
- Gained knowledge to the extent of helping the clientele learn the highways of web authoring and multimedia tools and presentation skills.
- Attained the knowledge of e-publishing, and Design for Print and multimedia.
- Importance of the E-publishing technologies

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	H	H	H
CO2	H	H	M	H	M	H	M	H
CO3	H	M	M	H	M	H	M	H
CO4	M	H	M	M	M	H	M	M
CO5	M	L	M	M	H	H	H	M
CO6	M	H	M	M	H	M	M	M

Mapping with PSO:

Unit-I

Content: Types of content. Electronic Publishing: Origin, History and Development, and Trends: Digital content types, File formats, Encoding systems ASCII, UNICODE and ISCII.

Unit-II

Concept and Evolution of Authoring Tools; Markup Languages, SGML, HTML and XML. Recent trends on E-Publishing Models and Publishers

Unit-III

Page Description Languages: Adobe PDF and Photoshop. Legacy documents-Conversion from analog to digital, OCR Software and Adobe Capture.

Unit-IV

Electronic Publishing and scholarly communication, E-journals and e-books. Platforms, Standards and formats. DTP software. Delivery devices. Social, economic, and legal issues in electronic publishing. Use and usability issues.

Unit-V

Economics of e-publishing. IPR and copyright issues. Multimedia Content Creation: Data Compression Techniques Multimedia Files and Formats – JPEJ, MPEG, GIF, TIFF

Selected Readings:

1. Karen S. W. Marilynn B, Stone, T. A. (2003). Electronic publishing: The definitive guide. UK: HardShell Word Factory.
2. Klostermann, D. (2011). The e-book handbook - A thoroughly practical guide to formatting,publishing, marketing, and selling your e-book. Cambridge: Full Stop.
3. Loton, T. (2011). E-book publishing DIY: the do it yourself guide to publishing e-books, 2nd ed.United States: LOTONtech.
4. Meckler, L. (2011). E-book formatting, self-publishing, marketing tips updated. USA: Linda Emeckler on smash words.
5. Sahida, f. k. (2010). Publishing e-book for dummies. USA: CreateSpace .
6. Schuster, C. (2011). E-publishing for writers: Trends and opportunities/Fall 2011 (Kindle Editioned.). UK: Books to Go Now.
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Course - 3.5: Elective – III:

(A). GREEN LIBRARY TECHNOLOGY

Course Code:

Objectives

To help the students learn the upkeep and maintenance of the physical environment of the library atmosphere in an aesthetic as well as energy saving manner supported by Green technologies.

Course Outcomes:

At the end of the learning program of this paper, the student should have

- Gained knowledge in maintaining the overall library's physical environment and making the library a place of frequent visit not only for information but also for stress relief of the clientele.
- Gained knowledge in assessing the library ecology and environment and control measures to rectify any shortcoming
- Gained knowledge in maintaining an attractive and peaceful library environment creating aesthetic pleasure in the minds of readers/users, making the library a social place for clients' meet.
- Gained knowledge to the extent of helping the clientele learn the highways of web authoring and multimedia tools and presentation skills.
- Attained the knowledge of e-publishing, and Design for Print and multimedia.
- Importance of the E-publishing technologies

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	H	H	H
CO2	H	H	M	H	M	H	M	H
CO3	H	M	M	H	M	H	M	H
CO4	L	H	M	L	M	H	M	M
CO5	M	M	M	M	H	H	H	M
CO6	M	H	M	M	H	M	M	M

Mapping with PSO:

Unit – I

Library Building

Unit – II

Energy Consumption in Libraries; Energy saving methods.

Unit – III

Conservation and preservation of Library resources through natural and traditional methods.

Unit – IV

Green Technologies for Libraries. Development activities on Garden Library

Unit – V

Library Environment – cleanliness, air and noise pollution free maintenance water consumption space management gardening – interior and external.

