CURRICULUM OF M.LIB.I.Sc. 2021-22

MASTER OF LIBRARY AND INFORMATION SCIENCE (M.LIB.I.Sc.) (Autonomous)

CURRICULUM

(Revised with effect from 2021-2022 onwards)



DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
BHARATHIDASAN UNIVERSITY
TIRUCHIRAPPALLI 620024, INDIA

REGULATIONS FOR

M.Lib.I.Sc. (2 YEARS) (UNDER AUTONOMY)

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 / Practical's 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 Post Graduate (PG) integrated (two years) course since 2007.

Eligibility for admission:

A pass in any degree or as approved by AIU / UGC / any recognized University and also eligible for the 10+, 2+, 3+ / 10+2+4.

Duration of the course:

The duration of PG programme is two years. Each year shall consist 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). Lateral Entry

Course Fees:

Each student admitted to the Master of Library and Information Science degree course will pay Tuition, Lab, Special, Stationery, and computer and other fees as decided by the University from time to time. The student will have to pay additionally the 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 (2007-2008) **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 belated 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

Section A: 10 Questions x 2 Mark = 20 Marks (Two questions from each unit)

Section B: 5 Questions x 5 Marks = 25 Marks (Internal Choice and one set of questions from each unit)

Section C: 3 Questions x 10 Marks = 30 Marks
(Answer any three out of 5 questions and one question 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 tests out of 3 - 15 Marks
Seminar - 5 Marks
Assignments - 5 Marks

Total - 25 Marks

Practical

Continuous performance - 15 Marks
Model practical - 10 Marks
Record - 10 Marks
Viva - 5 Marks

Total - 40 Marks

- 40 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 within 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:

$$\textbf{GPA} = \frac{\displaystyle\sum_{i=1}^{n} C_{i} G_{i}}{\displaystyle\sum_{i=1}^{n} C_{i} M_{i}} = \frac{\displaystyle\sum_{i=1}^{n} C_{i} M_{i}}{\displaystyle\sum_{i=1}^{n} C_{i}}$$
 WAM
$$= \frac{\displaystyle\sum_{i=1}^{n} C_{i} M_{i}}{\displaystyle\sum_{i=1}^{n} C_{i}}$$

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	В
50-55	5.5	С
Below 50	0	F

FINAL RESULT - Table 2

CGPA	Letter Grade	Classification of Final Result
9.51 and above	S+	First Class Examples
9.01 - 9.50	S	First Class – Exemplary
8.51 - 9.00	D++	
8.01 - 8.50	D+	First Class - Distinction
7.51 - 8.00	D	
7.01 - 7.50	A++	
6.51 - 7.00	A+	First Class
6.01 - 6.50	A	
5.51 - 6.00	В	Second Class
5.00 - 5.50	C	Second Class
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 Bharathidasan University, Tiruchirappalli – 620 024

Master of Library and Information Science Courses of Study and the Scheme of Examinations

Courses of Study and the Scheme of Examinations
2 Years (4 Semesters) Programme, Choice Based Credit System

		Paper	Inst. Ex		Marks		Total	
	Subject code	т арст	Hours / Week	Hours	Credit	Int.	Ext.	
r-I	P21MLS1	Core Course: 1.1 – Information, Communication and Knowledge Society	6	3	4	25	75	100
	P21MLS2A	Core Course:1.2 – Information Resources	6	3	4	25	75	100
	P21MLS2B	Or Open Educational Resources		2	4	25	75	100
Semester- I	P21MLS3	Core Course: 1.3 – Knowledge Organization (Theory) - Classification and Cataloguing	6	3	4	25	75	100
Ser	P21MLS4P	Core Course: 1.4 – Knowledge Organization (Practice - I) - DDC/CC	6	3	4	40	60	100
	P21MLS5	Core Course:1.5 –Information Technology in Libraries (Theory)	6	3	4	25	75	100
	P21VAC1*	Value Added Course:1.6 Quality Assurance in Libraries	3	3	2	25	75	100
	P21MLS6	Core Course: 2.1 – Management of Library and Information Centres	6	3	4	25	75	100
. II	P21MLS7A P21MLS7B	Core Course: 2.2 (A)Information Systems and Services (B) Academic and Research Librarianship	6	3	4	25	75	100
	P21MLS8	Core Course –2.3 Information Processing and Retrieval Systems	6	3	4	25	75	100
Semester-	P21MLS9P	Core Course: 2.4 – Knowledge Organization (Practice – II): – AACR-II and UDC	6	3	4	40	60	100
Sei	P21MLS10A P21MLS10B	2.5 – Elective (any one) A. Soft Skills B. Information Literacy	6	3	4	25	75	100
	P21VAC2*	Value Added Course: 2.6 - Research Ethics and Metrics	3	3	2	25	75	100
	P21MLS11A	Core Course: 3.1- Research Methods and Techniques	6	3	4	25	75	100
	P21MLS11B	or Scholarly Communications						
Ш	P21MLS12A	Core Course:	6	3	4	25	75	100
	P21MLS12B	3.2 – Digital Library and Web Technology Or						
er-		Swayam course offered during the semester)						
Semester- III	P21MLS13P	Core Course: 3.3 Information Technology in Libraries: Practice (Automation, Repositories, CMS)	6	3	4	40	60	100

		Elective course: 3.4	6	3	4	25	75	100
	P21MLS14A	a. Web based Information Services (or)	U	3	7	23	75	100
	P21MLS14B	b. E – Publishing						
	P21MLS14C	c. EDC Paper offered by Other						
	121WEST4C	Departments						
	P21MLS15A	Elective course: 3.5	6	3	4	25	75	100
	P21MLS15B	a. Green Library Technology (or)						
		b. Electronic Resource Management						
		System						
	P21VAC3*	Value Added Course :	3	3	2	25	75	100
		3.6: - Heritage Documentation						
	P21MLS16	Core Course: 4.1 – Knowledge Management	6	3	4	25	75	100
	P21MLS17	Core Course: 4.2 - Internship and Field Work	6	-	8	-	-	100
		Project						
		(Internship and Field work Report Valuation = 60						
		Marks]-Viva= 40 Marks)						
		Core Course: 4.3 Project and Dissertation = 80	-	-	10	-	-	100
IV	P21MLS18P	Marks						
-		Viva= 20 Marks						
ter		Elective course: 4.4	6	3	4	25	75	100
Semester-	P21MLS19A	a. Marketing of Information Products and						
Sen		Services (or)						
	P21MLS19B	b. Intellectual Property Rights						
	DOAD ST COOL	777 47		2	4	25		100
	P21MLS20A	Elective course: 4.5	6	3	4	25	75	100
	P21MLS20B	a. Informetrics and Scientometrics (or)						
	DOATE CAN	b. Corporate Information System		2	2	25	7.5	100
	P21VAC4*	Value Added Course :	3	3	2	25	75	100
		4.6:- MOOC (Massive Open Online Course)	m-4 1	 C 124	(90+8)			2400
		Total Credits						2400

(Applicable to Candidates admitted from the Academic Year 2021 onwards)

^{*}Value added course (optional are not to be calculated for CGPA)

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 officers at Higher Education Institutions (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 such as PGDLKM.
- ➤ 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 DOLIS: BHARTHIDASAN 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 DOLIS/BDU 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 Information Communication Technology (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, and Information Analyst at various organizations besides research wings of the IT industry by acquiring technology based courses such as PGDLKM.
- 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: P21MLS1

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.

