Learning Outcomes-based Curriculum Framework (LOCF) for Post-graduate Programme

Name of the Programme:

M.L.I.Sc. (Library and Information Science)

(Syllabus effective from 2022 Admission onwards)

UNIVERSITY OF KERALA

2022

UNIVERSITY OF KERALA

Syllabus for M.L.I.Sc. (Library and Information Science)

Programme Specific Outcomes (PSO) for M.L.I.Sc. (Library and Information Science)

PSO1 Understand the basic concepts, principles, theories, and laws related to the broad field of Library and Information Science and its sub-fields such as types of libraries and information sources, library management, reference and information services.

PSO2 Understanding the procedures of selection, acquisition, classification, cataloguing and physical processing of documents, using Information and Communication Technologies in Libraries and Information Centers, providing library and information services, and managing other library routine activities.

PSO3 Apply skills in carrying out professional activities such as acquisition, accessioning, classification, cataloguing, and physical processing of documents, housekeeping operations using library management software and Information and Communication Technologies, maintaining library collection, and educating users.

PSO4 Prove skills in providing various library services such as document circulation, reference and information services, Internet and database searching.

PSO5 Develop skills that offer job opportunities as librarians in different environments.

PSO6 Develop professional attitude and commitment will help to serve the user community by facilitating different sources and services to strengthen the Human Resource Development initiatives.

PSO7 Develop core values by honouring diversity, insuring inclusion and displaying ethical integrity which involves honest behaviour.

Programme Structure of M.L.I.Sc.

Semester	Course Code	Name of the course	Credits
I	**Core Courses (CC)**		
	LIS-CC-511	Foundations of Library and Information Science	3
	LIS-CC-512	Principles of Management	3
	LIS-CC-513	Knowledge Organization: Library Classification (Theory)	3
	LIS-CC-514	Knowledge Organization: Library Classification (Practical)	4
	LIS-CC-515	Fundamentals of Information Technology (Practical)	3
	Discipline – Specific Elective (DE)		
	LIS-DE-516	Knowledge Organization: Universal Decimal Classification (Practical)	2
II	**Core Courses (CC)**		
	LIS-CC-521	Information and Communication	3
	LIS-CC-522	Information sources	4
	LIS-CC-523	Information Products and Services	3
	LIS-CC-524	Library and Information Centre Management	3
	LIS-CC-525	Cataloguing and Metadata (Theory)	3
	LIS-CC-526	Cataloguing and Metadata (Practical)	3
	Discipline – Specific Elective (DE)		
	LIS-DE-527	Intellectual Property Rights	3
III	**Core Courses (CC)**		
	LIS-CC-531	Research Methodology	3
	LIS-CC-532	Information Storage and Retrieval	3
	LIS-CC-533	Information Technology Application in LIS (Theory)	3

	LIS-CC-534	Information Technology Applications in LIS (Practical)	3
	LIS-CC-535	Internship	2
	Discipline – Specific Elective (DE)		
	LIS-DE-536	Statistical Methods	3
IV	**Core Courses (CC)**		
	LIS-CC-541	Technical Communication	3
	LIS-CC-542	Informetrics	2
	LIS-CC-543	Digital Libraries	2
	LIS-CC-544	Dissertation & Viva voce	4
Any semester (I-IV)	**Generic Courses (GC)**		
	LIS-GC-501	Technical Writing	2
	LIS-GC-502	Electronic Publishing	2
	LIS-GC-503	Electronic Records Management	2
	LIS-GC-504	Knowledge Management	2
Any semester (I-IV)	**Skill Enhancement Elective (SE)**		
	LIS-SE-501	Web Technologies	2
	LIS-SE-502	Information Literacy	2
	LIS-SE-503	Competency Development	2

SEMESTER I	Course Code:LIS-CC-511	Credits: 3

Name of the Course:

FOUNDATIONS OF LIBRARY AND INFORMATION SCIENCE

Course Outcome:

CO1: Articulate and exemplify basic knowledge on the development of libraries
CO2: Introduce the concept of resource sharing and library networking
CO3: Awareness about types of libraries and library associations

COURSE CONTENT

Module I: Library as a Social Institution

Social and historical foundations of library; Different types of libraries: their distinguishing features and functions (including digital/ electronic/ virtual libraries); Role of library in formal and informal education.

The changing concept of librarianship.

Module Outcome:

After Completion of this module, the student should be able to:

M01: Identify the history of libraries (Understand)

M01: Describe the different types of libraries and their functions (Understand)

M01: Examine the role of libraries in our education system (Analyse)

M01: Evaluate the role of librarians (Evaluate)

M01: Understand professional and technical skills needed for librarians (Understand)

Module II: Normative Principles of LIS

Five Laws of Library Science; Implications of the five laws in library and information activities.

Module Outcome:

After Completion of this module, the student should be able to:

M02: Analyse and evaluate the Five Laws of Library and Information Science proposed by the Father of

Library and Information Science in India,Dr.S.R.Ranganathan(Analyse)

Module III: Library Development

Development libraries with special reference to India;Model public library bill of S. R. Ranganathan; Library movement of Kerala. Resource sharing and Library Networking; INFLIBNET

Module Outcome:

After Completion of this module, the student should be able to:

M03: Analyse the stages of development of libraries (Analyse)

M03: Evaluate the development of libraries before and after Independence (Evaluate)

M03: Explain library movement of Kerala (Understand)

M03: Describe resource sharing among libraries (Understand)

M03: Analyse library networking (Analyse)

M03: List out important library networks in India (Remember)

Module IV: Laws relating to Libraries and Information

Library legislation: need and essential features' Library legislation in India, Kerala Public Libraries Act; Pressand Registration Act and Delivery of Books (Public Libraries) Act and Copyright Act.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Describe the needs and features of Library Legislation (Understand)

M04: Evaluate the Library Legislation in India (Evaluate)

M04: Examine Kerala Public Libraries Act (Analyse)

M04: Describe Press and Registration of Books Act (Understand)

M04: Explain Delivery of Books Act (Understand)

M04: Describe Copyright Act (Understand)

Module V: Library and Information Profession

Attributes of profession; Librarianship as a Profession; Professional ethics; Professional associations and their role: ILA, IASLIC, IATLIS, CILIP, SLA, ALA, and ASLIB. Professional education and research.

Module Outcome:
After Completion of this module, the student should be able to:

M05: Explain the Professional Ethics (Understand)

M05: Justify the Librarianship as a Profession (Evaluate)

M05: Examine the important Professional associations and their role (Analyse)

Module VI: Promoters ofLIS

UNESCO,FID,IFLA,UGC,RRRLF.

Module Outcome:

After Completion of this module, the student should be able to:

M06: Explain various promoters of Library and Information Science (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- Seminar Presentation on selected topics
- Tutorials

LEARNING RESOURCES

References

1. Bawden, D., & Robinson, L. (2013). Introduction to information science. Chicago: Neal Schuman.

2. Choudhury,G.(2004).Librarianship: An introduction.London:Facet.

3. Davies,D.L.(2013).Library and information science.NewDelhi:Random Exports.

4. Dhiman, A. (2008). Handbook of special libraries and librarianship. New Delhi: Ess Ess Publication..

5. Dhiman,A.,& Sinha,S.(2002).Academic libraries.NewDelhi:Ess Ess Publications.

6. Dhiman,A.,&Yashoda Rani.(2005).Learn library and society.New Delhi:Ess Ess Publications.

7. Hill,M.W.(1998).The impact of information on society.London:Bowker-Saur.

8. Isaac,K.A.(2004).Library legislation in India: A critical and comparative study of state library Acts.New Delhi: Ess Ess Publications.

9. Isaac,K.A.(2004).Library Legislation in India: A critical and comparative study of State Library Acts.Ess Ess Publications

10. Jagnayak,S.S.(1997).Role of Libraries in Socio-economic, Cultural, and Educational Development Among Rural People. Classical Publishing Company.

11. KhannaJ.K.(1994). Library and Society. New Delhi: Ess Ess Publications.

12. Kumar,P. (2008).Library in India Series. New Delhi: B. R. Publishing Corporation.

13. Leckie, G.J., Given,L.M., & Buschman,J. (2010). Critical theory for library and information science: Exploring the social from across the disciplines. Santa Barbara, Calif: Libraries Unlimited.

14. MacDougall, A., &Prytherch, R. (1997). Handbook of library cooperation. Mumbai: Jaico Pub. House.

15. Mangla,P.B.(1981) (Ed).Library and information science education in India.NewDelhi: Macmillan.

16. McIntosh, J. (2011). Library and information science: Parameters and perspectives. Oakville, Ont:AppleAcademicPress.

17. Paslithil,A.(2006).Public Library Movement Kerala.Kalpaz Publications.

18. Ranganathan,S.(1988).The five laws of Library Science.Bangalore:Sarada Ranganathan Endowment for Library Science.

19. Ranganathan,S.R.(1957).The five laws of library science.Bombay:Asia Publishing House.

20. Raval,A.(2013).Handbook of public library system.New Delhi:Discovery Pub.House.

21. Rout,R.K.(1986).Library legislation in India:Problems and prospects.New Delhi:Reliance Publishing House.

22. Rubin,RichardE.(2013).Foundations of library and information science.3rd ed. New Delhi: DBS Imprints.

23. Sharma,S.(1987).Libraries and Society. New Delhi: Ess Ess Publication.

24. Smith,M.M.(1999).Information ethics. London: Bowker-Saur.

25. Stock,W.G., Stock,M., & Becker,P.(2013).Handbook of information science.Berlin;Boston: De GruyterSaur.

26. Sujatha, G. (1999). Resource sharing and networking of university libraries. Ess Ess Publications.

27. Venka appaiah,V.& Madhusudhan,M. (2006).Public library legislation in the new millennium: New model public library Acts for the Union,States,and UnionTerritories.NewDelhi: Bookwell.

28. Venkatappaiah,V.(1990).Indian Library Legislation:State library bills and acts (Vol.2).Daya Books.

29. Kumar, P. S. G (2003). Foundations of Library and Information Science. Delhi: B. R. Publishing

On-line Sources

30. Government of India. (1957, June 4). The Copyright Act, 1957. Copyright.Gov.In. http://copyright.gov.in/Documents/CopyrightRules1957.pdf

31. Krolak,L.(2006).The role of libraries in the creation of literate environments. International Journal of Adult and Life long Education, 4(1/4),5.