Selected Readings

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9. Coder, Megan. 2008. "The Way I See It: It's Not easy being green" *College & Research Libraries News*. 69, no. 11: 692. (Accessed May 14, 2013)
10. Connell, Virginia. "Greening the Library: Collection Development Decisions." *Endnotes: The Journal of the New Members Round Table,* Vol. 1, no. 1 (2010). (PDF file, accessed May 14, 2013)
11. Echavarria Robinson, Tami. "Sustainable Practices: Thinking Green is a Good Option for Libraries." *Alki.* Mar.2011, Vol. 27 Issue 1, p. 6-8.
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19. LEED. 2005. Reference Guide, Version 2.2 US Green Building Council. Retrieved June 14, 2008.
20. Librarian's Environmental Toolkit, LibGuides @ University of Illinois Library. (Accessed May 14, 2013)
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25. Rickert, Kathleen. "Greening" our college libraries: complete the cycle of the three Rs." *College & Research Libraries News* 62, no. 8 (September 2001): 825-828.
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Course - 3.5: ELECTIVE – III
(B) ELECTRONIC RESOURCE MANAGEMENT SYSTEM
Course Code:

Objectives:

- Enable the students become familiar with various kinds and types of information sources both in print and digital formats,
- Enable the students obtain thorough knowledge about online databases, and resource sharing and e-Resource management.
- Enable the students obtain thorough knowledge Information/database networks and consortia at the national and international levels.

Course Outcomes:

At the end of the learning of this paper the students should have

1. Gained knowledge about various reference sources such as print, digial and online.
2. Gained knowledge in eResource management
3. Gained knowledge in resource sharing techniques and procedures
4. Developed a thorough knowledge about the Information networks both national and international
5. Developed a thorough knowledge about the Information system components, Documentation centres and virtual reference desk
6. Well trained to create the library Portal, e-learning, Community of Practice, Storytelling.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	H	H	H
CO2	H	H	M	H	M	H	M	H
CO3	H	M	M	H	M	H	M	H
CO4	L	H	M	M	M	H	M	M
CO5	M	M	M	M	H	H	H	M
CO6	M	H	M	M	H	M	M	M

Unit -I

Information Sources: Concept, Types/ Kinds, Characteristic features and use. Types of sources
(Primary, Secondary, Tertiary and Non- Documentary Sources) - Evaluation of Information Sources.

Unit -II

Electronic Information resources: Meaning and definition, Growth and development, Types. E-Journals, e-Books, e-Theses, e-newspapers, Blogs, Wikis.Free *online*

Dictionaries, Non-free online dictionaries, Free Thesauri. Encyclopedia, Virtual Libraries, Subject gateways and Portals

Unit -III

Free databases and fee based bibliographical and full text databases, subject related websites,
Institutional repositories, Open Archives and digital Libraries.

Unit -IV

Resource Sharing and Networks: Consortia- Importance and objectives. Study of Information
networks and Digital Library Consortia - OCLC, RLIN, INFLIBNET, UGC-INFONET, DELNET, INDEST, FERA, and CSIR e-journal Consortia.

Unit -V

Components of Information System: Libraries, Documentation Centres, Information centres, Data, centers, Data Banks, Museums, Memories, Publishing Houses. Virtual Reference Desk. Current Trends on E-RAMS, Plagiarisms, Remote Access Management

Selected Readings:

1. Chowdhury, G.G. and Chowdhury, Sudatta (2000). Searching CD-ROM and online Informationsources. London: Library Association.
2. Cooper, M. D. (1996). Design of Library automation systems: File structures, data structures andtools. New York: john Wiley.
3. Dickson, G.W. and Desanctis, G.. Information technology and the future enterprise: New modelsfor managers. New Jersey: Prentice Hall.
4. Ferris, Jeffrey A. (2000) Windows 2000: Development and desktop management. Indiana: NewRiders.
5. Gallimore, A. (1997). Developing on IT strategy for your Library. London: Library Association.
6. Gopinath, M.A. (1984). Information sources and communication media (Annual Seminar). Bangalore: DRTC
7. http://www.infolibrarian.com
8. http://www.Libraryspot.com
9. http://www.refdesk.com
10. Krishan Kumar (1996) Reference service, 5th ed. New Delhi: Vikas,
11. Lesk, Michael (1997). Practical digital Libraries: Books, bytes and bucks. San Francisco: MorganKaufmann.
12. Ormes, Sorah and Dempsey, Lorcan Eds. (1997). The Internet, networking and the public Library. London: Library Association.
13. Sharma, Jitendra Kumar (2003). Print Media and Electronic Media: Implications for the future.Delhi, Authorspress.
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15. White C M, et.al. (1973). Sources of Information in the social Sciences. 2 Ed. Bedminster Press, Tolowa, N.J

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Course -3.6: Heritage Documentation
Course Code:

Objectives:

The objective of this study is to emphasize on the need of a contribution of library profession in the process of safeguarding and documentation of ICH and to identify the strategic role of the Library and Information Science students in this regard.