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 Cyclegeneration. 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; Copyright Act; Intellectual Property Rights –Right to Information Act; Tamilnadu 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.

Unit-VI

Forms of Mobile communication- Case Study

- 1. Badan (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 services for 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.
- 18. Rout, R.K. Ed. (1999) Library legislation in India. New Delhi: Reliance.
- 19. Rubin, Richard E. Foundations of Library and Information Science. Neal Schuman Publishers, Inc., 100 Varick St., New York, NY 10013, 1998.
- 20. Sadhu, S.N. &Saraf, B.N. (1967). Library legislation in India. Delhi: Sagar, 1967.
- 21. Sharma, P.S.K.(1992). Library and society. 2 Ed. Delhi: ESS ESS.
- 22. Stieg, M.F. Change and Challenge in Library and Information Science Education (ALA, 1991).
- 23. Surendra S. &Sonal Singh. Ed. (2002).Library, Information and Science and society. New Delhi:ESS ESS.
- 24. Velaga V. & Madhusudhan, M. (2006). Public Library legislation in the new millennium: NewModel Public Library Acts for the Union. Bookwell.

- 25. Venkatappaiah, V. (1990). Indian Library legislation. 2nd Vol. New Delhi: Daya.
- 26. Vickery, A. & Vickery, B. (1988): Information Science Theory and Practice, London: Bowker-Saur.
- 27. Budd, John (2001), Knowledge and Knowing in Library and Information Science: APhilosophical Framework, Scarecrow Press.
- 28. Henderson, Kathrine A. (2009), Case Studies in Library and Information Science Ethics, McFarland.
- 29. Prashar, Ram Gopal (1997), Library and Information Science: Information science, Information technology and its application, Concept Publishing Company.
- 30. Rubin, Richard (2010), Foundations of Library and Information Science, Neal-Schuman
 Publishers, Incorporated.

Learning Outcomes:

After completion of the learning curriculum of this course, students will be able to

- **1.** Acquired the knowledge on the concepts of information and characteristics of library systems, and Information centres and their roles and functions
- 2. Understood the communication channels and barriers to communication
- **3.** Visualized the information science as a discipline.
- **4.** Understood the importance of information in the context of social, political, cultural, economic and industrial environments.
- **5.** Learnt the S.R.Ranganathan's five laws and its implications on library and society
- **6.** Familiarized with the roles and functions of Library associations at the state, national and international levels.
- **7.** Understood the librarians' professional ethics, qualities and role in society at different levels.
- **8.** Learnt the need for library legislation, library cess and functioning public library system

Course - 1.2 (A): INFORMATION RESOURCES

Course Code: P21MLS2A

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

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 and BNB, List of Serials - Union Catalogues: OCLC, INDCAT, NUCSSI, Indexing and Abstracting sources; LISA, LISTA, Indian Science Abstracts, and Engineering Village 2.

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

Unit-VI

Recent trends on Databases: India and US, ETD: Shodhganga, NDLI, PubMed.

- 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 Sudatta Chowdhury: 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
- 12. http://isa.niscair.res.in/
- 13. www.oclc.org
- 14. https://indcat.inflibnet.ac.in/
- 15. http://nucssi.niscair.res.in/
- 16. https://ndl.iitkgp.ac.in/
- 17. https://shodhganga.inflibnet.ac.in/

Learning Outcome

After completion of the learning curriculum of this course, students will be able to

- **1.** Familiarized with the resources on academic, Research & Development 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.** Acquired skills on searching right information from various reference sources.
- **6.** Gained evaluation capabilities of information resources in general and for libraries in particular.
- **7.** Orientation on the gamut of traditional as well as digital and web enabled scholarly resources.
- **8.** Learnt the skills of exploring the databases and web portals.

Course - 1. 2 (B): OPEN EDUCATIONAL RESOURCES Course Code: P21MLS2B

Objectives

- 1. To orient the students on Open Education Resources
- 2. To help students familiarize with open access initiatives of scholarly resources
- 3. To train on the exploration and use of open resources: courseware, full text journals database, ETDs, Patents, standards and multimedia resources

Unit -I

Open Educational Resources: Definition and concept; Types of OER, OER Policies, Licensing, difference between Proprietary and Open source, Open Vs Free resources.

Unit-II

E-Journals: DOAJ, OAJSE, Indian Academy of Science, High wire, NISCAIR Online Periodicals, PLOS journals, Repository E-Books: DOAB, Audio Books, Audible Books, National Digital Library of India (NDL), OER Common, Project Gutenberg, Forgottenbooks.com, Utah Open Textbook, E-Pustakalaya-open access-commercial publishers

Unit – III

Courseware: National and International Initiatives; Sakshat Portal, MIT open Courseware, NPTEL, CEDT, SciGate, Khan Academy, MERLOT, NIOS, e-GyanKosh, e-PGPathshala and Swayam.

Unit- IV

Institutional Repository: Open DOAR, ROAR, OAJSE, National Repository of Open Educational Resources (NROER).

Unit-V

Development of Open educational resources in India- National Digital Library of India, NCERT, IGNOU, NSDL, Tamilnadu Digital Library, TKDL – Traditional Knowledge Digital Library.

Unit-VI

Case Study - National and International Repositories.

Web Links

- 1. https://www.oercommons.org/
- 2. https://doaj.org/
- 3. http://www.oajse.com/
- 4. http://www.ias.ac.in/
- 5. http://nopr.niscair.res.in/
- 6. http://www.doabooks.org/
- 7. http://www.olenepal.org/e-pustakalaya/
- 8. http://www.sakshat.ac.in/
- 9. http://nptel.ac.in/
- 10. https://www.merlot.org/merlot/index.html

Learning outcome

After completion of the learning curriculum of this course, students will be able to

- 1. Acquired knowledge on open access policy and its impact on academic community
- 2. Gained knowledge and academic participation in scholarly open access information systems
- 3. Attained the capabilities of exploring international and national scholarly open access databases
- 4. Acquired knowledge on academic participation with open access initiatives
- 5. Acquired knowledge about information literacy of scholarly open access information systems at national and international
- 6. Become members of national and international digital library initiatives
- 7. Understood the importance of heritage and cultural documentation
- 8. Learnt the skills on preparation of scholarly content and contribute to the public domain.



Course - 1.3: KNOWLEDGE ORGANIZATION (THEORY) - CLASSIFICATION AND CATALOGUING Course Code: P21MLS3

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.

Unit - I

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

Unit-II

General theory of Library Classification: Devices of Zone Analysis; 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; BSO - the Broad System of Ordering.

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.

Unit-VI

Trends in classification: Automatic classification, Classification in online system and Web; Knowledge Organization for Digital Libraries; Ontologies; Advancement study for LOC, Online DDC,

- 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.
- 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. 7 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). London: 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.

Course Outcome

After completion of the learning curriculum of this course, students will be able to

- 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
- 7. Gained the knowledge of SLSH (Sears list of Subject Headings)
- 8. Gained the knowledge about the theoretical background to cataloguing of different types of documents including print and non print, electronic and micro documents.

Course - 1.4: KNOWLEDGE ORGANIZATIONS - I (Practice): CLASSIFICATION – DDC / CC

Course Code: P21MLS4P

Objective:

To help students practice library classification of documents by assigning the call number using CC and DDC schedules.