32. Professional Ethics and Librarianship—YouTube. (n.d.)., from https://www.youtube.com/watch?v=pOmstwLCDQs&feature=youtu.be

33. Library resource sharing and networking (LIB). (2015, December 23). https://www.youtube.com/watch?v=ra2df6L07us&feature=youtu.be

34. User studies, Methods techniques and evaluation. (2018, January 30). https://www.youtube.com/watch?v=TLi85tO5bVw&feature=youtu.be

ASSESSMENT

- 40% Continuous/FormativeAssessment (see PG Regulations).
- 60% End-semester/SummativeAssessment: 3 hour written Exam.

SEMESTER I	Course Code: LIS-CC-512	Credits: 3

Name of the Course:
PRINCIPLES OF MANAGEMENT

Course Outcome:

CO1: Articulate and exemplify basic knowledge about history, concept, styles and school of management thoughts
CO2: Enunciating the concepts of system design and Project Management techniques
CO3: Express effectively about HRM
CO4: Articulate basic Knowledge about Financial Management and Marketing management
CO5: Perceive idea about quality management

CO6: Express effectively about crisis management, change management and space management

COURSE CONTENT

Module I: Schools of Management Thought

Classical, Neo-classical and Modern management theories; Principles of scientific management; Fayol's principles; Functions of management

Module Outcome:
After Completion of this module, the student should be able to:

M01: Describe the concept, history, styles and schools of Management schools (Understand)
M01: Apply the management concepts (Apply)

Module II: Systems Analysis and Design

Systems Theory; Open and Closed Systems; Project management Techniques–PERT/CPM, decision tables; dataflow diagram.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Describe the basic concept of system design and analysis (Understand)
M02: Explain the use of project management techniques (Understand)

Module III: Human Resources Management

Organizational structure; job analysis and description; recruitment, selection and induction; training; performance appraisal; motivation; group dynamics; stress management.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Describe different aspects of Human Resource Management (Understand)
M03: Introduce HRM in libraries (Apply)

Module IV: Financial Resources Management
Methods of financial estimation; Budgets and Budgeting techniques; Marketing management: Marketing of information services and products, Role of social media in marketing.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Describe the financial estimation methods (Understand)

M04: Practice Budgeting and budgeting techniques in libraries (Apply)

M04: Explain the marketing techniques and the marketing of information services and products (Understand)

M04: Explain Role of social media in marketing (Understand)

Module V: Quality Management

TQM, Quality audit; SERVQUAL, ISO 9000 series of Standards;

Module Outcome:
After Completion of this module, the student should be able to:

M05: Describe the TQM, ISO 9000 series of standards (Understand)

M05: Apply the ISO 9000 series in libraries (Apply)

Module VI: Other Realms of Management
Crisis Management; Change Management; Space Management, Green library building, Information Commons

Module Outcome:
After Completion of this module, the student should be able to:

M06: Explain the crisis management, Change management and Space Management (Understand)

M06: Examine the application of Space Management in Libraries (Analyse)

M06: Evaluate the crisis management in libraries (Evaluate)

M06: Describe the Green Library (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:
- Assignments
- SeminarPresentationonselectedtopics
- Tutorials

LEARNING RESOURCES

References

1. Dougherty, R.M. and Heinritz,F.J. Scientific management of library operations. NewYork: Scarecrow, 1967.
2. Duelling, Thomas N. and Ivancevich, John M. Management: Principles and guidelines. New Delhi: Biztantra, 2003.
3. Evans, G. Edwardand Alire,Camila A.Management basics for information professionals. 3rd ed. London: Facet,2013.
4. Evans, G. Edward G. Management techniques for librarians. 2nd ed. NewYork: Academic Press, 1983.
5. Hannagan, Tim. Management: concepts and practices. Ed5. New Delhi: Pearson, 2014.
6. JamesA F Stoner ,Edward Freeman and Gilbert, "Management", 6th Edition, Pearson Education,1995./Prentice Hall of India Pvt.Ltd.,2007.
7. Koontz, Harold and Weirich, Heinz. Essentials of management: An international and leadershipperspective.9thed.NewDelhi:TataMcGraw-Hill,2013.
8. Osbone,LarryNandNakamura,Margaret.Systemanalysisforlibrariesandinformation professional.Colorado:LibrariesUnlimited,1999.
9. Robbins, Stephen P "Fundamentals of Management: Essential Concepts and Applications", 5th Edition,Pearson Education.,2005
10. Robbins, StephenP., Coulter, Mayand Vohra, Neharika.   Management, 10thed. Delhi: Pearson, 2010.
11. Rudani, Ramesh B. Principles of Management, Delhi: Tata McGraw -Hill Education (India) Private Ltd, 2013
12. Seetharama S. Guidelines for planning and management of libraries and information centres.Calcutta:IASLIC,1990.
13. Sivarethinamohan, R and Aranganathan, P. Principles of Management, 1st Edition, CBA/Tata McGraw-Hill Publishing Company Ltd., 2005.
14. Tripathi, P.C and Reddy, P.N. Principles of Management. 5th ed. New Delhi: TataMcGraw Hill Education private Ltd., 2012
15. Walters, Suzanne. Library Marketing That Works! New York: Neal-Schuman, 2004.

16. Weirich, Heinz, Cannice, MarkV. And Koontz, Harold. Management: A global, innovative and entrepreneurial perspective. 14th ed. New Delhi: McGraw-Hill Education (India), 2013.

On-line Sources

17. CPM-Critical Path Method‖ Project Management Technique‖ Operations Research‖ Solved Problem. (2016). [Video]. Retrievable from https://www.youtube.com/watch?v=vUMGvpsb8dc
18. History of Management thought. Retrievable from http://faculty.wwu.edu/dunnc3/rprnts.historyofmanagementthought.pdf
19. Marketing of library and Information Services V1.(2015). [video]. Retrievable from https://www.youtube.com/watch?v=0V4jEKuWb2o&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=90
20. PERT Vs CPM: Difference between them with definition & Comparison Chart. (2018). [Image].Retrievablefromhttps://www.youtube.com/watch?v=dFTG3ohAcso.
21. Principles of management. Retrievable from http://www.saylor.org/site/textbooks/Principles%20of%20Management.pd

ASSESSMENT

- 40%Continuous/FormativeAssessment(seePGRegulations).
- 60%End-semester/SummativeAssessment:3hourwrittenExam.

SEMESTER I	Course Code:LIS-CC-513	Credits: 3

Name of the Course:

KNOWLEDGE ORGANIZATION: LIBRARY CLASSIFICATION (THEORY)

Course Outcome:

CO1: The students would be able to understand the concept of Universe of Subjects and different modes of formation of subjects

CO2: The students would be able to familiarize the Enumerative and Faceted schemes of Library Classification

CO3: The students would be able to explain the Mapping of Universe of Subjects in the major Library Classification schemes

CO4: The students would be able to understand the theories of Library Classification

CO5: The students would be able to examine the functions and qualities of the Notation system in Library Classification

CO6: The students would be able to understand the global trends in Library Classification

COURSE CONTENT

Module I: Universe of Subjects

Structure and attributes, modes of formation of subjects.

Module Outcome:
After Completion of this module, the student should be able to:

M01: Describe the structure of Universe of Subjects (Understand)
M01: Explain the attributes of Universe of Subjects (Understand)
M01: Define the modes of formation of subjects (Remember)

Module II: Library Classification

Library classification and its functions. Enumerative and faceted schemes.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Describe important functions of Library Classification (Understand)

M02: Understand the Enumerative and Faceted schemes of Classification (Understand)

M02: Compare the Enumerative and Faceted schemes of Classification (Analyse)

Module III: Mapping of the Universe of Subjects

Mapping of the Universe of Subjects in the major schemes of Library classification (DDC, CC, UDC and LC), salient features of CC, UDC, DDC and WebDewey

Module Outcome:
After Completion of this module, the student should be able to:

M03: Describe the Mapping of Universe of Subjects (Understand)

M03: Compare the Mapping of the Universe of Subjects in the major schemes of Library classification (Analyse)

Module IV: General Theory ofClassification

Normative Principles for Idea Plane and Verbal Plane; Principles for Helpful Sequence; Facet Analysis as used in the CC; Principles for Facet Sequence; Postulation procedure; Devices to form and sharpen isolate numbers.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Explain the Normative Principles for Idea Plane and Verbal Plane in the Library Classification (Understand)
M04: Describe the Principles for Helpful Sequence in the Library Classification (Understand)
M04: Define the Facet Analysis used in Colon Classification (Remember)
M04: Describe the Principles for Facet Sequence in the Library Classification (Understand)
M04: Evaluate the Postulation procedures used in Library Classification (Evaluate)

Module V: Notation System and its functions

Qualities of a good notation system; Hospitality and Mnemonics; Zone analysis

Module Outcome:
After Completion of this module, the student should be able to:

M05: Describe the Notation System (Understand)
M05: Analyse Qualities of a good notation system (Analyse)
M05: Explain the functions of Notation in Library Classification (Understand)

M05: Define the Hospitality of the Notation System (Remember)
M05: Explain the Mnemonics used in Library Classification (Understand)
M05: Examine the Zone analysis used in Library Classification (Analyse)

Module VI: Trends in Library Classification
Automatic Classification; Classification in online systems and Web; Knowledge Organization for Digital Libraries; Ontologies; Steps in designing a scheme of classification for a micro-subject.

Module Outcome:
After Completion of this module, the student should be able to:

M06: Describe the automatic classification system (Understand)
M06: Classify documents by using Web based Classification systems (Apply)
M06: Develop knowledge organization for Digital Libraries (Create)
M06: Design a scheme of classification for micro-subjects (Create)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:
- Assignments
- SeminarPresentationonselectedtopics
- Tutorials

LEARNING RESOURCES
References

1. Dewey, M., In Fox, V. B., In Kyrios, A., & OCLC. (2020). Dewey decimal classification. Dublin, Ohio : OCLC, Inc.
2. Dewey, M., & Beall, J. (2019). Dewey decimal classification: January 2019. Dublin, Ohio: OCLC Online Computer Library Center, Inc.
3. Satija, M. P. (2013). The theory and practice of the Dewey Decimal Classification system. Oxford: Chandos Pub.
4. Dewey, M., Mitchell, J. S., Beall, J., Green, R., Martin, G., & Panzer, M. (2011). Dewey decimal classification and relative index.
5. Chan, L. M., Comaromi, J. P., Mitchell, J. S., &Satija, M. P. (1996). Dewey Decimal classification: A practical guide. Albany: Forest Press.
6. Kumar, P. S. G. (2010). Practical guide to Colon classification, edition-6. Agra: Associated Pub. House.
7. Raju, A. A. N. (2001). Colon classification: Theory and practice : a self instructional manual. New Delhi: EssEss Publications.
8. Ranganathan, S. R. (2006). Colon classification. New Delhi: EssEss Publications.