Course Outcomes

- Knowledge and understanding about heritage documentation
- Skills for developing heritage documentation
- Attitudes and values of heritage documentation
- Enjoyment, Inspiration and creativity
- Activity, behaviour and progression
- Well trained to create the library Portal, e-learning, Community of Practice, Storytelling.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	H	H	H
CO2	H	H	M	H	M	H	M	H
CO3	H	M	M	H	M	H	M	H
CO4	L	H	M	L	M	H	M	M
CO5	M	M	M	M	H	H	H	M
CO6	M	H	M	M	H	M	M	M

UNIT-I

Heritage definitions; features; importance; types of heritages

UNIT-II

Heritage natural; Architecture; locations, plants, animals; Visit to Saraswathi Mahal Library

UNIT-III

Indian Heritage in Digital Space (IHDS); Computer Forensics and Cultural Heritage; digital application needs for research and conservation.

UNIT-IV

Traditional knowledge- documentations; Preservation and Documentation of Cultural Heritage; issues on ICH

UNIT-V

Metadata and ontologies for digital cultural heritage documentation Information Technology; Semantics in the documentation of architectural heritage.

REFERENCE:

1) Ahmad, Y. (2006). The Scope and definitions of heritage: from tangible to intangible.
2) International Journal of Heritage Studies, 12(3), 292–300.
3) FOLA, (2005). Living heritage of Sri Lankan Tamils: digital image library of Foundation for
4) Library Awareness. Retrieved from:
5) http://jaffnaheritage.blogspot.com/search/label/customs%29
6) Howell, D. (2013). The intangible cultural heritage of Wales: a need for safeguarding? .
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8) Manetsi, T. (2011.) Safeguarding intangible heritage in South Africa: a critique of the draft
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12) 20.07.2013].
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14) heritage. Retrieved from : http://whc.unesco.org/archive/convention-en.pdf.
15) Milles, R.H. (Eds.) Collection management for the 21st century: A handbook for librarians. London: The Greenwood Library Management Collection.
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17) Singh, R. (2004). Restructuring library and information science curriculum. LIS Education in India.
18) World Bank (2001) Historic Cities and Scared sites: Cultural Roots for Urban Futures. Washington DC: World Bank.
19) Ogden, S. (Ed.) (1994). Preservation of library & archival materials: A manual. Northeast Document Conservation Centre.

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FOURTH SEMESTER

Course - 4.1: KNOWLEDGE MANAGEMENT
Course Code:

Objectives:

- Enable the students learn the concepts and types of knowledge management.
- Enable the students to become proficient in the process of knowledge management practices in libraries and documentation centres
- Prepare the students' self confidence level to become efficient knowledge managers both in traditional and digital tracks.

Course Outcomes:

At the end of the learning of this paper, the students should be able

1. Acquired knowledge the concepts and types of knowledge management.
2. Learnt how to familiar the knowledge management practices and process in libraries.
3. Learnt in depth the process of Knowledge creation and capturing: Knowledge creation model – Capturing tacit knowledge
4. Gain the Knowledge in the codification and organization: Knowledge mapping, decision trees, decision tables
5. Learnt depth the Knowledge Management Tools and techniques elaborate discussion on Case studies about Corporate and Special Libraries
6. Well trained to create the library Portal, e-learning, Community of Practice, Storytelling.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	H	H	H	H	M	H
CO2	H	M	H	H	H	M	M	M
CO3	H	H	M	H	M	M	H	M
CO4	H	M	M	M	H	H	H	M
CO5	H	M	M	M	M	H	M	H
CO6	H	H	M	M	H	H	L	H

Unit –I

Knowledge Management: Concept and definitions – Need, Types; explicit and tacit Knowledge.

Unit-II

Knowledge Creation and Capturing: Knowledge creation model: Capturing tacit knowledge

Unit –III

Knowledge Codification: Knowledge Mapping, decision trees, decision tables. Case studies- Emerald Management Extra-Fortune 500 companies- Library visits

Unit - IV

Knowledge Management Tools and techniques: Knowledge Portal, e-learning, Community of Practice, Story telling.