Exercise

Classification of titles of Books and periodicals according to CC (6th Edition)
Classification of titles of Books and periodicals according to DDC (22nd Edition)

Selected Readings

- 1. Mitchell, Joan S (2003). Dewey decimal classification and Relative Index. 22nd ed. 4 Vol. New York: Forest Press.
- 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. 6 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.

Learning Outcome

After completion of the learning curriculum of this course, students will be able to

- 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. Attained knowledge 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

Course - 1.5: Information Technology in Libraries Course Code: P21MLS5

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.

Unit -I

Information Technology: Concept, Definition and Components, Types of Computers; 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. Linked Data, Data Harvesting. 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

Data Security: Network Security, Firewalls, Cryptographic Techniques, Anti-virus software, Anti spyware, Intrusion Detection System.

Unit –V

Office Management tools: Word Processing: fixing footnotes and endnotes, Spreadsheet, Presentation Software and Access.

Unit-VI

Recent trends in Database Management in Libraries, Latest development of Mobile Apps in Libraries

- 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)

Learning Outcome

After completion of the learning curriculum of this course, students will be able to

- 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. Familiarized the various ICT practices applied in Library services
- 7. Attain skills know about various Library Automation Software's: WINISIS, LIBSYS, KOHA and how to implement for library functions
- 8. Analyzed the knowledge of Open source Digital Library Software's: Greenstone and DSpace
- 9. Learnt about the knowledge of Web Technologies and how to create for library website and personal web blogs
- 10. Known the knowledge of creating Weblog; Website; Mobile Applications
- 11. Got well trained on Web Technologies: Weblog; Website; Mobile Applications
- 12. Learnt depth knowledge on Digital Library Software's: Greenstone and DSpace
- 13. Acquired the knowledge of creating institutional repositories for library as well as personal

Course - 1.6: Quality Assurance in Libraries Course Code: P21VAC1

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.

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; NIRF; Quality Assurance and Academic Libraries; Quality Assurance Issues in Libraries; Implementation of Quality Assurance and IT in Academic Libraries.

UNIT-V

Library Standards International - Trainers Higher Education (THE) Ranking, and Quindar Scanning System (QSS) World Ranking.

UNIT-VI

Case studies on best practices in libraries.

- 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.
- 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.

Learning outcome

After completion of the learning curriculum of this course, students will be able to

- Understood the academic quality parameters of NAAC, NBA, NIRF, and institutional ranking parameters.
- Gained knowledge to use the quality assurance strategies.
- Learnt to determine challenges and innovativeness related to quality assurance
- attained to map out quality indicators used to measure the quality in libraries.

SEMESTER -II

Course - 2.1: MANAGEMENT OF LIBRARY AND INFORMATION CENTRES - Course Code: P21MLS6

Objectives:

- 1. To know the Concept of Finance Management and its Evolution
- 2. To understand the various managerial operations of Library and Information Centers
- 3. To apply the relevant management techniques in modern Library and Information Centers
- 4. To impart the techniques of library routines both physical and online environment
- 5. To teach Financial Management and Human Resource Management practices in libraries.

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.

Unit-VI

Case Study- Bharathidasan University, National Institute of Technology, Tiruchirappalli, Indian Institute of Management, Tiruchirappalli and St. Joseph College, (Acquisition, Technical Processing, Circulation and Periodicals)

- 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: ShriSaiPrintographers, 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.

Learning outcome:

After completion of the learning curriculum of this course, students will be able to

- 1. Acquired knowledge on the concepts of financial management.
- 2. Acquired knowledge on historical development of management as a science.
- 3. Understood the procedures, rules and the practices of library routines
- 4. Understood the system of charging and discharging methods in library services
- 5. Acquired knowledge on HRD, Budget, planning and their relationship to the library environment
- 6. Acquired traits on library collection development of both print and electronic resources

Course - 2.2 (A) INFORMATION SYSTEMS AND SERVICES Course Code: P21MLS7A

Objectives:

- 1. To help the students learn the various information systems and their functioning.
- 2. To train the students on various Library and Information services in different library environments.
- 3. To give exposure to Online research information systems in various subjects
- 4. To make aware on existing National Information Sytems

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 in India; ROAR, DOAR, SHARPA-ROMIO; Web OPAC, EDDS, Citation and Indexing Services; Digital Reference Services.

Unit -IV

Global Information System: INIS, AGRIS, INSPEC, MEDLARS, BIOSIS, ERIC, Patent Information System (PIS), Biotechnology Information System (BIS).

National Information Systems; NISCAIR, DESIDOC, SENDOC, ENVIS, INFLIBNET, DELNET, NICNET, ERNET, National Knowledge Network (NKN), Biotechnology Information System Network

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, SENDOC.

Unit-VI

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.

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. Neelameghan A. and Prasad, K.N. Eds. (2005). Information systems and services in India. Bangalore: SRELS.
- 12. PrashantKaushik Library Information Services and Systems Anmol Publisher, New Delhi, 2006,
- 13. Sewa Singh. Handbook of International sources on reference and information, 2001
- 14. Sherman, C. and Price, G. The invisible web: uncovering Information Sources Search engines can't see. 2001
- 15. SunithaAsija(1998). Documentation services in India: A review of some selected documentationcentres. New Delhi: Academic Publications.
- 16. U.S. Jadhav and Suresh Jange Library and Information Sources and Services Regency Publications A Divison of Astral International (P) Ltd. New Delhi, 2013
- 17. Vickery, B.(1987). Information systems. London: Butterworths

Learning outcome

After completion of the learning curriculum of this course, students will be able to

- 1. Analyzed the various information systems and their functioning.
- 2. Attained knowledge how to teach and train on the various Library and Information services in different library
- 3. Discussed the national and international information systems and services in library
- 4. Discussed to get idea about consortia in different levels and different areas.
- 5. Attained the knowledge on various sources and services provided by library
- 6. Discussed elaborately the Digital Information Services; Institutional Repository, Web OPAC, Online DDS, Citation and
- 7. Attained the knowledge of Library consortia-India; UGC-INFONET, INDEST, N-LIST;
- 8. Gained knowledge of Library Networks: INFLIBNET, DELNET, ERNET.

Course - 2.2 (B) ACADEMIC AND RESEARCH LIBRARIANSHIP Course Code: P21MLS7B

Objectives

- 1. To learn the responsibility of libraries to society, academic and R & D
- 2. To learn about the Academic library and information system
- 3. To learn the ways of preservation and conservation
- **4.** To learn the planning and management of managing library.
- **5.** To learn the responsibility of information literacy program

Unit – I

Role and Responsibility of Academic Libraries – Growth of University and College Libraries in India – Role of UGC in Academic library development.

Unit – II

Academic Libraries: School Library- College Library- University Library, Collection Development- Technical Processing – Services – Preservation and Conservation.

Unit – III

Library Authority and Library Committee in university and college libraries – Centralization and Decentralization – Budgeting- Statistics – Files and Records.

Unit – IV

Planning and Management: Resource Sharing – Manpower and Staff Formula – University and College Libraries Authorities.

Unit - V

Information Literacy Programme in Academic Libraries – Public Relations in Academic Libraries.

Unit-VI

Case Study- Library Visit: British Council Library, Indian Institute of Technology Madras, Bharathidasan University, National Institute of Technology, Indian Institute of Management, St Joseph College.

- 1. Baker (D), Ed.:Resource management in academic libraries. London: Library Asso., 1997.
- 2. Baker David and Hutchins John. Resource management in Academic Libraries. London: LA, 1995
- 3. Biddiscombe (R.), Ed.: The end-user revolution. London: Library Association, 1996.
- 4. Biddle S F. Planning the University Library. Westport: Greenwood Press, 1992
- 5. Brophy (P.): The academic library. 2nd ed. London: Facet, 2005.