9. Sagar, R. (2003). New concepts of practical colon classification. New Delhi: EssEss Publications.
10. Satija, M. P. (2011). A guide to the theory and practice of colon classification. New Delhi: EssEss Publications.
11. Tiwari, P. (2016). Colon classification. New Delhi: A.P.H. Pub. Corp.
12. Hussain, S. (2022). Library Classification: Facets and Analysis (2nd Revised and Enlarged Edition). B.R. Publishing Corporation.
13. Kaula, P. N. (1985). A Treatise on Colon Classification. Macmillan Publishers.
14. Ranganathan, S. R. (1962). Elements of library classification (3rd ed.). Asia Publishing: Bombay.

On-line Sources

15. https://shodhganga.inflibnet.ac.in/bitstream/10603/152617/11/09_chapter%204.pdf
16. https://onlinelibrary.wiley.com/doi/abs/10.1002/asi.5090120406
17. https://openlibrary.org/subjects/colon_classification
18. https://mypages.iit.edu/~smart/halsey/lesson1.htm
19. http://sixthformstudyskills.ncl.ac.uk/libraries/overview-the-dewey-decimal-system/
20. https://www.gutenberg.org/files/12513/12513-h/12513-h.htm

ASSESSMENT

- 40% Continuous/ Formative Assessment (see PG Regulations).
- 60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER I	Course Code:LIS-CC-514	Credits: 4

Name of the Course:

KNOWLEDGE ORGANIZATION: LIBRARY CLASSIFICATION (PRACTICAL)

Course Outcome:

CO1: The students would be able to classify simple specific subjects by using DDC

CO2: The students would be able to classify complex subjects by using DDC (23rd Ed.)

CO3: The students would be able to practice classification of documents by using DDC (23rd Ed.) Indicating the steps followed

CO4: The students would be able to classify simple specific subjects by using Colon Classification

CO5: The students would be able to classify complex subjects by using Colon Classification

CO6: The students would be able to practice classification of documents by using CC indicating the steps followed

COURSE CONTENT

Module I: Dewey Decimal Classification: Basic Subjects
Familiarization of Main Classes, Subdivisions and Relative Index, Classification of simple specific subjects

Module Outcome:
After Completion of this module, the student should be able to:

M01: Describe the Main Classes of DDC (Understand)

M01: Analyse the Subdivisions and Relative Index of DDC (Analyse)

M01: Classify the simple specific subjects using DDC (Apply)

Module II: Dewey Decimal Classification: Complex Subjects
Complicated titles by applying schedules, tables and 'add.....' instructions in the Dewey Decimal Classification (23rd. ed.)

Module Outcome:
After Completion of this module, the student should be able to:

M02: Analyse complex subject by using DDC (Analyse)

M02: Classify complex subject by using DDC (Apply)
M02: Classify titles by applying schedules (Apply)
M02: Classify titles by applying schedules and tables (Apply)
M02: Classify titles by applying schedules, tables and 'add………' instructions (Apply)

Module III: Record of Term Work:DDC
Classification of not less than 75 documents, indicating the steps followed. Books numbers have to be derived using the Cutter table.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Prepare a Record of term work of Classification (Create)
M03: Classify the documents by following the steps (Classify)
M03: Construct Book Numbers by using the Cutter table (Create)

Module IV: Colon Classification: Basic Subjects
Familiarization of Main Classes/ Basic Classes and Fundamental categories. Classification of simple specific subjects.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Describe the Main Classes of CC (Understand)
M04: Analyse the Basic Classes and Fundamental categories (Analyse)
M04: Classify the simple specific subjects by using CC (Apply)

Module V: Colon Classification: Complex Subjects
Classification of complicated titles covering all the Main Classes, Facets, Common Isolates, Phase relation and the Devices in the Colon Classification (6thed.).

Module Outcome:
After Completion of this module, the student should be able to:

M05: Analyse complex subject by using CC (Analyse)
M05: Classify complex subject by using CC (Apply)
M05: Classify titles by applying Main classes of CC (Apply)
M05: Classify titles by applying Facets and Common Isolates (Apply)
M05: Classify titles by applying Main Classes, Facets, Common Isolates, Phase relation and the Devices (Apply)

Module VI: Record of Term Work: CC

Classification of not less than 75 documents, of simple and complicated specific subjects, applying the postulation Procedure. Book numbers have to be derived using the Facet Formula prescribed in CC.

Module Outcome:
After Completion of this module, the student should be able to:

M06: Prepare a Record of term work of Classification (Create)
M06: Classify the documents by following the postulation procedure (Classify)
M06: Construct Book Numbers using the Facet Formula prescribed in CC (Apply)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT
Suggested Class Room Activities:
- Assignments
- Demonstration
- Tutorials
- Practical

LEARNING RESOURCES
References

- Dewey, M., InFox, V.B., InKyrios, A., & OCLC. (2020). Dewey decimal classification. Dublin, Ohio :OCLC, Inc.
- Dewey,M., & Beall, J. (2019). Dewey decimal classification: January 2019. Dublin, Ohio: OCLC Online Computer Library Center,Inc.
- Satija,M.P. (2013). The theory and practice of the Dewey Decimal Classification system. Oxford: Chandos Pub.
- Dewey,M., Mitchell, J.S., Beall, J., Green, R., Martin, G. , & Panzer, M. (2011). Deweydecimal classification and relative index.
- Chan, L. M., Comaromi, J. P., Mitchell, J. S., &Satija, M. P. (1996). Dewey Decimal classification: Apractical guide. Albany: Forest Press.
- Kumar,P.S.G.(2010).Practical guide to Colon classification, edition-6. Agra: Associated Pub.House.
- Raju, A.A.N.(2001). Colon classification: Theory and practice: a self instructional manual. New Delhi: EssEss Publications.
- Ranganathan,S.R.(2006). Colon classification. New Delhi: EssEss Publications.
- Sagar,R.(2003). New concepts of practical colon classification. NewDelhi: EssEss Publications.
- Satija,M.P.(2011).A guide to the theory and practice of colon classification. New Delhi: EssEss Publications.
- Tiwari,P.(2016).Colon classification. NewDelhi: A.P.H.Pub.Corp.

- Online Resourses
- https://shodhganga.inflibnet.ac.in/bitstream/10603/152617/11/09_chapter%204.pdf
- https://onlinelibrary.wiley.com/doi/abs/10.1002/asi.5090120406
- https://openlibrary.org/subjects/colon_classification
- https://mypages.iit.edu/~smart/halsey/lesson1.htm
- http://sixthformstudyskills.ncl.ac.uk/libraries/overview-the-dewey-decimal-system/
- https://www.gutenberg.org/files/12513/12513-h/12513-h.htm

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End semester/ Summative Assessment: 3 hour written Exam.

SEMESTER I	Course Code:LIS-CC-515	Credits: 3

Name of the Course:

FUNDAMENTALS OF INFORMATION TECHNOLOGY (PRACTICAL)

Course Outcome:

CO1: Create,editandmanagefilesusingMS-Word,OpenOfficeWriter,MSExcel,MS Access

CO2: Encourage the students to examine how to install and use operating system

CO3: Encourage the students to look a practice of the video conferencing and live streaming software Google Meet, OBS Studio, Team Viewer.

COURSE CONTENT
Module I: Operating System: Windows
MS Office

Module Outcome:

After Completion of this module, the student should be able to:

M01: Installation and customization of Windows Operating Systems and allied softwares (Apply)

Module II: Operating System: Linux
LibreOffice

Module Outcome:

After Completion of this module, the student should be able to:

M02: Setting up and customization of Linux Operating Systems and related softwares (Apply)

Module III: Content Management Software
CMS software- JOOMLA, Drupal, Wordpress, Moodle.

After Completion of this module, the student should be able to:

M03: Setting up and customization of CMS softwares (Apply)

Module IV: Video Conferencing, Live Streaming and Remote system access
Google Meet, Zoom, OBS Studio, Team viewer, Anydesk

Module Outcome:

After Completion of this module, the student should be able to:

M04: Develop a thorough understanding of how to conduct video conferencing, live streaming, remote system access and video recording (Apply)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- Demonstration
- Tutorials
- Practical

LEARNING RESOURCES

References

1. Burke,J.C. Power point 97exam guide. Delhi: Prentice-Hall of India,1998.
2. Lee,WM. Windows 7 up and running. Mumbai: Shroff Publishers and Distributors, 2009.
3. Solutions KI, Excel 2010 in simple steps. Delhi: Dream tech Press Publications, 2012.
4. Solutions KI, Word 2010 in simple steps. Delhi: Dream tech Press Publications, 2011.
5. Walkenbach, Microsoft Excel Bible. New Delhi: Wiley Publications, 2013.
6. Achyut Godbole and AtulKahate. Web Technologies: TCP/IP, Web/Java Programming, and Cloud Computing 3rd ed. New Delhi: McGraw Hill Education (India) Private Limited,2014.

7. Joan Lambert and Curtis Frye. Microsoft Office 2019 Step by Step. USA: Microsoft, 2019.
8. MichaelJ. Graham, Jason Borgen. Google Tools Meets Middle School. Thousand Oaks: Corwin, 2017.
9. Gordon Haff. How open source ate software: understand the open source movement and so much more, New York: A press, 2018

ASSESSMENT

40%Continuous/Formative Assessment (see PG Regulations). 60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER I	Course Code: LIS–DE- 516	Credits: 2

Name of the Course:

KNOWLEDGE ORGANIZATION: UNIVERSAL DECIMAL CLASSIFICATION (PRACTICAL)

Course Outcomes:
   CO1:   Practical awareness of document classification
   CO2:   Awareness about the organization of documents in different libraries based on subjects.
   CO3:   Application of subject classification based on UDC.

<div align="center">COURSE CONTENT</div>

Module I: Universal Decimal Classification
Classification of simple and complicated specific subjects, applying the schedules, Common and Special Auxiliaries and other Devices prescribed in the Abridged Edition of the UDC.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Describe the Universal Decimal Classification (Understand)
MO1: Classify the simple and complicated specific subjects (Apply)
MO1: ExplainCommonandSpecialauxiliaries(Understand)

Module II: RecordofTermWork
Classification of not less than 75 documents, indicating the steps followed. Book Numbers have to be derived from the name of author(s).