Unit –V

Case studies Corporate and Special Libraries: MS Share Point, Mind Mapping, Citizen Science.

Selected Reading;

1. Michael, E.D. Koenig,Knowledge Management Lessons Learned, New Delhi, EssEss Publications,2008
2. Al-Hawamdeh, Suliman (2003). Knowledge Management : cultivating knowledge professionals. Oxford :Chandos Publ.
3. Arvidsson, Niklas (2000). Knowledge management in the Multinational enterprise. p.176-163 IN The Flexible firm : capability management in network organizations/edited by Julian
4. Holsapple, Clyde W. (ed.) (2003). Handbook on Knowledge Management 1 : Knowledge Matters. New Delhi : Springer
5. Holsapple, Clyde W. (ed.) (2003). Handbook on Knowledge Management 2: Knowledge Directions/(editor). New Delhi : Springer their identification; information seeking behavior

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4.2 INTERSHIP AND FIELD WORK PROJECT

(Internship and Valuation = 60 Core Course: 4.2 - Internship and Field Work Project Field work Report Marks]-Viva= 40 Marks)

Program:

- Internship [in-house] training for a specified period at s University, IIT, IIM, NIT and selected College and Research Libraries. The student will have to work in different sections of the allotted library as an internee for a period of 30 working days.

Objectives:

During the internship program, the student shall have to

- Work in a practical environment and to get hands on experience in handling online databases, handling library management software, practical work related to the library resources and services.
- Procurement of Library Materials-purchase policy (Book and periodicals both print and online)
- Process of subscription of journal and periodical both manual & online.
- Processing of Library Materials
- Shelving and Circulation Policy
- Corresponding Knowledge
- Extra knowledge

Course Outcomes:

At the end of the internship, the student should have

- Acquired complete professional skills-set matching the expectations of the employer
- Gained professional confidence with a high level knowledge and skills set in managing a library
- Gained skills to acclimatize in different library working environment
- Attain the knowledge about precise enunciation of user needs, information retrieval with precision both traditional and online documents, involve in participatory research with the library clientele, document delivery, user study reports, user education programming and service delivery and statistical report generation.
- Attain the knowledge of library budget preparation and presentation for both traditional and digital environment

- Attain the knowledge of the library technical works and classifying documents with traditional and digital environment; render effective reference service in both traditional and digital environment

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	H	H	H	H	M	H
CO2	H	M	H	H	H	H	M	M
CO3	H	H	M	H	M	M	M	M
CO4	H	M	M	M	H	M	H	M
CO5	H	M	M	M	M	H	M	H
CO6	H	M	H	M	H	L	H	H

Course 4.3: PROJECT AND DISSERTATION
Course Code:

Dissertation = 80 Marks [2 Reviews – 20+20=40 Marks, Report Valuation = 40 Marks]-Viva voce = 20 Marks

Course Outcome:

On the completion of the project work and report, the students should have

1. Obtained a thorough knowledge about overall research methodology, identifying a specific research area and an appropriate choice of topic, research design including sampling techniques, identifying the conceptual framework, data collection techniques and the style of bibliographic format.
2. Obtained a thorough knowledge about the emerging areas of research in LIS as well as the application subject domain beneficial to the academic community or the library professionals.
3. Developed the capability to identify the emerging problem facing library services or automation or digitization
4. Developed the capability to suggest optimum solution using open source software
5. Gained the knowledge for designing the research problem and methods of research types
6. Attained the knowledge of collecting review of literature and the procedures to compile a bibliography.
7. Learnt the research report writing skills and presentation skills, also the expertise to write the research articles in LIS area.

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	H	M	M	M	M
CO2	H	M	M	M	H	H	H	M
CO3	H	M	M	M	M	H	M	H
CO4	M	M	M	H	H	M	H	H
CO5	H	H	H	H	M	M	L	M
CO6	H	M	M	M	H	L	H	M

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Course - 4.4: ELECTIVE – III

(A). MARKETING OF INFORMATION PRODUCTS AND SERVICES

Course Code:

Objectives:

1. Enable the students learn the fundamentals of marketing, its principles and models.
2. Enable the students to comprehend the marketing strategies of information products and services

Course Outcome:

At the end of learning this paper, the students should have

1. A good exposure to the fundamentals of marketing principles and models, Information as a Resource: Economics of Information; Marketing concepts and Marketing Strategies.
2. Gained knowledge in marketing strategies of information products and services
3. Learnt about the Portfolio Management BCG Matrix Model; Product Market Matrix; Product Life Cycle, Pricing Information
4. Gained the knowledge of Marketing Mix; Kotler's Four C's; McCarthy's Four P's
5. Developed the capability to analyze in depth the Marketing Plan & Research: Market Segmentation, User Behavior and Adoption in the context of Marketing of Library Information products and services.
6. Gained knowledge regarding the Role of Information Industries

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	H	H	M
CO2	H	H	M	M	M	H	H	M
CO3	H	H	M	M	M	H	M	M
CO4	M	M	M	H	H	M	M	M
CO5	M	H	H	M	H	H	H	L
CO6	H	H	H	M	M	H	L	M

Unit-I

Information as a Resource: Economics of Information; concepts and Strategies

Unit-II

Portfolio Management BCG Matrix Model; Product Market Matrix; Product Life Cycle, Pricing Information

Unit-III

Marketing Mix; Kotler's Four C's; McCarthy's Four P's Case Studies-Anna Centenary Library, Chennai – Nannemara Public Library, Chennai- IIT Library Chennai- Publication Division ,Ministry of Information & Broadcasting Government of India

Unit-IV

Marketing Plan & Research: Market Segmentation, User Behavior and Adoption

Unit-V

Marketing of Information products and services. Information Industry and Social Media.

Selected Readings:

1. Chandraiah, I., Lincolin and Diana Shotton. Introducation to Marketing of Library and Information Services, New Delhi: Manglam Publications, 2009.
2. Beth C. Thomsett-Scott (Ed) Marketing with Social Media. Chicago: ALA Techsource, 2014.
3. Dinesh K. Gupta, Christie Koontz, Angels Massisimo, &RéjeanSavard (Eds.)Marketing library and information services: International perspectives. Munich: K.G. Saur, 2006.
4. Anderson A R. Advancing library marketing. Journal of Library Administration. 1(3), 1980, pp. 17 – 32.
5. Anderson, W. T. Jr., Bentley, C. C. and Sharpe, L K IV. Multi-dimensional marketing: Managerial, societal, philosophical. Austin TX: Austin Press 1976.
6. Bellardo, T. and Waldhart, T J. Marketing products and services in academic libraries, Libri. 27(3), 1977. pp. 181 – 194.
7. Dragon, A C. Marketing the library. Wilson library bulletin. 53, 1979, pp. 498 – 500.

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Course - 4.4: ELECTIVE – III
(B)INTELLECTUAL PROPERTY RIGHTS
Course Code:

Objectives:

1. To know the basics of IPR, Copyrights and Right to Information ACT.
2. To know the various National and International IPR Organization.

Course Outcomes:

At the end of learning this paper the students should have

1. Acquired a thorough knowledge about the fundamentals of IPR, Copyrights and Right to Information ACT, National and International IPR Organizations such as IPO and WIPO
2. Gained the knowledge about the Forms of IPR: Patents, Designs, Trademarks.
3. Attained the information of Knowledge Commission and Right to Information Act and features of Copyright Act.
4. Developed an awareness about copyright violations and their legal impact.
5. Earned the characteristic of various National and International IPR Organization.
6. Reveals the complete awareness of the Right to Information Act

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	M	H	H	M	H	M
CO2	H	M	M	H	M	M	M	H
CO3	H	H	H	H	M	M	M	L
CO4	H	H	M	M	M	M	H	H
CO5	H	H	M	H	H	M	H	M
CO6	H	M	M	H	M	M	L	H

Unit-I: IPR & Copy right, Concepts and Issues, Digital Information Rights.

Unit-II: Copy right act: Press and registration of News Paper, Delivery of Books

Unit-III: Knowledge Commission and Right to Information Act.

Unit-IV: Forms of IPR: Patents, Designs, Trademarks Recent Trends in Patent, Database, IPR and Online use of documents

Unit -V: National and International Organization: IPO, WIPO

Selected Readings:

1. The Copyright Act, 1957 (Act 14 of 1957) with The Copyright Rules, 1958 & neighbouring rights, Sahni, Ajay, Lal, Nathuni, b. 1897, India.