- 6. Bryan Harrison. University Libraries in Britain. London: Clive-Bingley, 1968
- 7. Chapman (L.): Managing acquisitions in library and info. Ser. Rev. ed. London: Facet, 2004.
- 8. DattaNarender. Academic status for University and College Librarians in India. Delhi: IBB, 1986
- 9. Deshapande K S. University Library System in India. Varanasi: IBC, 1985
- 10. Durrey Peter. Staff Management in University and College Libraries. Oxford:Pergoman, 1976
- 11. Fleming Hugh. User Education in Academic Libraries. London: LA, 1990
- 12. Fussler H H (Ed). Functions of the Library in Modern College. Chicago: University of Chicago, 1967
- 13. Gelfand (M.A.): University libraries for developing countries. Paris: Unesco, 1968.
- 14. Gelfand M A. University Libraries for Developing Countries. Paris: UNESCO, 1968
- 15. Jenkins C and Morley C. Collection Management in Academic Libraries. Gower,1991
- 16. Jordon (P.): The academic library and its users. London: Gower, 1998.
- 17. Line (M.B.), Ed.: Academic library management. London: Library Association, 1990.
- 18. Lyle (G.R.): Administration of the college library. 2nd ed. New York: Wilson, 1974.
- 19. Lyle G R. College Library Publicity. New Delhi: Reliance, 1986
- 20. Mayer R M. Strategic Management for Academic Libraries: A Handbook. Greenwood1993
- 21. Metcalf (KD): Planning academic and research library building. NewYork: McGrawHill, 1965.
- 22. Rajwantsingh University Library Buildings in India. Delhi: Academic, 1984
- 23. Ranganathan S R. School and College Libraries. Madras: MLA, 1942
- 24. UGC (India). Library Committee Report (1957) University and College Libraries. New Delhi: UGC, 1967
- 25. UGC: Great Britain. Library Committee. 1963. Report. London: HMSO, 1967
- 26. Viswanathan C G. University Libraries of India (1857-1970). New Delhi: Author,1972
- 27. White Carl M. Survey of the Delhi University Library. Delhi: University of Delhi,1965

Learning outcome

At After completion of the learning curriculum of this course, students will be able to

- 1. Understood the different levels of academic library system and their growth and development phases in India besides the role of the UGC.
- 2. Acquired knowledge about the academic library governing body, financial management, records and their maintenance.
- 3. Exposured to the principles of scientific management including Human resource.
- 4. Attained knowledge about information literacy programs and Public relations management.

Course -2.3: INFORMATION PROCESSING AND RETRIEVAL

SYSTEMS Course Code: P21MLS8

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

Unit -I

Information Retrieval System – concepts – Tools and Techniques

Unit – II

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-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.

Unit-VI

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

- 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.

Learning Outcomes

After completion of the learning curriculum of this course, students will be able to

- 1. Learnt developed skills of information search strategies
- 2. Familiarize with various Metadata Standards, and web 2.0
- 3. Discussed the Digital Object identifiers and Mark up languages
- 4. Familiarize deep knowledge with various indexing systems
- 5. Emphasized the types of information retrieval models
- 6. Learned the knowledge of indexing systems and thesaurus and vocabulary control
- 7. Learned the knowledge of digital resource organization
- 8. Attained the knowledge of indexing and classifying the library materials

Course - 2.4: KNOWLEDGE ORGANIZATION PRACTICE-II: (AACR - II and UDC) Course Code: P21MLS9P

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 of various types 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

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.

Learning Outcome

After completion of the learning curriculum of this course, students will be able to

- 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. Discussed 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
- 7. Attain the capabilities for retrieving classification system from web resources
- 8. Learnt the skills of making different classification schemes.

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

Course Code: P21MLS10A

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.

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 and Objectives.

Unit -V

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

Unit-VI

Case Study- TCS Soft Skills Course; MOOC Soft Skills Course

- 1. Amer, Beverly. Soft Skills at Work: Technology for Career Success, Cengage Learning, 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.

Learning Outcome

After completion of the learning curriculum of this course, students will be able to

- 1. Acquired knowledge on the basics of verbal and written communication.
- 2. Understood the components of Visual and Tele communication.
- 3. Gained 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.

ELECTIVE – I: Course - 2.5: (B) INFORMATION LITERACY Course Code: P21MLS10B

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.

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 users, professionals and Research & Development.

Unit-V

Digital and Web Literacy, Study of Information literacy programs in the world. Information Literacy Competencies. Challenges facing Information literacy. Information Literacy models – SCONUL;.ACRL

Unit-VI

Current trends in Information literacy, Case Study - Library Virtual Tours, Awareness on Publishers Tutorials (Springer, Elsevier and Clarivate Analytics)

- 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.
- 13. Library Conference Presentation and Speech. (2005). University of Nebraska,
- 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.

Learning Outcomes

- 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 standards of information literacy and digital information literacy.

Course - 2.6: Research Ethics and Metrics Course Code: P21VAC2

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.

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 Unit-VI

Recent Trends Metrics: Info graphics-SNIP-SJR-ALEXA - Webometric tools, Altmetrics Tools.

- 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%2 0Trends.htm

Learning Outcomes

- 1. Understood the knowledge on concept, theories, laws and parameters of citation metrics.
- 2. Evaluated how to understand the citation analysis operation research.
- 3. Attained the knowledge how to the apply and measure of Bibliometrics to study the literature in different subjects.
- 4. Learnt the basic metric studies on Librarmetrics, Concept, Scientometrics, Webometrics, Altmetrics, Netometrics.
- 5. Gained the knowledge Theory and Laws of Citation Tools and Techniques.
- 6. Gained the knowledge to apply and measure the Quantitative and Qualitative techniques: Types, Multidimensional scaling, Cluster analysis, Correspondence analysis, Co-word analysis, media and audience analysis.
- 7. Attain the knowledge of Citation Theory and Analysis.
- 8. Gained the knowledge of different forms of citations, Age of citation, citation counts, Self citation, Citation Index, Impact Factor and H Index.

SEMESTER - III

Course - 3.1 (A) RESEARCH METHODS AND TECHNIQUES Course Code: P21MLS11A

Objectives

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

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 and Plagiarism Tools.

Unit-VI

Case Studies-Survey-Information Needs: E-resources usage; Research profile compilation-Library website evaluation, Trends in LIS research.