Module Outcome:
After completion of this model, the students should prepare a record of team work of classification

MO1: Solve the titles not less than 75 documents in UDC (Apply)
MO1: Determine book numbers have to be derived from the name of author(s). (Apply)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

   Suggested Class Room Activities:

   - Assignments
   - SeminarPresentationonselectedtopics
   - RecordofTermWork

LEARNING RESOURCES
References

1. Fosket, A.C.(1973).Universal Decimal Classification. Clive Bingley, London.
2. Mcllwaine, I.C.(2007).The Universal Decimal Classification: A guide to its use. UDC Consortium, The Hague, Netherlands.
3. Universal Decimal Classification. (Latest Edition). British Standards Institution, London.
4. Foskett, A. C. (1973). The universal decimal classification;: The history, present status, and future prospects of a large general classification scheme,. Linnet Books.
5. Raju, A. (2007). Universal Decimal Classification (IME-1993): Theory and Practice (A Self Instructional Manual). EssEss Publications.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60%End- semester/ Summative Assessment: 3 hour written Exam.

SEMESTER II	Course Code: LIS-CC-521	Credits: 3

Name of the Course:
INFORMATION AND COMMUNICATION

Course Outcome:
CO1: ArticulateandexemplifybasicknowledgeaboutCommunication,Barriersof
Communication and Models of Communication
CO2: Enunciating the Information society, information industry
CO3: Articulate basic knowledge about Information Management and Knowledge
Management

COURSE CONTENT

Module I: Information
Characteristics, nature, value and uses; Conceptual difference between data, information and knowledge

Module Outcome:
After Completion of this module, the student should be able to:

M01: Explain the difference between data, information and Knowledge (Understand)
M01: Describe the Characteristics, nature, value and uses of information (Understand)

Module II: Communication
Channels – formal and informal; models; barriers, Trends in scientific communication.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Define the channels of Communication (Remember)
M02: Explain the models and barriers of Communication (Understand)
M02: Evaluate the trends in scientific communication (Evaluate)

Module III: Information Science
Genesis and development; definitions and scope; Information Science as a discipline and its relationship other subjects

Module Outcome:
After Completion of this module, the student should be able to:

M03: Describe the genesis and development of Information Science (Understand)
M03: Explain the Information Science and its relationship with other subjects (Understand)

Module IV: Library, Information and Society

Information Society: genesis and characteristics;Information literacy; Intellectual Property Acts; Right to Information Act; Fair use provision, censorship, data security; National policy of information; Open access movement.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Describe the genesis and characteristics of information society (Understand)
M04: ExplaintheIPActs,RTI,Fairuseprovision,DataSecurity,NationalPolicyof
        Information,OAmovement(Understand)

Module V: Economics of information

Information industry: generators, providers and intermediaries; Information audit. Marketing of information products and services.

Module Outcome:
After Completion of this module, the student should be able to:

M05: Describe the Information Industry (Understand)
M05: Explain the Information Audit (Understand)

Module VI: Management of Information

Information management; Knowledge management.

Module Outcome:
After Completion of this module, the student should be able to:

M06: Describe the Information Management and Knowledge Management (Understand)
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ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics

LEARNING RESOURCES
References

1. Andal, N. Communication theories and models. Mumbai: Himalaya Publishing House, 2005.
2. Bawden, David and Robinson, Lyn. Introduction to Information Science. London: Facet Publishing, 2012.
3. Case, Donald O. Looking for information: a survey of research on information seeking, needs and behaviour. 2nd ed. Amsterdam: Academic Press, 2007.
4. Feather, John. The information society: a study of continuity and change. 5th ed. London: Facet Publishing, 2008.
5. Khanna, JK. Library and society. 1955. Research Publication, Kurukshetra
6. Martin, WJ. The information society. 1988. Aslib, London.
7. McGarry, K.J. Changing context of information: an introductory analysis. 2nd ed. London: Library Association, 1993.
8. McGarry, K.J. Communication, knowledge and librarian. London: Clive Bingley, 1975.
9. McQuail, Denis and Windahl, Sven. Communication models for the study of mass communications. London: Longman, 1981.
10. Meadows,A.J.,ed.Knowledge and communication:essays on the information chain. London: Library Association, 1991.
11. Norton, Melanie J. Introductory concepts in Information Science. New Jersey: Information Today, 2008.
12. Prasher, RG. Information and its communication. 1991. Medallion Press, NewDelhi
13. Satyanarayana, N.R and Satyanarayana, Red. Problems of Information Science, 1996.
14. Shera, J.H The Foundation of Education Librarianship, Bombay, Asia, 1970
15. Vickery, Brian C. and Vickery, Alina. Information Science in theory and practice. 3rd ed. Munchen: K.G.Saur, 2004.

Online Sources

16. Christozov,D.,&Toleva-Stoimenova,,S.(2014).Theroleofinformationbrokersin knowledge management. Iiakm.org. Retrievable fromhttp://www.iiakm.org/ojakm/articles/2014/volume2_2/OJAKM_Volume2_2pp109-119.pdf.
17. Data, information and knowledge (LIB). (2015). [Video]. Retrievable from https://www.youtube.com/watch?v=nLdw725hsRc&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=17.
18. Information related legislation - censorship (LIB). (2015).[video]. Retrievable from https://www.youtube.com/watch?v=KiZxqNGu0JE&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=6
19. Information Related Legislation- RTI (LIB). (2015). [video]. Retrievable fromhttps://www.youtube.com/watch?v=foj-N-SS5xs&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=7
20. KnowledgeManagement-Tutorialspoint.Tutorialspoint.com.(2020).Retrievablefrom https://www.tutorialspoint.com/management_concepts/knowledge_management.htm.

21. Knowledge management (LIB). (2015). [Video]. Retrievable from https://www.youtube.com/watch?v=yHi-5EbjiA4&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=11.

22. Plosker, G. (2020). The Information Industry Revolution: Implications for Librarians. Infotoday.com. Retrievable fromhttp://www.infotoday.com/online/nov03/plosker.shtml.

23. Theories and models of communication. Retrievable from https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/library_and_information_science/knowledge_society/05._theories_and_models_of_communication/et/4305_et_et.pdf.

24. Marketing of library and Information Services V1.(2015). [video]. Retrievable from https://www.youtube.com/watch?v=0V4jEKuWb2o&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=90

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER II	Course Code: LIS-CC-522	Credits: 4

Name of the Course:
INFORMATION SOURCES

Course Outcome:

CO1: Articulate and exemplify basic knowledge about primary, secondary and tertiary Sources
CO2: Enunciating the reference sources
CO3: Articulate basic Knowledge about online sources

COURSE CONTENT

Module I: Physical media of information
Evolution of physical media; Classification of information sources– Print and non-print; Documentary and Non-Documentary; Primary, Secondary and Tertiary Sources of Information—their categories and characteristics.

Module Outcome:
After Completion of this module, the student should be able to:

M01: Describe the evolution of physical media (Understand)
M01: Explain the classification of information sources (Understand)

Module II: Ready Reference Sources
Evaluation Criteria; Detailed Study of dictionaries, encyclopaedias, yearbooks, directories, biographical sources, geographical sources, statistical sources, sources of current information.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Describe the evaluation criteria for reference sources (Understand)
M02: Evaluate different reference sources (Evaluate)

Module III: Electronic Information Sources
Definition, characteristics and types; Information in the Internet–E-books, E-journals, information gateways, table of contents, preprints, discussion forums, technical reports,

OPACs, Campus Wide Information Service, ETDs, Patents, reference sources, search tools, subject directories, Courseware, software.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Describe different types of Electronic Information sources (Understand)

Module IV: Prominent sources in different subjects
Abstracting and Indexing periodicals, databases, ready reference sources – dictionaries, encyclopaedias, yearbooks, directories, biographical sources, geographical sources, handbooks and manuals and statistical sources

Module Outcome:
After Completion of this module, the student should be able to:

M04: Explain the prominent sources in different subjects (Understand)
M04: Examine major reference sources in different subjects (Analyse)

Module V: Multimedia & E- resources
Databases, Portals, Subject Gateways; Open Access Resources, institutional repositories, blogs, social book marking. DOAJ, DOAB, Open Educational resources

Module Outcome:
After Completion of this module, the student should be able to:

M05: Explain the multimedia and E-resources (Understand)
M05: Define the databases, portals, gatewaysandOpen AccessResources (Remember)
M05: Explain the Institutional repositories (Understand)
M05: Explain the Blogs, Social Book Marking (Understand)
M05: Explain the DOAJ, DOAB, Open Educational resources (Understand)

Module VI: Search Engines, Search Techniques
Lab. Work on information search & access, Trial Demos

Module Outcome:
After Completion of this module, the student should be able to:

M06: Formulate the search techniques for relevant search (Apply)
M06: Describe the different search techniques used in different databases (Understand)

Project
Evaluation of not less than 75 reference sources including electronic sources.

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics
- ProjectEvaluation

LEARNING RESOURCES
References

1. Cassel, Kay Ann and Hiremath, Uma. Reference information services: An introduction, 3rd ed. London: Facet Publishing,2013.
2. Cheney,FN and Williams,WJ. Fundamental reference sources.Ed.3.2000. ALA, Chicago.
3. Chowdhary G.G and Sudatta Chowdhary. Information Sources and Searching on the WWW.London:FacetPublishing,2001.
4. Chowdhary G.Gand Sudatta Chowdhary: Searching CD-ROM and Online Information sources. London: Facet Publishing, 2001.
5. Gopinath,M.A. Information Sources and Communication Media. DRTC Annual Seminar, Bangalore-1984
6. Grogan, Denis. Science and Technology an Introduction to the Literature 4th ed.London: Clive Bingley, 1992.
7. Guha,B. Documentation and Information, 2nd Ed.,Calcutta, World Press,1982.
8. Hurt, C. D. Information Sources in Science and Technology. 3rd ed. Westport, Conn.: Libraries Unlimited,1998.
9. KatzWilliamA.Introduction to reference work: reference service and reference process. v.2. Ed. 5. McGraw-Hill, New York, 1987.
10. Katz,WilliamA. Introduction to reference work, 7th ed. New York: McGraw Hill,1997.
11. Krishan Kumar. Reference service,5th ed. New Delhi: Vikas Publishing House,2004.
12. Ranganathan,S.R. Reference Service. 2nd ed. Bombay: Asia Pub. House,1961.
13. SewaSingh. Handbook of international sources on reference and information. NewDelhi: Beacon Books, 2001.
14. SewaSingh. Manual of reference and information sources. NewDelhi: BR.Publishing, 2004.
15. Stebbins, Leslie,F. Student guide to research in the digital age: how to locate and evaluate information sources.Santa Barbara:Libraries Unlimited, 2005
16. Stevens, Rolland and Smith, Linda C. 'Reference Work in the University Library. Littleton: LibrariesUnlimited,1986
17. Trebble, T.: The Impact of the new media on libraries, OSTI Project Report, S1/57/09, Second InternationalReport;
18. Valecich,J.Information systems today: Managing the digital world. NewDelhi: PHI, 2009.
19. Walford, AJ. Guide to reference books.v.3.Ed.4..LibraryAssociation,London,1980
20. Webb, WilliamH.etal.Sources of information with social sciences. 3rded. Chicago: ALA, 1986.