2. Austen, J. (1813), Pride and Prejudice, p. 1, available at: www.pemberley.com/janeinfo/ppv1n01.html
3. Stallman, R. (2001), ‘‘Science must ‘push copyright aside’’, available at: www.nature.com/ nature/debates/e-access/Articles/stallman.html.
4. The Law of Intellectual Property Rights: Edited by Shiv Sahai Singh, Deep & Deep Publications Issues of Intellectual Property Rights: Edited by Ramesh Chandra, Isha, 2006.
5. Modern Intellectual Property Law 3/e, Catherine Colston, Jonathan Galloway.
6. M. Ficsor, International Bureau of WIPO, Collective Management of Copyright and Related Rights, WIPO Pub. No. 855, 2002
7. S. Ono, Modernization of the Administration of Intellectual Property: Vision of a Futuristic System, WIPO/IP/MOW/00/8, October 2000
8. H. Olsson, Enforcement of Intellectual Property Rights (IPRs) in a Digital Environment, WIPO/IP/JU/THR/00/7, August 2000
9. International Bureau of WIPO, Licensing of Industrial Property Rights—Patents, WIPO/IPE/IR/93/9, June 1993
10. S. Alikhan, Socio-Economic Benefits of Intellectual Property Protection in Developing Countries, WIPO Pub. No. 454, 2000.
11. P. Sirinelli, Exceptions and Limits to Copyright and Neighboring Rights, WCT-WPPT/IMP/1, December 1999 .
12. International Bureau of WIPO, Copyright and Related Rights in the Digital Era, WIPO/CR/JKT/02/4, April 2002

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Course - 4.5: ELECTIVE – IV

(A) INFORMETRICS AND SCIENTOMETRICS
Course Code:

Objectives:

- Enable the students learn the concept, theories, laws and parameters of bibliometrics.
- Enable the students develop a knowledge about the citation analysis and operation research
- Enable the students in the measurement of research performance of literature output in a specific field or subject, institutions or group of scientists in a particular domain or a nation.
- Enable the students to use the bibliometric techniques to rank academic institutions on the basis of their research publications during a period of time.

Course Outcomes:

At the end of the learning of this paper, the students should have

1. Developed a thorough knowledge about the significance and theories of citations and their analysis, citation index as well as various faomulae, impact factor of individual scholars and journals, bibliometric laws, theories and metric indicators.
2. Developed the capability of undertaking the citation analysis and operation research
3. Attain the knowledge to identify the comparative research performance of research literature output in a specific field or single subject area, individual nation or the development of research trend in a particular field.
4. Learnt the basic metric studies in Librarmetrics, Informetrics , Concept, Bliometrics, Scientometrics, Webometrics, Altmetrics
5. Gained the knowledge Theory and Laws of bibliometrics ; Zipf's law, Lotka's Law, Bradford's Law. Price Theory
6. Gained knowledge to measure applying Quantitative and Qualitative metric techniques such as Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	M	H	M	M	H	M	M
CO2	H	M	H	H	M	H	M	H
CO3	M	H	M	M	M	H	H	H
CO4	M	H	M	H	M	M	H	L
CO5	H	H	M	H	M	M	M	M
CO6	H	M	M	M	H	L	H	M

Unit -I

Bibliometricsand Scientometric: Concept, definition, evolution and applications in Libraries.

Unit –II

Theory and Laws - Zipf's law, Lotka's Law, Bradford's Law. Price Theory. webometric tools. Info graphics-ALEXA

Unit – III

Quantitative and Qualitative techniques: Types, Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis.

Unit –IV

Citation Theory and Analysis; Definition, Theory of citing, different forms of citations, Bibliographic Coupling, Age of citation – citation counts , Self –citation – Citation Index –Impact Factor, SNIP, SJR, Citescore, H Index and I10 Index

Unit – V

Emerging Trends: Webometrics, Altmetrics, Analysis Tools (Hitscite, Bibexcel, PAJEK, VOS Viewer and Biblioshiny)

Selected Readings:

1. Belikov, A.V.; Belikov, V.V. (2015). "A citation-based, author- and age-normalized, logarithmic index for evaluation of individual researchers independently of publication counts". F1000Research 4: 884. doi:10.12688/f1000research.7070.1
2. Braam, Robert R. (1991). Mapping of science: Foci of intellectual interest in scientific literature. DSWO Press. ISBN 90-6695-049-8.
3. *De Bellis, Nicola (2009).* Bibliometrics and citation analysis: from the Science citation index to cybermetrics. *Scarecrow Press. p. 417.* ISBN 0-8108-6713-3.
4. Egghe, Leo; Rousseau, Ronald (1990). Introduction to Informetrics: Quantitative Methods in Library, Documentation, and Information Science. Elsevier. ISBN 978-0-444-88493-0.
5. Glänzel, W. (2003). Bibliometrics as a research field: A course on theory and application of bibliometric indicators.1.
6. Hamdaqa, M.; A Hamou-Lhadj (2009). Citation Analysis: An Approach for Facilitating the Understanding and the Analysis of Regulatory Compliance Documents. Las Vegas, NV: IEEE. pp. 278–283. doi:10.1109/ITNG.2009.161. ISBN 978-1-4244-3770-2.
7. Leydesdorff, L. A. (2001). The challenge of scientometrics: The development, measurement, and self-organization of scientific communications (2nd ed.). Boca Raton, FL: Universal Publishers.

8. Noyons, E. C. M. (1999). Bibliometric mapping as a science policy and research management tool. Leiden: DSWO Press, University of Leiden.
9. Wilson, Concepción S. (1999). "Informetrics". Annual Review of Information Science and Technology (Medford, NJ: Information Today) 34: 107–247
10. Wolfram, D. (2003). Applied Informetrics for Information Retrieval Research. Libraries Unlimited.

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Course - 4.5: ELECTIVE – IV
(B)CORPORATE INFORMATION SYSTEM
Course Code:

Objectives:

- Enable the students to learn the corporate information culture and library related facets.
- Enable the students learn about the procurement of information and collection building in business school libraries
- Enable the students learn various social media networks, and communication types and styles
- Enable the students develop online communication skills to handle and promote publishing media both print and digital

Course Outcomes:

1. Aware knowledge to the concepts of Industrial and corporate information system
2. Elaborate discussion how to understand industrial and corporate system, corporate user needs and thus to design corporate library services
3. Acquired sufficient knowledge about the national information systems and their functions
4. Acquire knowledge to know the difference kinds of information systems between corporate, government and academics
5. Acquired the knowledge of Intellectual Property issues; Patents as a source of Industrial Information; Information systems for patents
6. Discussed on Corporate Users; Information needs, Types of information services for corporate sector

Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	H	H	M	H	M	M	M
CO2	H	H	M	M	M	H	M	H
CO3	M	H	M	M	M	L	H	M
CO4	M	M	H	H	H	H	M	H
CO5	H	H	M	H	M	M	L	M
CO6	H	M	M	M	H	M	H	M

Unit-I

Introduction- Definition, Need, Nature and Functions of corporate Libraries and Information centers. Learning resources, Types of corporate Libraries and types of users and their Information need. Business school Libraries case analysis.

Unit -II

Collection Development: Objectives and Purpose. Advantages of collection development
planning, Implementation and evaluation. Book selection principles and policies, Procedures and problems. Information searching and access. Use of various search techniques

Unit-III

Web based Information services, Corporate librarian 2.0 and Social networks-Blogs, Twitters, Face book, Google buzz etc. for communication. Information analysis and consolidation.Packaging and delivery.

Unit-IV

Corporate communications systems and tools-news letter. Bulletins, preparing for organizing events, Social talks, Conference, News briefs, Press releases, Editing, Reporting. Knowledge management in corporate Libraries.

Unit -V

Intellectual Property issues; Patents as a source of Industrial Information; Information systems for patents Case Study- Philips, Samsung, TCS, Infosys

Selected Readings:

1. Bopp, R E., & Smith, L. C. (2011). Reference and Information services: An introduction, 4th Ed..Santa Barbara, Calif.: Libraries Unlimited.
2. Campbell, M. J(1982). Business Information services: Some aspects of structure, organisation andproblems. London: Clive Bingley
3. Gunningham, N. (2009). Corporate environmental responsibility. Farnham, Surrey, England:Ashgate.
4. Malone, S. A. (2003). How to set up and manage a corporate learning centre, 2. Ed..Aldershot,Hampshire, England: Gower.
5. Matarazzo, J. M. (1999). Knowledge and special Libraries. Boston: Butterworth-Heinemann.
6. Mitchell, L. E. (2009). Corporate governance. Farnham, Surrey, England: Ashgate.
7. Moss, R. W (2003). Strauss's handbook of business Information: A guide for librarians, students andresearchers. 2nd Ed. Santa Barbara, Calif.: Libraries Unlimited.