- 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. Kraft D H and Royce B R. Operations Research for Libraries and Information

- Agencies. San Diego, CA: Academic Press, 1991
- 7. Lancaster F W.If you want to evaluate Your Library. London: LA, 1993
- 8. McClure Charles R and Hernon Peter Eds.Library and Information Science Research:
 - Perspectives and Strategies for improvement. NJ, Ablex, 1991
- 9. Powell R R. Basic Research Methods for Librarians. Norwood., NJ: Ablex1980
- 10. Simpson I S. How to Interpret Statistical Data. London: LA, 1990
- 11. Slater M. Research Methods in Library and Information Studies. London: LA, 1990.
- 12. 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.
- 13. Charles, H. et.al. Research Methods in Librarianship: Techniques and Interpretations. New Delhi, Sage, 1993.
- 14. Goode. W. J& Hatt. P.K. Method of Social Research. McGraw Hill. Auckland, 1989
- 15. Kothari.C.R.. Research methodology: Ed2 Wishwa. New Delhi, 1990.
- 16. Krishna Kumar: Research methods in library in Social science. Vikas, New Delhi, 1992
- 17. Krishna Swamy, O.R. Methodology of research in social sciences. Himalaya, Bombay, 1993
- 18. Line, Maurice.B. Library surveys; An introduction to the use, planning procedure and presentation of survey. Ed2 Clive Bingley, London, 1982.
- 19. RavichandraRoa, I.K. Quantitative methods in library and information science, Wiley Eastern. New Delhi, 1988.
- 20. Slatter, Margaret, Ed. Research, methods in library and information science. London, L.A., 1990.
- 21. Stevens, Rolland.E. Research methods in librarianship, Clive Bingley, London, 1971.
- 22. Wilson, E.S. Introduction to scientific research McGraw Hill, New Delhi, 1952.
- 23. Young, P.V. Scientific social surveys and research. Ed4. Prentice Hall of India, New Delhi, 1982
- 24. John W. Creswell. Research Design: Qualitative, and Mixed methods Approaches. Sage Publications, 2013.
- 25. Ranjit Kumar. Research Methodology: a step-by-step guide for beginners. 2014. (Google E-Books)

Learning Outcomes

After completion of the learning curriculum of this course, students will be able to

- Learnt 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
- Learnt knowledge about writing the research article or paper
- Acquired the knowledge of different types of sampling and methodology

Course - 3.1 (B) SCHOLARLY COMMUNICATIONS Course Code: P21MLS11B

Objectives

- To enable the students to understand the concept of scholarly writing.
- To orient the pattern of scholarly communication.
- To reveal the various forms of scholarly communication
 - > To teach the methods, systems of scholarly writing in digital and online environment.

Unit-I

Republic of Science and Scholarship: Foundations of Science and scholarship. Principles and paradigms of scientific culture/scholarship: Historical perspective of scholarly communication systems. Scholarship and scholarly traditions. Study of journals, their functions, working and processes.

Unit-II

The importance of scientific and professional societies in journal publishing; the peer review process; the migration of peer review journals from print to Web-based; Serials pricing crisis phenomena.

Unit-III

Rise of the Internet as game changer in scholarship, communication, and daily lives. Evolution of Internet/Electronic publishing; Web 2.0 and the emergence of Wikipedia; slideshare; YouTube; blogs and others as mainstream media.E-Science, Open Data and cyber Infrastructure.

Unit-IV

Open Access Movement: understanding Open Access concepts, principles, ideology and philosophy of Open Source, Open Content; Open Educational Materials and Open Access to scientific literature; the Green and Gold route to OA. Familiarity with the people and organisations behind the OA movement. Study of Open source software for IR and DL: DSpace; Eprints; Fedora

Unit-V

Copyrights issues. Understanding copyrights. Creative Commons. Licensing issues. Scientometrics and metrics of scholarly communication. Innovations in measuring Science and scholarship. Mapping Science:tools and parameters: usage and influence factors.

Unit-VI

Case Study-Preparation of Research papers for Journals including online journal and Conferees – To choose right journal for publishing

Selected Readings:

1. Derricourt, R.(1996). An author's guide to scholarly publishing, Princeton, N.J.: Princeton University Press.

- 2. Andersen, D.L.(2004). Digital scholarship in the tenure, promotion, and review process. Armonk, N.Y.: M.E. Sharpe.
- 3. Donohue, J. C. (1974). Understanding scientific literatures: bibliometric approach, Cambridge, MIT Press.
- 4. Gabriel, Michael. (1989). A guide to the literature of electronic publishing: CD-ROM, desktop publishing, and electronic mail, books and journals, Conn.: Jai Press.
- 5. http://www.Library.cornell.edu/scholarlycomm/openaccessday.html
- 6. Machlup, F. and others Eds.(1980). Information through the printed word: The dissemination of scholarly, scientific, and intellectual knowledge. 1978-1980. New York: Praeger Publishers.
- 7. Nisonger, T. E. (2007). Journals in the core collection: Definition, identification, and applications. *The Serials Librarian*, *51*(3-4), 51-73.
- 8. Rowlands, I. and Nicholas, D. (2005). New journal publishing models: an international survey of senior researchers. London, CIBER, 2005. Available at http://www.ucl.ac.uk/ciber/ciber_2005_survey_final.pdf
- Rowlands, I. et al. (2004). Scholarly Communication in the digital environment: what do authors want? London, CIBER. Available at: http://www.ucl.ac.uk/ciber/ciber-pareport.pdf.
- 10. Saha, S. *et al.* (2003). Impact factor: a valid measure of journal quality? *Journal of the Medical Library Association* 91: 42-6. Available at http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=141186&blobtype=pdf
- 11. Gorman, G.E.(2005). Scholarly publishing in an electronic era. 2005. London: Facet Pub.
- 12. Schroter, S. (2005). Perception of open access publishing: interviews with journal authors. *BritishMedical Journal*, 330: 756. http://dx.doi.org/10.1136/bmj.38359.695220.82
- 13. Medford, N.J.(2000). The web of knowledge: a festschrift in honor of Eugene Garfield. N.J., Information Today.
- 14. Tibbitts, G. (2006). Measuring quality in journal publishing: new and emerging methods. Presentation at International Academy of Nurse Editors conference, London, August 2003. Available at: http://www.blackwellpublishing.com/press/files/2006_08August03_INANE_Conference_London_GTV2.ppt

Leaning Outcomes

After completion of the learning curriculum of this course, students will be able to

- 1. Learnt the basic concepts of scholarly communication.
- 2. Acquired knowledge about Web technologies and their development.
- 3. Acquired knowledge about journal publication process and related facets.
- 4. Gained knowledge about the OA movement and their impact on publications including OA learning materials.
- 5. Learnt the mapping of science and metrics of research performance.
- 6. Understood the copyright issues and mapping of science.
- 7. Learnt knowledge about writing the research article or paper.
- 8. Learnt to write the research report and using knowledge to check the plagiarism

Course – 3.2: (A) DIGITAL LIBRARY AND WEB TECHNOLOGY Course Code: P21MLS12A

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 k+6nowledge about DL softwares
- To enable the students gain knowledge about Online and electronic resources and institutional repositories

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.

Unit-VI

Creation of Tamil interface using D-Space, MERLOT-NPOR-SWAYAM

- 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

Learning Outcomes:

- 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. Learnt the concepts of digital library, organization of digital information, latest web tools used in digital information access.



Course - 3.2B (SWAYAM) Course Code: P21MLS12B

Core Course: 3.3: INFORMATION TECHNOLOGY IN LIBRARIES: PRACTICE (AUTOMATION, REPOSITORIES, CMS) Course Code: P21MLS13P

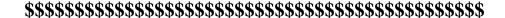
Objectives

- Enable the students become proficient in the various ICT applications and practices in Library automation and eGovernance and services delivery.
- Provide Hands-on experience with the following Software's:
- 1: Library Automation Software's: WINISIS, LIBSYS, KOHA
- 2: Digital Library Software's: Greenstone and Dspace
- 3: Web Technologies: Weblog; Website; Mobile Applications
- 4: Content Management: JOOMLA and DRUPAL
- 5: Scientometrics Tools: Bibexcel, Histcite, Vos Viewer and Biblioshiny

Learning Outcomes:

After completion of the learning curriculum of this course, students will be able to

- 1. Gained knowledge about the functions of library automation software.
- 2. Acquired knowledge in digital library softwares used by Greenstone and DSpace.
- 3. Attained knowledge of designing web blog and website for libraries.
- 4. Learnt the concepts of mapping tools for metric studies.