Online Sources

21. Kenchakkanavar,A.(2014).Typesofe-resourcesanditsutilitiesinlibrary.International Journal Of Information Sources And Services,1(2), 97-104. Retrieved fromhttp://file:///C:/Users/JP/Downloads/TYPESOFE-RESOURCESANDITSUTILITIESINLIBRARY9.pdf.

22. myils504 / Almanacs, Yearbooks, and Handbooks. Myils504.pbworks.com. (2020). Retrieved from http://myils504.pbworks.com/w/page/10032936/Almanacs%2C%20Yearbooks%2C%20and%20Handbooks#TheWorldAlmanacandBookofFacts.

23. ReferenceSources:UseandEvaluationCriteria,e-InformationSources(LS).(2015).[video]. Retrieved fromhttps://www.youtube.com/watch?v=nVugof1Ml_s&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=97

24. Sources for current Information: an overview (LIB). (2015).[Video]. Retrieved fromhttps://www.youtube.com/watch?v=4pjTdpnA-60&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=105

25. Types of Information sources: non-documentary: organizations and humans (LIB).(2015). [video]. Retrieved from https://www.youtube.com/watch?v=A4CAhRI7-xk&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=102

ASSESSMENT

40%Continuous/FormativeAssessment(seePGRegulations).

60%End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER II	Course Code: LIS –CC- 523	Credits: 3

Name of the Course:
INFORMATION PRODUCTS AND SERVICES

Course Outcome:
CO1: Illuminate the concept of various information services provided by the libraries
CO2: Introduce various information systems

COURSE CONTENT

Module I: Information Users and their Information Needs
Categories of information users; Information needs, definition; Types and models; Information seeking behaviour: User studies, methods, technique and evaluation

Module Outcome:
After Completion of this module, the student should be able to:

M01: Identify the Categories of Information Users (Remember)
M01: Analyse the different types of Information Needs (Analyse)
M01: Describe the behaviour of users in finding the right information they need (Understand)
M01: Explain different methods to evaluate users (Understand)

Module II: Introduction to Information Literacy
Information: Characteristics of information; Types of information; Need for Information Literacy; Dimensions of information literacy.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Describe the definition, characteristics and types of Information (Understand)
M02: Locate, evaluate and use information effectively (Apply)

Module III: Reference Service
Concept, definition and trends, virtual reference service, examples of electronic reference service; Reference Interview and search techniques.

Module Outcome:

After Completion of this module, the student should be able to:

M03: Describe the definition, concept and types of reference service (Understand)
M03: Examine virtual reference service (Analyse)
M03: Explain the concept of Reference Interview (Understand)
M03: Analyse the search techniques (Analyse)

Module IV: Information Services and Products

Information services, concept, definition need and trends, Alerting services–CAS, SDI, e-alert, technique,

evaluation. Bibliographic, Referral, Document Delivery, Referral centres, LISTSERV

Module Outcome:
After Completion of this module, the student should be able to:

M04: Evaluate the various information services provided by libraries (Evaluate)

Module V: Personalized Information Services
Abstracting and Indexing services; Document Delivery Services; Translation, Reprography

Module Outcome:
After Completion of this module, the student should be able to:

M05: Explain the personalised information services provided by libraries (Understand)

Module VI: Information Systems and their Services
Study of national, International Systems and Services, NISCAIR, DESIDOC, NASSDOC, SENDOC, UNISIST, AGRIS, MEDLARS, OCLC

Module Outcome:
After Completion of this module, the student should be able to:

M06: Evaluate the services provided by the various information systems (Evaluate)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- Seminar Presentation on selected topics

LEARNING RESOURCES
References

1. Bopp, R.E., & Smith, L.C. (1995). Reference and Information Services: An Introduction. Library Science Text Series. Englewood: Libraries Unlimited
2. Cassell, K. A., & Hiremath, U. (2019). Reference and information services: An introduction. American Library Association.
3. Grobelny,J. (2013). A Review of "Reference and Information Services: An Introduction" 4th ed.
4. Gurdev Singh (2013). Information Sources, Services and Systems. New Delhi: PHI Learning
5. Hurt,C.D. (1988). Information Sources in Science and Technology. Library Science Text Series. Englewood: Libraries Unlimited
6. Katz,W.A.,&Katz,B.(1991).Reference and information services: A reader for the nineties. Metuchen, NJ: Scarecrow Press.
7. Krishan Kumar (2004). Reference Service 5th ed. New Delhi: Vikas Publishing House
8. Neelameghan A.& Prasad K.N.(1998) Information systems, networks and services in India. Chennai: Ranganathan Centre for Information Studies
9. Ranganathan,S.R. (1961). Reference service. Asia Publishing House (Bombay).
10. Rastogi,K.G.(2006)Reference services in Library Science. New Delhi: Alfa Publications
11. Stebbins, L. (2005). Student Guide to Research in the Digital Age: How to Locate and EvaluateInformationSources.ABC-CLIO.
12. Valacich,J.,&Schneider,C.(2009).Information Systems Today: Managing the Digital World. Prentice Hall Press.
13. Fourie, I. (2006). How LIS professionals can use alerting services. Elservier.
14. Rothstein, S. (1961). Reference service: the new dimension in librarianship. College & Research Libraries, 22(1), 11-18.

On-line Sources

15. Information literacy 2.0 (LIB). (2016, July 23). https://www.youtube.com/watch?v=zAI7c0N5jak&feature=youtu.be
16. Information services: Concept, need etc (LIB)—YouTube. (n.d.)., from https://www.youtube.com/watch?v=2lWplYuo9Ec&feature=youtu.be
17. Kawatra,P.ReprographyandReprographicServices.Informationscienceandlibraries,102.
18. Kundu, D. K. (2017). Models of information seeking behaviour: A comparative study.Methodology,7,4.
19. Rath,P.(1995).InformationSeekingBehavioroftheuser:methodsandtechniques.
20. Referral, document delivery & translation services (LIB)—YouTube. (n.d.). from https://www.youtube.com/watch?v=2JV2q1IsQBI&feature=youtu.be

ASSESSMENT
40% Continuous/ Formative Assessment (see PG Regulations). 60%End- semester/ Summative Assessment: 3 hour written Exam.

SEMESTER II	Course Code: LIS-CC-524	Credits: 3

Name of the Course:

LIBRARY AND INFORMATION CENTRE MANAGEMENT

Course Outcome:

CO1: Familiarize in selecting and acquiring documents and prepare students to carry out library housekeeping operations

COURSE CONTENT

Module I: Introduction to Library Planning and Management

Library Planning: Concept, definition, need and purpose; Library Management: Concept, definition and scope, need and purpose of collection management, human resource management and financial management

Module Outcome:

After Completion of this module, the student should be able to:

M01: Describe the need and purpose of planning in libraries (Understand)
M01: Analyse the structure of libraries (Analyse)
Mo1: Analyse the need and purpose of collection management, human resource management and financial management (Analyse)

Module II: Library House Keeping Operations: Technical Operations
Different sections of library and information centres and their functions. Collection development: Acquisition procedures: selection, ordering, accessioning and stock editing. Technical processing: Classification, Cataloguing and physical processing.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Describe the different sections of libraries and their functions (Understand)
M02: Examine the steps in acquisition and technical section (Understand)

Module III: Library House Keeping Operations: Reader's services
Maintenance of documents: work with new, returned, damaged and lost documents. Stock verification, binding, care, preservation and restoration of print and electronic documents. Circulation control: Charging systems, inter library lending. Serials control: Selection, ordering, receipt and display. Special collections

Module Outcome:
After Completion of this module, the student should be able to:

M03: Analyse the services provided by Maintenance section, Circulation section, Serials Control (Analyse)

Module IV: Library Finance
Sources of Finance; Library Budget, Budgeting and Accounting

Module Outcome:
After Completion of this module, the student should be able to:

M04: Explain the sources of finance in libraries (Understand)
M04: Analyse library budget (Analyse)

Module V: Library Building
Building: Lay out and space estimation; Furniture and equipment

Module Outcome:
After Completion of this module, the student should be able to:

M05: Design the space estimation, furniture and equipments in libraries (Create)

Module VI: Library Records and Statistics
Libraryrules; Staff Manual; Library Statistics. Types of Report: Annual report, Progress/ Review reports.

Module Outcome:
After Completion of this module, the student should be able to:

M06: Define the library rules (Remember)
M06: Describe the library statistics (Understand)
M06: Evaluate the types of reports used in libraries (Evaluate)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics
- LibraryVisit

LEARNING RESOURCES
References

1. Bawden,D.,& Robinson, L.(2015). Introduction to information science. Facet Publishing.
2. Bryson,J.(2006). Managing information services: a transformational approach. Ashgate Publishing, Ltd..
3. Bryson,J. (2017). Effective library and information centre management. Routledge.
4. Clayton,P.R., Clayton,P., & Gorman,G.E. (2001). Managing information resources in libraries: collection management in theory and practice. London: Library Association Publishing..
5. Corrall,S., & Brewerton,A. (1999). The new professional's handbook: your guide to information services management. Facet Publishing.
6. Evans, G.E.(1976). Management Techniques for Librarians.
7. Katz,W.A.(1980).Collection development: The selection of materials for libraries. New York; Toronto: Holt, Rinehart and Winston.
8. Khanna, J. K. (2001) Handbook of library administration. New Delhi: Crest Publishing House,.
9. Kumar,K.(2007).Library management in electronic environment. Har-Anand Publications.
10. Matthews,J.R.,& Matthews, J.A. (2005). Strategic planning and management for library managers. Libraries Unlimited..
11. Mittal, R.L.(2007). Library administration: theory and practice. EssEss Publications.
12. Ranganathan,S.R.(2006). Library administration. Madras Library Association, Madras.
13. Seetharama, S. (1990). Guidelines for planning of libraries and information centres. Indian Association of Special Libraries and Information Centres.
14. Stueart, R. D., Moran, B. B., & Morner, C. (2002). Library and Information Center Management, Libraries Unlimited.