8. Taylor, A. and Farrel, S.(1994). Information management for business. London: ASLIB.
9. Thwaite, J. H.(1990). The Business Information maze: An essential guide. London: ASLIB.
10. Zaqorsky, J. L(2002). Business Information: Finding and using data in the digital age. McGraw- Hill/Irwin.
11. Bates, M. E., & Basch, R.(2003).Building and running a successful research business: A guide for theindependent Information professional. Information Today, Inc.
12. Lavin, M. R., (2004). Business Information: How to Find It, How to Use It. 3rd Ed. Oryx Press.
13. Greasley, A. etal..(2002). Business Information systems: Technology, development and managementfor the E-Business. Financial Times Management.
14. Daniells, L. M.,(1993). Business Information sources. 3rd Ed. University of California Press.

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Mapping with PSO:

COs	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
CO1	H	L	L	L	L	L	L	H
CO2	M	L	H	M	L	M	L	H
CO3	H	L	L	M	L	L	L	M
CO4	M	L	L	M	L	H	L	H
CO5	H	L	L	M	L	L	L	H
CO6	H	L	L	L	H	L	L	L

Unit 1 : Content Designation : Role of content designation in bibliographic data exchange; Content Designation Standards- Physical Standards (ISO-2709, Z 39.2, MARC-XML etc.); Content Designation and Logical Standards (ISBDs, AACR, FRBR, FRAD, FRSAD etc.);Content Designation Standards – Framework Standards (CCF, UNIMARC, MARC-21) RDA

Unit 2: Bibliographic Data Formats : Evolution of Principles for Bibliographic Description; Development of Codes for Bibliographic Record;Standards and Formats for Bibliographic Record; ISBD, ISO 2709, CCF, UNIMARC, MARC 21, etc.; Comparison of CCF, UNIMARC and MARC-21; Distributed Cataloguing (Z 39.50 protocols and services) BIBFRAME

Unit 3:Authority Data Formats : Scope, objectives and use of authority data formats; Interaction of Authority list with library catalogue; MARC-21 Authority Data Format; FRAD and FRSAD model

Unit 4 : Generic and Domain-specific Metadata Schemas: Metadata: Use, functions, models and best practice guidelines; Generic Metadata Schema: Dublin Core; Metadata Schema using RDF and XML;

Unit 5

Learning Object Domains: GEMS, IEEE-LOM, CanCore; ETD Domain: ETDMS, UKETD, Shodhganga; Other domains: Geographical Data, Science Data, Music, Image, News Items, Publishing etc.

Reading Lists

Resource Description

CHAN (Lois Moi). Cataloguing and classification: an introduction. 1985. McGraw Hill; New York.

COATES (E J). Subject catalogues: heading and structures. 1960. Library Associations; London.

CUTTER (Charles A). Rules for a dictionary catalogue. Library Association;London.

DRTC. Seminar on cataloguing. 1970. DRTC; Bangalore.

HUNTER (E J) and BAKEWELL (KGB). Cataloguing. 1990. Clive Bingley; London.

HUNTER (E J). Computerized cataloguing. 1990. Clive Bingley; London.

MANN (Margaret). Introduction to cataloguing and classification of books. 1943. 2nd ed. ALA; Chicago.

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13. (a) Explain the Database Structure?

(Or)

(b) Describe the Web Server?

14. (a)What is software and discuss various types of softwares?

(Or)

(B) What is browser and discuss the categories of browsers?

15. (a) Explain the different types of INTERNET connectivity?

(Or)

(b)Describe various types of Web Resources?

PART – C **(5 x 8 = 40)**

Answer ALL questions, Choosing either (a) Or (b)

16. (a)What are the I/O Devices?

(Or)

(b) Explain the Components of Information Technology

17. (a) Describe different types of System Software?

(Or)

(b) Define search Engine and Explain the different types of search Engine?

18. (a) What is Database? What are the functions of Database management system?

(Or)

(b) What is Automation? Explain need and advantages of Library Automation?

19 (a) List out the advantages of CCF

(Or)

(b) Write briefly on MARC-21

20. (a) Explain the Components of Information Technology

(Or)

(b) Describe the types of Search Engines?