Course - 3.4: ELECTIVE-II

(A) WEB BASED INFORMATION SERVICES Course Code: P21MLS14A

Objectives:

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

Unit-I

Mobile based Library Services and Tools – Mobile OPAC, Mobile Databases, Mobile Library Website, Library Apps, Mobile Library Instructions, Augmented Reality, SMS Alerts, Geo-Location, and Reference Enquiry.

Unit-II

History of www – Open Access to databases; Open educational resources; Web portals and subject gateways; Web Casting; ETD, Bibliographic Databases and online Coursewares

Unit-III

Vidwan, IRINS; Research Information System; Profile Management System; Subject Expert System.

Unit-IV

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

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.

Unit-VI

 $\begin{tabular}{ll} \textbf{Advance study on Webinars, Web OPAC, RSS Feeds, Group mail - Web-Scale Discovery Services.} \end{tabular}$

- 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

Leaning Outcomes:

- 1. Acquired a thorough knowledge about the online information resources required for research program of the institution and the clientele
- 2. complete professional skills in identifying the relevant online source, retrieving and downloading data/information for the clientele and means of online information delivery.
- 3. 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.
- 4. Attained knowledge the significance of citation, impact factor and means to be a continuant in research publishing performance.
- 5. 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.
- 6. Discussed on Technology for Multimedia: Hypermedia etc., music and sound, visualization, virtual reality, CAL, standards
- 7. Learnt the knowledge of Design for Multimedia: Design methodologies, media evaluation.
- 8. Elaborated discussion on Multimedia Publishing: Financial strategies, market sectors (educational, music, art, etc., versus academic, business, popular, etc., versus newspaper, magazine, journal, book, video, etc.), comics.
- 9. Aware about the user interactive software, multimedia databases and intelligent systems.

Course - 3.4: Elective - II (B) E- PUBLISHING Course Code: P21MLS14B

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.

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.

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.

Unit-VI

Recent trends on E-Publishing Models and Publishers.

- 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.
- 7. Bradley, Phil. The advanced Internet Searcher's Handbook. Ed 2. London: LA, 2002.
- 8. Parekh, Harsha. Internet in the Scholarly Communication Process. Mumbai, Knowledge ware, 1999.
- 9. Dawson Andy. The Internet for Library and Information Service Professionals. London: Aslib, 1995.
- 10. Poulter Allen and Others. The Library and Information Professionals' Guide to the World Wide Web. London: LA, 1999kehoe B P. Zen and the Art of the Internet: A Beginners Guide. Prentice Hall, 1992.

Learning Outcomes:

After completion of the learning curriculum of this course, students will be able to

- 1. Gained knowledge and skills in ePublishing methods.
- 2. Gained knowledge in designing, marketing and promoting library information products and services by means of multimedia and ePublishing techniques and strategies
- **3.** Gained knowledge to design, maintain and manage storage and service functioning of library website, blogs of clientele supplemented and supported by multimedia techniques.
- 4. Gained knowledge to the extent of helping the clientele learn the highways of web authoring and multimedia tools and presentation skills.
- 5. Attained the knowledge of e-publishing, and Design for Print and multimedia.
- 6. Importance of the E-publishing technologies
- 7. Attained the knowledge of Technology for Print: Document structure, document preparation systems, DTP, DDLs, page description languages, text databases, standards
- 8. Discussed the Design for Print: Type design, graphic design, composition products, separation; Technology for presenting static and dynamic content on the Internet

Course - 3.4: Elective - II - (C)
Course Code: P21MLS14C
EDC Paper offered by Other Departments

Course - 3.5: Elective – III:

(A). GREEN LIBRARY TECHNOLOGY

Course Code: P21MLS15A

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.

- Unit I Green Library Elements of choice, maintenance, stuff and structure; Library
 Building design and materials, Green building resources.
- **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. Landscapes, Garden library, Environmental Load Reduction
- **Unit V-** Library Environment cleanliness, air and noise pollution free maintenance, water consumption, space management, gardening interior and external.

Unit-VI

Development activities and maintenance on Garden Library

- 1. <u>A Green Glossary</u> -- From the District of Columbia Resident Recourse Center; defines commonly used environmental terms and concepts. (PDF file, accessed May 14, 2013)
- 2. Antonelli, Monika, and Mark McCullough. *Greening Libraries*. Los Angeles, Library Juice Press, 2012.
- 3. Antonelli, Monika. 2008. "The Green Library Movement: An Overview and Beyond", *Electronic Green Journal* 1, no. 27, Article 1. (Accessed May 14, 2013)
- 4. Arist, Suzanne. "Going Green in Illinois: Diverse Libraries, Diverse Initiatives." *ILA Reporter*, Aug. 2010, Vol. 28 Issue 4, p. 4-7.
- 5. Blame, Amy S. "Creating a Lean, Green, Library Machine: Easy Eco-Friendly Habits for Your Library." *Library Media Connection*. Jan./Feb. 2010, Vol. 28 Issue 4, p. 24-26.
- 6. Boyden L.and J. Weiner. 2000. "Sustainable libraries: Teaching environmental responsibility to communities" [Electronic version]. The Bottom Line, 13(2), 74-82.
- 7. Brown, B. 2003. "The new green standard: With the LEED rating system in place it is easier to make sure your new library saves money as it treads lightly on natural resources" [Electron Version]. Library Journal, 128(20), 61-4.

- 8. Christensen, Karen and Bill Siever. "Seeing the forest: why publishers and readers need to take a fresh look at print and online publishing to create a sustainable information industry." *Serials* 23, no. 1 (March 2010): 20-24.
- 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.
- 12. Fox, H. 2004. Seattle central library: Water conservation (Web Video) Retrieved November 20, 2007.
- 13. Jankowska, Maria Anna and James W. Marcum. 2010. "Sustainability Challenge for Academic Libraries: Planning for the Future." College & Research Libraries. March 2010 71:160-170. (Accessed May 14, 2013)
- 14. Johnson, Greg. "Greening Our Libraries: Practical Advice for Saving the Planet and Your Budget." *Mississippi Libraries* 73, no. 4 (Winter2009 2009): 86-88.
- 15. Kaln, John. "Tips for Growing a Green Organization." *Information Management Journal* 44, no. 3 (May 2010): 16-19.
- 16. Kaminel, Ariel. "A Library That Most Can Only Dream Of." New York Times, March 26, 2010 (A version of this article appeared in print on March 28, 2010, on page MB4 of the New York edition; accessed May 14, 2013).
- 17. Lamis, A.P. 2003. "Greening the library: An overview of sustainable design." In G.B. McCabe and J.R. Kennedy (ed.), Planning the Modern Public Building (pp. 31-45). Westport, CN: Libraries Unlimited. ISBN 0313321558, ISBN 9780313321559
- 18. Le Ber, Jeanne M. and Joan M. Gregory, "<u>Becoming Green and Sustainable: A Spencer S. Eccles Health Science Library Case Study</u>," Journal of Medical Library Association 92, no. 2 (2004): 266–68. (Accessed May 14, 2013)
- 19. LEED. 2005. Reference Guide, Version 2.2 US Green Building Council. Retrieved June 14, 2008.
- 20. <u>Librarian's Environmental Toolkit</u>, LibGuides @ University of Illinois Library. (Accessed May 14, 2013)
- 21. Long, Sarah Ann. "Libraries Can Help Build Sustainable Communities." *American Libraries*, Jun/Jul2000, Vol. 31 Issue 6, p. 7.
- 22. McCabe, G.B. 2003. "New Concepts for Technology in Library Design." In G.B. McCabe and J.R. Kennedy (ed.), Planning the Modern Public Building (pp. 31-45). Westport, CN: Libraries Unlimited. ISBN 0313321558, ISBN 9780313321559
- 23. Meyer, Jennifer. 2008. "Global Warming's Library Challenge: Immediate Plans and Actions Needed!" Library Journal 133, no. 18: 26-29. (Accessed May 14, 2013)
- 24. Miller, Kathryn. <u>Public Libraries Going Green</u>. Chicago: American Library Association, 2010.
- 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.
- 26. Sands, J. 2002. Sustainable library design Libris Design Project. Retrieved November 1, 2007.
- 27. Tseng, S.H. 2007. "An eco building, a healthy life, and good service: A new Century in public library architecture" [Electronic version]. Public Libraries, 46(4), 50-5.