On-line Sources

15. Evans,G.E.,&Alire,C.(2013).Management basics forinformation professionals. American Library Association.
16. Reid,M.T.(2000).Management Basics for Information Professionals. Reference & User ServicesQuarterly,40(1),98.
17. Library Building Furniture and Equuipment—YouTube.(n.d.).RetrievedJuly27,2020,from https://www.youtube.com/watch?v=HYL0LThTx4c&feature=youtu.be
18. Library Budget and Its Technique. (2020, June 4). https://www.youtube.com/watch?v=fQYs0XqNL4w&feature=youtu.be

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester/ Summative Assessment: 3hour written Exam.

SEMESTER II	Course Code: LIS-CC-525	Credits: 3

Name of the Course:
CATALOGUING AND METADATA (THEORY)

Course Outcome:
 CO1: Theoretical and practical awareness about document description and cataloguing.
 CO2: Understand various concepts and theories in cataloguing.
 CO3: Articulate and identify various standards in document description and bibliographic exchange.

COURSE CONTENT

Module I: Bibliographic Items
Bibliographic record and its structure and functions; Different kinds of bibliographic files; FRBR; Library catalogue and its functions; Types of catalogues: Classified and Dictionary Catalogues; OPACs

Module Outcome:
After Completion of this module, the student should be ableto:

MO1: Articulate the structure and functions of bibliographic record (Understand)
MO1: Analyse the different requirements for a bibliographic records (Analyse)
MO1: Explore the world of library catalogue (Evaluate)
MO1: Describe the Classified and Dictionary Catalogue (Understand)
MO1: Application of OPAC in libraries (Apply)

MODULE II: Bibliographic Description
Principles of Description; Standards for Description: ISBDs, AACR-2, RDA, CCF, FRBR, Bibframe. Standards of bibliographic information interchange– ISO 2709 and the MARC family of Formats, MARC XML.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Explain the various principles of description (Understand)
MO2: Define the ISBDs, AACR-2, and RDA (Remember)
MO2: Articulate bibliographic record formats- ISO 2709 (Understand)
MO2: Identify MARC and MARC XML (Analyse)

MODULE III: Subject Indexing
Problems in subject search and retrieval; vocabulary control; Thesauri;General Theory of Subject Indexing Languages

Module Outcome:
After Completion of this module, the student should be able to:

MO3: Explain the problems in subject search and retrieval (Understand)
MO3: Analyse vocabulary control (Analyse)
MO3: Develop Thesauri (Create)
M03: Analyse and evaluate the General Theory of Subject Indexing proposed by G Bhattacharya (Analyse)

MODULE IV: Indexing Systems

Lists of Subject Headings; LCSH, Sear's list of subject heading, Chain Indexing, PRECIS, POPSI; Automatic Indexing; Natural language indexing. Centralised cataloguing and co-operative cataloguing

Module Outcome:
After Completion of this module, the student should be able to:

MO4: List and explain various subject headings (Remember)
MO4: Articulate and exemplify various indexing methods (Understand)

MODULE V: Metadata

Types of metadata and their functions; metadata standards: Dublin Core, EAD

Module Outcome:
After Completion of this module, the student should be able to:

MO5: Identify the types of metadata (Analyse)
MO5: Explain the Dublin Core and EAD (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- Seminar Presentation on selected topics
- Tutorials

LEARNING RESOURCES
References

1. Aswal,R.S.(2004).MARC-21:Cataloguing format for 21st century.NewDelhi:EssEssPublications.
2. BowmanJ.H. (2003). Essential cataloguing. London: Facet Publishing.
3. Foulonneu,M. (2008). Metadata for Digital Resources. Oxford, UK: Chandos.
4. Girja Kumar and Krishan Kumar. (1983). Theory of cataloguing. Rev. Ed.5. NewDelhi: South Asia Books.
5. Read,J.(2003). Cataloguing with out tears: managing knowledge in the information society. Oxford: Chandos Publishing.
6. Sangma S.K.(2013).Cataloguing rules in Library science. New Delhi: Centrum Press.
7. Sangma, S.K. (2012). AACR2 with MARC21: Cataloguing Practice. New Delhi: Centrum Press.
8. Smiraglia,R.P.(2005). Metadata: A Cataloger's Primer. USA: Haworth.
9. Srivastava,M.D.(2011).Metadata Creation in Digital Libraries. New Delhi: Pacific.
10. Taylor, A. G. and Miller, David P. (2006) Wynar's introduction to cataloging and Classification.Ed.10.London:LibrariesUnlimited.
11. Aswal, R. S. (2004). MARC 21: Cataloguing Format for 21st Century. EssEss Publications.
12. Bavakutty, M. (1981). Canons of Library Classification. Kerala Library Association.
13. Dhiman, A. K. (2004). Cataloguing of Non Book Materials. EssEss Publications.
14. Foulonneau, M., & Riley, J. (2008). Metadata for Digital Resources: Implementation, Systems Design and Interoperability (Chandos Information Professional Series) (1st ed.). Chandos Publishing.

Codes / Standards

15. Anglo-AmericanCatalogingRules(mostrecenteditiontobeused)
16. DublinCoreandotherrelevantmetadatastandardsfordifferentkindsofobjects/ resourcesLibraryofCongressSubjectHeadings
17. MARC21andrelatedstandardsforbibliographicrecords
18. OCLC.(2002). Bibliographic formats and standards. 3rd ed. Dublin, Ohio: OCLC (Also availableonlineathttp://www.oclc.org/oclc/bib/toc.htm)
19. Ranganathan,S.R. (1964).Classified Catalogue Code,etc.5thed.Bangalore: SRELS.
20. SearsListofSubjectHeadings

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester/ Summative Assessment: 3hour written Exam.

SEMESTER II	Course Code: LIS-CC-526	Credits: 3

Name of the Course:
CATALOGUING AND METADATA (PRACTICAL)

Course Outcome:
 CO1: Familiarize with the practical awareness about cataloguing and metadata standards.
 CO2: Impart skills in cataloguing documents using AACR II R and CCC..
 CO3: Application of bibliographic description using MARC 21 format.

COURSE CONTENT

MODULE I: Bibliographic Description
Preparation of bibliographic description of books, periodical publications and E-resources as per ISBD and AACR2R. Coding of data elements in bibliographic description using MARC21 format.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Articulate and exemplify the preparation of bibliographic description of books, periodical publications and
       E-resources as per ISBD and AACR2R (Understand)
MO1: Analyse MARC21 format (Analyse)

MODULE II: Access Points
Choice and Rendering of access points for works of personal authorship, mixed responsibility, corporate publications, pseudonymous works and anonymous works for both Classified catalogue and Dictionary catalogues as per the rules in AACR2R. Formulation and rendering of subject access points using Chain Indexing for Classified Catalogue and Sears List of Subject Headings for a Dictionary Catalogue.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Identify the choice and rendering of access points in Classified Catalogue and Dictionary
       Catalogues as per the rules in AACR2R (Apply)
MO2: Identify the formulation of access points using various subject heading list (Apply)

Records of Term Work:
1. Sample catalogue (both Classified Catalogue and Dictionary Catalogue) of not less than 50 documents prepared in the card form.
2. MARC coded sheets for the above documents and their data base prepared in WINISIS
3. Metadata of 25 items prepared in DublinCore

Module III: Cataloguing of non book materials

Choice and Rendering of access points for works of Cartographic materials, films, CDs/DVDs.

Module Outcome:
After Completion of this module, the student should be able to:

MO3: involve in cataloguing of non book materials: cartographic materials, films, CDs/DVDs (Analyse)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentation

ASSESSMENT

40% Continuous/ Formative Assessment (seePGRegulations). 60% End-semester/ Summative Assessment: 3hour written Exam.

LEARNING RESOURCES
References

1. Aswal, R. S. (2005). *AACR2R With MARC21: Cataloguing Practice for 21st Century* (Illustrated ed.). Es Ess Publications.
2. Chan, L. M. (2022). *Cataloging and Classification An Introduction*. Scarecrow Press.
3. Lazarinis, F. (2014). *Cataloguing and Classification: An introduction to AACR2, RDA, DDC, LCC, LCS and MARC 21 Standards* (1st ed.). Chandos Publishing.
4. Ranganathan, S. R. (1988). *Cataloguing Practice* (2nd ed.). Stosius Inc/Advent Books Division.
5. Ranganathan, Sr, & Neelameghan, A. (2006). *Classified Catalogue Code: With Additional Rules for Dictionary Catalogue Code*. EssEss Publications.
6. Welsh, A. (2012). *Practical Cataloguing: AACR, RDA and MARC 21* (1st ed.). Neal-Schuman Publishers. Inc.

SEMESTER II	Course Code: LIS-DE-527	Credits: 3

Name of the Course:
INTELLECTUAL PROPERTY RIGHTS

Course Outcome:
CO1: Articulate and basic knowledge about Intellectual Property Rights including scope and international treaties.
CO2: Articulate basic Knowledge of IPR implied in digital environment.

COURSE CONTENT

Module I: Intellectual PropertyRights
Meaning,scope and significance; areas of application, significance in the present scenario

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Describe the Intellectual Property rights (Understand)

Module II: International Treaties on IPR
Berne Convention; Universal Copyright Convention; Stockholm Conference; Paris Conference; WIPO Copyright treaty; GATT;WTO and TRIPS agreement.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Explain the International treaties on IPR (Understand)
M02: DescribetheBerneconvention,UniversalcopyrightConventionetc.(Understand)

Module III: Different types of IPR
Copyright law of India and its amendments: Patent law of India and amendments, Trademarks, Industrial design, Geographical indication, Traditional knowledge

Module Outcome:
After Completion of this module, the student should be able to:

M03: Describe thedifferent types of IPR (Understand)

Module IV: Management of IP

IP policies, licensing, legal issues, commercialization of IPR, Emerging issues and challenges of IPR in internet age.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Explain the Management of IP (Understand)
M04: Analyse issues and challenges of IPR in internet age (Analyse)

Module V: Implications of IPR
Protection of web-based content; Copyright and libraries; Copy left movement; Creative Commons; Plagiarism.

Module Outcome:
After Completion of this module, the student should be able to:

M05: Explain the implication of IPR (Understand)
M05: Apply in the protection of web-based content (Apply)
M05: Describe the use of copyright law in libraries (Understand)

Project
Evaluation of not less than 75 reference sources including electronic sources.