Learning Outcomes:

After completion of the learning curriculum of this course, students will be able to

- 1. 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.
- 2. Gained knowledge in assessing the library ecology and environment and control measures to rectify any shortcoming
- 3. 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.

Course - 3.5: ELECTIVE – III (B) ELECTRONIC RESOURCE MANAGEMENT SYSTEM Course Code: P21MLS15B

Objectives:

- ➤ Enable the students become familiar with various kinds and types of information sources both in print and digital formats.
- Enable to learn the principles and practices of electronic resource management.
- ➤ 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.

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, DELNET, FERA, E.Shodhsindhu, and CSIR e-journal Consortia.

Unit -V

Components of Information System: Libraries, Documentation Centres, Information centres, Data, Data Banks, Museums, Memories, Publishing Houses. Virtual Reference Desk.

Unit-VI

Current Trends on E-RAMS, 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.
- 14. Terplan, Kornel (1999). Intranet performance management. London: CRC Press.
- 15. White C M, et.al. (1973). Sources of Information in the social Sciences. 2 Ed. Bedminster Press, Tolowa, N.J

Learning Outcomes:

- 1. Gained knowledge about various reference sources such as print, digial and online.
- 2. Gained knowledge in e-Resource 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

Course -3.6: HERITAGE DOCUMENTATION Course Code: P21VAC3

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.

UNIT-I: Heritage definitions; features; importance; types of heritages

UNIT-II: Heritage natural; Architecture; locations, plants, animals

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.

UNIT-VI: Visit to Saraswathi Mahal Library.

REFERENCE:

- 1) Ahmad, Y. (2006). The Scope and definitions of heritage: from tangible to intangible. International Journal of Heritage Studies, 12(3), 292–300.
- 2) FOLA, (2005). Living heritage of Sri Lankan Tamils: digital image library of Foundation for Library Awareness. Retrieved from: http://jaffnaheritage.blogspot.com/search/label/customs%29
- 3) Howell, D. (2013). The intangible cultural heritage of Wales: a need for safeguarding? . Intangible Heritage, 8, 104-116.
- 4) Manetsi, T. (2011.) Safeguarding intangible heritage in South Africa: a critique of the draft national policy on living heritage, 6, 58-69.
- 5) UNDP, (2004). Human development report 2004: cultural liberty in today's diverse World.
- 6) Retrieved from: http://hdr.undp.org/en/media/hdr04_complete.pdf. Accessed on 20.07.2013.
- 7) UNESCO, (1972). Convention concerning the protection of world cultural and natural
- 8) heritage. Retrieved from: http://whc.unesco.org/archive/convention-en.pdf.
- 9) Milles, R.H. (Eds.) Collection management for the 21st century: A handbook for librarians. London: The Greenwood Library Management Collection.
- 10) Hughes, L. (2004). Digitization of collections: Strategic issues for the information manager. London: Facet Publishing.
- 11) Singh, R. (2004). Restructuring library and information science curriculum. LIS Education in India.
- 12) World Bank (2001) Historic Cities and Scared sites: Cultural Roots for Urban Futures. Washington DC: World Bank.
- 13) Ogden, S. (Ed.) (1994). Preservation of library & archival materials: A manual. Northeast Document Conservation Centre.

Learning Outcomes

After completion of the learning curriculum of this course, students will be able to

- Attained the knowledge and understanding about heritage documentation
- Gained skills for developing heritage documentation
- Gained knowledge to attitudes and values of heritage documentation
- Attained the knowledge of Enjoyment, Inspiration and creativity; Activity, behaviour and progression.

FOURTH SEMESTER

Course - 4.1: KNOWLEDGE MANAGEMENT Course Code: P21MLS16

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.

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.

Unit – IV

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

Unit –V

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

Unit-VI

Case studies- Emerald Management Extra-Fortune 500 companies- Library visits

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

Learning Outcomes:

After completion of the learning curriculum of this course, students will be able to

- 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. Gained the Knowledge in the codification and organization: Knowledge mapping, decision trees, decision tables
- 5. Learnt depth the Knowledge Management Tools and techniques
- 6. Discussed on Case studies about Corporate and Special Libraries
- 7. Well trained to create the library Portal, e-learning, Community of Practice, Storytelling.
- 8. Attained the knowledge for creating subject gateway
- 9. Trained to accept readily a managerial cadre in knowledge management in a library or an equivalent position in IT industry.

Course - 4.2: INTERSHIP AND FIELD WORK PROJECT Course Code: P21MLS17

Program:

o 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.
- o Procurement of Library Materials-purchase policy (Book and periodicals both print and online)
- o Process of subscription of journal and periodical both manual & online.
- Processing of Library Materials
- Shelving and Circulation Policy
- o Corresponding Knowledge
- o Extra knowledge

Learning Outcomes:

At the end of the internship, the student should have

- o Acquired complete professional skills-set matching the expectations of the employer
- o Gained professional confidence with a high level knowledge and skills set in managing a library
- o Gained skills to acclimatize in different library working environment
- O 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.
- O Attain the knowledge of library budget preparation and presentation for both traditional and digital environment
- o 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
- Become capable of supervising and controlling digital library division management, material management, staff management, and overall safety and security management
- o Gained sufficient knowledge about internet resources, information harvesting, compilation of online bibliographies and the maintenance of Public Relations.
- Attained the knowledge of organizing information in academic or industrial libraries including institutional repository.

Course 4.3: PROJECT AND DISSERTATION Course Code: P21MLS18P

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.

Course - 4.4: ELECTIVE – III

(A). MARKETING OF INFORMATION PRODUCTS AND SERVICES Course Code: P21MLS19A

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

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

Unit-IV

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

Unit-V

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

Unit-VI

Case Studies - IIM Library, Tiruchirappalli- NIT Library, Tiruchirappalli, IIT Library Chennai. Virtual library portals.