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics

LEARNING RESOURCES
References

1. Bainbridge, D.I. Intellectual Property Rights. 9th ed. New Delhi: Pearson Education Ltd. 2012
2. Elizabeth Verkey. Intellectual Property Rights. Lucknow: EBC Publishing. 2015
3. Frederiksen, L. The Copyright Librarian: A Pratical Handbook. USA: Chandos Publishing.2016

4. Gopalakrishnan,N.S.andAjitha,T.G.Principles of Intellectual Property Rights.2nd ed. Lucknow:EBCPublishing.2009

5. Norman Sandy. Practical Copyright for Information Professionals. London: Facet Publishing.2004.

6. Pedley,Paul.Digital Copyright. London:Facet Publishing. 2007

7. Puspalatha Srivastava. Copyright Act and digital Millennium Act. New Delhi: Ess Ess Publication.2015

8. Rajendran, S. Copyright, Copy Left and Library. Thiruvananthapuram: Sree Viswayogi Publication,2017

9. Satarkar, S.P. Intellectual Property Rights and copyright. New Delhi: Ess Ess Publication.2003

10. Sreenivasulu, N. S. Intellectual Property Rights. New Delhi:Regal Publication. 2011

11. Stim, Richard. Intellectual Property: Patents, Trademarks & copyright. 2nd ed. New Delhi: CengageLearning

Online Sources

12. Information related legislation - censorship (LIB). (2015).[video]. Retrievable from https://www.youtube.com/watch?v=KiZxqNGu0JE&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=6

13. Information Related Legislation- RTI (LIB). (2015). [video]. Retrievable from https://www.youtube.com/watch?v=foj-N-SS5xs&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=7

14. Intellectual property right: Copyright (LIB).2015[video]. Retrievable from https://www.youtube.com/watch?v=DSc9gbz4_R0

15. Intellectual Property Rights: Patents(2020).[video].retrievable from https://www.youtube.com/watch?v=rQ573XIM2_I

16. IPR. [PDF]. Retrievable from https://www.researchgate.net/publication/328161728_INTELLECTUAL_PROPERTY_RIGHTS_IPR.

17. Manual of patent practice and procedure the patent office, india. [Ebook]. Retrieved 29 July 2020, from http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_59_1_15-wo-ga-34-china.pdf.

18. What is Intellectual Property?. [pdf]. Retrievable from https://www.wipo.int/edocs/pubdocs/en/intproperty/450/wipo_pub_450.pdf.

ASSESSMENT

40% Continuous/Formative Assessment(see PG Regulations). 60% End-semester/ Summative Assessment: 3hour written Exam.

SEMESTER III	Course Code: LIS-CC-531	Credits: 3

Name of the Course:
Research Methodology

Course Outcomes:
 CO1: Develop research skills in students
 CO2: Familiarize the art and style of writing a research report
 CO3: Acquaintance with intensive techniques and skills of research process

COURSE CONTENT

Module I: Research
Concept, meaning, need and process of research. Types of research: fundamental and applied including interdisciplinary and multidisciplinary approach; Research and development ofscholarship.

Module Outcome:
After Completion of this module, the student should be able to:

M01: Understand the concept, need and types of research (Understand)

Module II: Research Design
Conceptualization and operationalization; Types of research design; Identification and formulation of problem; Hypothesis; nominal and operational definition; Designing research proposal; Ethical aspects of research; Literature search: print, non-print and electronic sources; Literature Review.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Familiarize with research design(Understand)
M02: Analyse the types of research design(Analyze)
M02: Understand the ethical aspects of research (Understand)

Module III: Research Methods
Scientific method; Historical method; Descriptive method; Survey method and case study method; Experimental method and Delphi method; Brainstorming method.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Familiarize with different research methods (Understand)

Module IV: Research Techniques and Tools
Observation; Questionnaire; Interview; Online research tools Scales and checklists; Library records and reports; Sampling techniques.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Evaluate the various tools used in data collection (Understand)
M04: Understand the sampling techniques (Understand)

Module V: Research Reporting
Structure, style, contents; Guidelines for research reporting ;Style manuals, e-citation, Reference Management software; Plagiarism, Softwares to check Plagiarism, Methods of research evaluation.

Module Outcome:
After Completion of this module, the student should be able to:

M05: Evaluate the structure and guidelines for research reporting (Understand)
M05: Understand reference management software (Understand)
M05: Analyse different methods of research evaluation. (Analyze)

Module VI: Recent Trends
Current Trends in Library and Information Science Research.

Module Outcome:
After Completion of this module, the student should be able to:

M06: Understand the Current Trends in Library and Information Science Research (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT
Suggested Class Room Activities:
> Assignments
> Seminar Presentation on selected topics

LEARNING RESOURCES
References

1. Connaway,L.S.,& Powell, R.R.(2010).Basic research methods for librarians.ABC-CLIO.

2. Kothari,C.R.(2011).Research Methodology: Methods and Techniques. NewDelhi: NewAge International Publication.

3. KrishanKumar(1999). Research methods in Library and Information Science.NewDelhi: Har-An and Publications

4. Kumar, P. S. G. (2004). Research Methods and Statistical Techniques. BR. Publishing Corporation. NewDelhi,467-505.

5. Lancaster, F.W.and Powell,R.R.(1995)Basic research methods for librarians. New Jersey: Ablex Publishing

6. Pickard,A.J.(2013).Research methods in information. Facet publishing.

7. Slater,M.(Ed.).(1990).Research methods in library and information studies. London: Library Association.

8. Wildemuth,B.M.(Ed.).(2016).Applications of social research methods to questions in information and library science.ABC-CLIO.

Online Sources

9. Alverson,M.,& Skoldberg, K. (2000). Reflexive methodology: New vistas for qualitative research. London: Sage. Anderson, RE ,& Srinivasan, SS(2003). E-satisfaction and e-loyalty: A contingency fiamework.Psychology& Marketing, 20(2), 123-138.

10. Busha, C. H., & Harter, S. P. (1980). Research methods in librarianship: Techniques and interpretation. Academicpress.

11. Butros, A., & Taylor, S. (2010,October). Managing information: evaluating and selecting citation management software, a look at EndNote, RefWorks, Mendeley and Zotero. In Netting knowledge: two hemispheres/one world: proceedings of the 36th IAMSLIC Annual Conference (pp.17-21).USA:IASLIC.

12. Gilmour,R.,&Cobus-Kuo,L.(2011).Reference management software: A comparative analysis off our products.Issuesin science and technology librarianship, 66(66), 63-75.

13. Greenfield,T.(1996). Research methods: guidance for postgraduates. rmgp.

14. Introduction to Library Research Methods. (2015, November 4). https://www.youtube.com/watch?v=olIVT6QJDPU&feature=youtu.be

15. M-18 Basics of Research Methodology. (2015, December 16). https://www.youtube.com/watch?v=UABF1zrW-eE&feature=youtu.be

16. M-19 Basics of Testing of Hypotheses. (2015, December 16). https://www.youtube.com/watch?v=lYI3myeU3Es&feature=youtu.be

17. Martyn, J., & Lancaster, F.W.(1981).Investigative methods in library and information science. Information resources press.

18. Partap,B.(2015).Current trends in library and information Science research in India 2008– 2013:Astudy. Library Progress (International),35(2),107-120.

19. Powell, R. R. (2006). Basic research methods for librarians. Library & Information Science Research, 28,149-167.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester/Summative assessment: 3 hour written Exam.

Name of the Course:
INFORMATION STORAGE AND RETRIEVAL

Course Outcome:

CO1: The students would be able to understand the basics of DBMS (Database Management System)
CO2: The students would be able to understand the basic concepts, components and models of IR systems
CO3: The students would be able to practice searching, browsing and query formulation
C04: The students would be able to understand methods for evaluating IR systems
CO5: The students would be able to describe information centres and networks
CO6: The students would be able to familiarise Modern trends and recent developments in Information Retrieval

COURSE CONTENT

Module I: Database and DBMS
Data, Database, Database Architecture, DBMS- Applications; Entities, Attributes, Relationships; ER Models- Hierarchical, Network, Relational, Object-Oriented; DBMS Softwares- MySQL

Module Outcome:
After Completion of this module, the student should be able to:

M01: Describe the basics of data and database (Understand)
M01: Explain the DBMS applications in particular field (Understand)
M01: Design ER Diagrams using the three basic concepts-Entities, Attributes, Relationships (Create)
M01: Create DBMS Models- Hierarchical, Network, Relational, Object-Oriented (Create)
M01: Examine DBMS Softwares- MySQL (Analyse)

Module II: Information Retrieval (IR)
Basic Concepts and Components; Overview of IR systems; Classic IR Models: Boolean, Probabilistic and Vector Processing Models; Alternative Probabilistic Model: Bayesian network model; Structured Text Retrieval Models.

Module Outcome:

After Completion of this module, the student should be able to:

M02: Describe the basic concepts and components of IR (Understand)
M02: Explain the overview of IR systems (Understand)
M02: ExplainClassic IR Models like Boolean, Probabilistic and Vector Processing Models (Understand)
M02: Describe the Bayesian network model (Understand)
M02: Conduct a query by using Structured Text Retrieval Models (Apply)

Module III: Information Search
Searching vs. Browsing; Search Strategy: Formulation of search strategy for online search; Models for Browsing: Flat browsing, Structure guided browsing and Hypertext browsing; Dynamic query formulations: Keyword based querying, Pattern matching, Structural queries; Query protocols, Hybrid, Statistical and knowledge approaches: Query expansion.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Explainthedifferencebetweeninformationsearchingandbrowsing(Understand)
M03: Formulate a search strategy for online search (Apply)
M03: Compare Models for Browsing (Analyse)
M03: Explain different Dynamic query formulations (Understand)
M03: Describe query protocols (Understand)
M03: Evaluate hybrid, statistical and knowledge approaches (Evaluate)

Module IV: Evaluation of Information System
Evaluation of Information Systems: Need for evaluation; Evaluation Criteria; Evaluation Steps; Evaluation Projects: Cranfield, MEDLARS, STAIR, SMART and TREC.

Module Outcome:
After Completion of this module, the student should be able to:

M04: Understand the evaluation of information systems (Understand)
M04: Understand the need for evaluation of information system (Understand)
M04: Evaluate information systems using some criteria (Analyse)
M04: Examine the steps for evaluation of information system (Analyse)
M04: Explain the evaluation projects like Aslib Cranfield, MEDLARS, STAIR, SMART and TREC (Understand)

Module V: Networks Systems in India
Communication Networks in India: INDONET, VSNL, NICNET.

Library Networks in India:ADINET, BONET, CALIBNET, DELNET, INFLIBNET, MALIBNET, MYLIBNET, PUNENET.