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.
- **8.** Shiva Kanaujia. Marketing of information products and services in Indian R&D Library and Information Centres, Library Management, Volume 25 · Number 8/9 · 2004 . pp. 350-360. https://doi.org/10.1108/01435120410562844.
- 9. https://www.ipinnovative.com/journals/IJLSIT/article-full-text/5262
- **10.** Khanchandani, Vanita&Nabi Hassan. Marketing of Library Resources, Services and Products: A Case Study of IIT Delhi. DESIDOC Journal of Library & Information Technology, 2016, 36(3), 158-161.
- **11.** Gupta, Dinesh K &Savard, Regean. Marketing Library and Information Services. Encyclopedia of Library and Information Sciences, 2010, 3553-3560. DOI: 10.1081/EELIS3-120044552.
- **12.** Gupta, Dinesh K. Marketing of Library and Information Services: Building a new Discipline for Library and Information Science Education in Asia. Malaysian Journal of Library & Information Science, 2003, 8(2), 95-108.
- **13.** Dongardive, Prakash. Marketing Library and Information Services. International Journal of Science and Research (IJSR), 2013, 2(11), 227-234.

Learning Outcome:

- 1. Attained 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
- **7.** Developed the skills set in marketing of information products and services matching user needs.
- 8. Attained the skills of information products and marketing based on user demands

Course - 4.4: ELECTIVE – III (B) INTELLECTUAL PROPERTY RIGHTS Course Code: P21MLS19B

Objectives:

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

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

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

Unit-VI: Recent Trends in Patent, Database, IPR and Online use of documents

- 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

Learning Outcomes:

At the end of learning this paper the students should have

- 1. Acquired 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
- 7. Learned knowledge how to create different kinds of copyright forms for their own property
- 8. Learned the IPR and National and International Scenario, IPO and WIPO

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Course - 4.5: ELECTIVE – IV

(A) INFORMETRICS AND SCIENTOMETRICS Course Code: P21MLS20A

Objectives:

- ➤ Enable the students learn the concept, theories, laws and parameters of bibliometrics.
- Enable the students develop a knowledge about the citation analysis and peration 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.

Unit -I

Librarmetry, Bibliometrics and Scientometrics: Concept, definition, evolution and applications in Libraries.

Unit –II

Theory and Laws - Zipf's law, Lotka's Law, Bradford's Law. Price Theory

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, Cite Score – H Index

Unit – V

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

Unit- VI

Webometric tools, Info graphics, ALEXA

- 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 (2005). Power laws in the information production process: Lotkaian Informetrics. Academic Press. ISBN: 978-0120887538
- 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. Glänzel, W. (2003). Bibliometrics as a research field: A course on theory and application of bibliometric indicators.1.
- 7. 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.

- 8. Ingwersen, Peter (2012). Scientometric indicators and webometrics and the poly representation principle information retrieval. Ess Ess publications, New Delhi. ISBN: 9788170006572.
- 9. Leydesdorff, L. A. (2001). The challenge of scientometrics: The development, measurement, and self-organization of scientific communications (2nd ed.). Boca Raton, FL: Universal Publishers.
- 10. Noyons, E. C. M. (1999). Bibliometric mapping as a science policy and research management tool. Leiden: DSWO Press, University of Leiden.
- 11. Peter Vinkler (2010). The evaluation of research by scientometric indicators. Chandos Publishing. ISBN 978-1843345725.
- 12. Rousseau, Ronald ; Egghe ,Leo and Guns ,Raf (2018). Becoming Metric-Wise: A Bibliometric Guide for Researchers. Chandos Publishing. ISBN: *978-0081024744*
- 13. Tiwari, Ashwini (2006). Bibliometrics, Informetrics and Scientometrics: Opening New Vistas of Information Science. RBSA Pub.ISBN: 9788176113243.
- 14. Wilson, Concepción S. (1999). "Informetrics". Annual Review of Information Science and Technology (Medford, NJ: Information Today) 34: 107–247
- 15. Wolfram, D. (2003). Applied Informetrics for Information Retrieval Research. Libraries Unlimited.

Course Outcome:

- 1. Learnt the basic metric studies in Librarmetrics, Informetrics , Concept, Bliometrics, Scientometrics, Webometrics, Altmetrics
- 2. Attained knowledge the significance and theories of citations analysis, various formulae, impact factor of individual scholars and journals, bibliometric laws, theories and metric indicators.
- 3. Gained the knowledge of Theory of citing, different forms of citations, Age of citation, citation counts, Self citation, Citation Index, Impact Factor and H Index.
- 4. Developed the capability of undertaking the citation analysis and operation research
- 5. 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.
- 6. Gained the knowledge on Theory and Laws of Bibliometrics; Zipf's law, Lotka's Law, Bradford's Law. Price Theory

7. 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

Course - 4.5 (B): ELECTIVE – IV CORPORATE INFORMATION SYSTEM Course Code: P21MLS20B

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

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

Unit-VI

Case Study- Philips, Samsung, TCS, Infosys

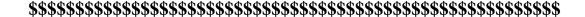
Selected Readings:

- 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 and problems. 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 management for the E-Business. Financial Times Management.
- 14. Daniells, L. M.,(1993). Business Information sources. 3rd Ed. University of California Press.

Learning Outcomes

- 1. Attained knowledge to the concepts of Industrial and corporate information system
- 2. Discussed 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. Acquired 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
- 7. Learnt the way of known the Nature and needs of industrial users; Information needs of industry, Types of information services for industry
- 8. Acquired the knowledge of national and international information systems supported to LIS services



Course -4.6: MOOC (MASSIVE OPEN ONLINE COURSE) Course Code: P21VAC4

Objectives

- 1. To know the basic concepts of MOOC
- 2. To train the students in applying online course content in Libraries and information centers.
- 3. To understand the concepts of various Open access initiatives and open course ware protocols and guidelines.

Unit –I

MOOCs: Introduction, Definition, Characteristics, Types and Categories

Unit-II

Development of MOOC in National Level: NPTEL, , IGNOU, Sakshat Portal, IGNOU, NCERT, NIOS, SWAYAM, NCERT, CIET, Egyankosh, , ePGPathshala, NIOS and Consortium for Educational Communication,

Unit – III

Development of MOOC in International Level: MIT Open Coursware, , CEDT, SciGate, Khan Academy, MERLOT, Open Learn, U-Now Open Courseware, Teacher tube,. Coursera, Khan Academy, Open Classrooms, Open Learning and edX

Unit-IV

Open Access Initiatives: DOAJ, OAJSE, Indian Academy of Science, High wire Press, NISCAIR Online Periodicals Repository, E-Books: DOAB, Oapen, Audible Books, Digital Library of India, OER Commons, Project Gutenberg, Utah Open Textbook, E-Pustakalaya, PLOS; TWAS; NDL

UNIT V

Registering Open Courseware: Methods; protocols and guidelines; limitations

UNIT-VI

Case study- MOOC Courses: India, Europe, USA and UK, Standards and Protocols.

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, Pustak Mahal, 2005
- 7. Hunter & Shelly: Computers and Common sense, New Delhi, Prentice-Hall,.
- **8.** ITL Education Solution. Introduction to Information Technology, Pearson Education. Singapore, 2006. (Google E-Book)
- 9. Kashyap, M.M: Database Systems, New Delhi, Vikas, 2003.

Learning Outcomes

After completion of the learning curriculum of this course, students will be able to

- ➤ Gained the knowledge types of availability MOOC resources for academic
- Discussed and introduced the various MOOC information sources and how to retrieved
- ➤ Learnt the knowledge about types of Open Access resources and how to utilize for user community
- ➤ Learnt elaborate knowledge to evaluate and use the E-Books and E-Journals resources
- ➤ Attained knowledge how acquire knowledge from various electronic and information sources.
- Familiarized the online courseware resources.
- ➤ Known well aware about the Registering Open Courseware for the self development.