Module Outcome:

After Completion of this module, the student should be able to:

M05: Explain important Communication Networks of India (Understand)
M05:Describe some Indian Library Networks: ADINET, BONET, CALIBNET, DELNET, INFLIBNET, MALIBNET, MYLIBNET, PUNENET.(Understand)

Module VI: Modern trends in Information Retrieval
Modern trends in Information Retrieval; Recent developments in Information Retrieval

Module Outcome:

After Completion of this module, the student should be able to:

M06: Describe the modern trends in Information Retrieval (Understand)
M06: Explain the recent developments in Information Retrieval (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

Assignments
SeminarPresentationonselectedtopics
Tutorials

LEARNING RESOURCES
References

1. Baeza-Yates, R., & Ribeiro-Neto, B. (2007). Modern information retrieval. Delhi, India: Pearson Education.
2. Chowdhury,G.G.(2010).Introduction to modern information retrieval. London: Facet.
3. Chowdhury, G.G.,& Chowdhury, S.(2007).Organizing information: From the shelf to the Web. London:Facet.
4. Chowdhury,G.G.,& Chowdhury, S.(2019).Data and information: Organization and access. London: Facet Publishing, 2019.
5. Date,C.J.(2000).Anintroductiontodatabasesystems.Reading,Mass:Addison-Wesley.
6. Grossman, D. A.,& Frieder, O.(1998).Information Retrieval: Algorithms and Heuristics. Boston,MA:SpringerUS.
7. Hoffer ,J. A. ,Ramesh, V.,& Topi, H.(2020).Modern database management. Boston: Pearson Education Limited.
8. Hoffer, J., Venkataraman, R., &Topi, H.(2019).Modern Database Management, Global Edition. Harlow, United Kingdom: Pearson Education Limited.
9. Korfhage, R. R.(1997). Information storage and retrieval. NewYork: J. Wiley& Sons.
10. Meadow, C. T. , Boyce, B. R.,& Kraft, D.H.(2000).Text information retrieval systems. San Diego, Calif: Academic Press.

11. Neelameghan, A. (1995). Online database searching and retrieval: strategies, procedures, commands and problems -a brief guide. Bangalore: SRELS.
12. Rajasekhar, R. P., & Mallikarjuna, R. A. (2020). Foundations of DatabaseManagement Systems: eginners Centric. Saarbrucken: LAPLAMERT Academic Publishing.
13. Sarfraz, M. (2020).Critical approaches to information retrieval research. Hershey: PA Information Science Reference.
14. Silberschatz, A., Korth, H. F.,& Sudarshan, S.(1997).Database system concepts. NewYork [etc.: The McGraw- Hill Companies.
15. Van,R.C.J.(2004).TheGeometryofinformationretrieval.Cambridge:Cambridge UniversityPress.

Online Resources

16. http://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000021LI/P000207/M004284/ET/145267 884902-ET.pdf
17. http://ebooks.lpude.in/library_and_info_sciences/MLIS/year_1/DLIS405_INFORMATION_STORAGE _AND_RETRIEVAL.pdf
18. http://www.egyankosh.ac.in/bitstream/123456789/25567/1/Unit-3.pdf

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60%End- semester/ Summative Assessment: 3 hour written Exam.

SEMESTER III	Course Code: LIS-CC-533	Credits: 3

Name of the Course:
INFORMATION TECHNOLOGY APPLICATION IN LIS (THEORY)

Course Outcomes:

CO1 : Develop a thorough understanding of library automation, planning and implementation, in-house operations, and library management software.

CO2 : Understand the fundamentals of telecommunication technology, modes, media, nature and components of networking devices, computer network types and topologies.

CO3 : To help the students to understand the Internet connectivity, protocols, Internet, search engines, web 2.0 and network security, Cloud Computing.

COURSE CONTENT

Module I: Library Automation

Planning and Implementation, Automation of in-house operations- file requirements for Acquisition, Cataloguing, Circulation Control, Serials Control, OPAC and Library Automation Packages: KOHA, E-Granthalaya. Institutional Repository software D-Space

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Evaluate the planning and implementation of library automation. (Understand)
MO1: Learn to use automation of in-house operations (Understand)
MO1: Evaluate Library Management Software (Evaluate)

Module II: Communication Technology

Fundamentals of Telecommunication Technology, Media, Mode and Components, Network Types and Topologies, Network Components

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Understand Fundamentals of telecommunication technology (Understand)
MO2: Awareness about Modes, Media, Nature and components of networking devices (Understand)
MO2: Achieve skill to analyze the Computer network types and topologies (Understand)

Module III: Internet

Basic Features and Tools; Communication tools; Net Based Information Services, Connectivity; Protocols; Web Browser; Search Engines; Library Security and technology: Barcode, RFID, CCTV, Biometrics, Smartcard.

Module Outcome:

After Completion of this module, the student should be able to:

MO3: Understand the basic concepts Internet Connectivity (Understand)

MO3: Develop a thorough understanding in Internet Protocols, Search Engines and Web Browsers (Understand)

MO3: Acquire knowledge in Library Security and technologies (Understand)

Module IV: Web Tools

Web 2.0 Tools and Services; Cloud Computing, Video Conferencing. Content enriching services: Blogs, Wikis, Social Community websites, Social networking tools, Semantic web, RSS feeds, Webcasts, Podcasts, Internet of Things (IoT).

Module Outcome:

After Completion of this module, the student should be able to:

MO4: Develop a thorough understanding in Content enriching services (Understand)

MO4: Acquire knowledge in Web 2.0 (Understand)

MO4: Procure awareness in Cloud Computing (Understand)

Module V: Artificial intelligence and expert systems

Artificial intelligence and expert systems – concepts, genesis and development of AI and ES- Application of AI and ES in library and information services. Hypertext, Hypermedia, Multimedia and File Formats, User Interfaces, Data Visualization.

Module Outcome:

After Completion of this module, the student should be able to:

MO5: Understand the basic concepts Artificial Intelligence in libraries (Understand)

MO5: Acquire knowledge in Expert Systems (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

Assignments

SeminarPresentationonselectedtopics

Demonstration

LEARNING RESOURCES

References

1. Achyut Godbole and Atul Kahate. Web Technologies: TCP/IP, Web/Java Programming, and Cloud Computing 3rd ed. New Delhi: McGraw Hill Education (India) Private Limited, 2014.
2. Arthur, Lowell JayandBurns,Ted .Unix Shell Programming. NewDelhi: Galgotia, 1995.
3. Borgman, ChristineL.(2017). Bigdata, little data, no data: Scholarship in the networked world. Cambridge: The MIT Press.
4. Date C J. An Introduction to database system.7thed.Boston, MA, USA: Addison-Wesley Longman, 2000.
5. Date, C. and Darwen,H.A Guide to the SQL Standard. 3rd ed .Reading, MA: Addison-Wesley Longman.
6. Elmasri Ramez and Navathe,Shamakant B. Fundamentals of DatabaseS ystems. 5th ed. Boston: Pearson/Addison Wesley, 2007.
7. Gosselin, Donetal.Web Warrior Guide to Web Design Technologies. NewDelhi: Cengage learning India Pvt. Ltd. 2013.
8. Haravu, L.J. (2014).Library automation: Design, principles and practice. Allied Publishers, NewDelhi.
9. Hennig, Nicole. (2017).Keeping up with emerging technologies: Best practices for information professionals. Santa Barbara: Libraries Unlimited.
10. Joiner, Ida.(2017).Emerging library technologies: It's not just for geeks. Oxford: Chandos Publishing.
11. Mathew, Neiletal. Professional Linux programming. Mumbai: SPD, 2001.

12. Michael, Randal K. Mastering UNIX Shell Scripting. Canada: Robert Ispen, 2003.
13. Mishra, Vinod Kumar (2016). Basics of library automation, Koha library management software and data migration:Challenges with case studies. NewDelhi: Ess Ess Publications.
14. Peterson, Richard. Linux: the complete reference. NewYork: McGraw-Hill, 2006.
15. Phadke, D.N.(2017).Library information technology. Pune: Universal Publications.
16. Ravichandra Rao. Library automation. New Delhi: Wiley Eastern, 1990.
17. Rowley, Jennifer. The electronic library. London: Library Association Publishing,1998.
18. Williams, Brain K. and Sawyer, Stacey C. Using information technology: A practical introduction to computers & communications, 6th Ed. NewDelhi: Tata Mc Graw-Hill, 2005.
19. Godbole, A. & Atul Kahate (2013). Web technologies: TCP/IP, Web/Java programming, and cloud computing (3rd ed.). McGraw-Hill.
20. Gosselin, D., Guthrie, R., Lopez, L. A., Sklar, J., Slaybaugh, M., & Soe, L. (2003). The web warrior guide to web design technologies. Course Technology.
21. Haravu, L. J. (2007). Library automation design principles and practice. New Delhi: Allied Publishers.
22. Hennig, N. (2017). Keeping up with emerging technologies: Best practices for information professionals. Santa Barbara, CA: Libraries Unlimited.
23. Joiner, I. A. (2018). Emerging library technologies: It's not just for Geeks. Chandos Publishing.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester Summative Assessment: 3hour written Exam.

SEMESTER III	Course Code: LIS-CC-534	Credits: 3

Name of the Course:
INFORMATION TECHNOLOGY APPLICATION IN LIS (PRACTICAL)

Course Outcome:

CO1 :	Gainhands-on familiarity in searching for information from bibliographic database management.
CO2 :	Acquire skills for installation and customization Library Management Software (LMS) – KOHA and Repository Software Package- Dspace.
CO3 :	Achieve practical knowledge with the steps, methods and techniques involved in designing websites
CO4 :	Hands-on insight about the application of Reference Management Software
CO5 :	Searching information through several search engines and academic gateways using search techniques and strategies.

COURSE CONTENT

Module I: Bibliographic Database Management and Searching
WINISIS
WebOPAC, Worldcat, Indcat

Module Outcome:
After Completion of this module, the student should be able to:

MO1: To conduct search bibliographic information using various search strategy (Apply)

Module II: Library Automation Package
KOHA – Integrated Library Management Software

Module Outcome:
After Completion of this module, the student should be able to:

M02: To install and customize Library Management Software (LMS) KOHA (Apply)

Module III: Web Design
Google sites

Module Outcome:
After Completion of this module, the student should be able to:

M03: Designing website using various tools. (Apply)

Module IV: Digital Library Software
DSpace/ Greenstone

Module Outcome:
After Completion of this module, the student should be able to:

M04: To install and customize digital library software (Apply)

Module V: Reference Management Software
Zotero, Mendley

Module Outcome:
After Completion of this module, the student should be able to:

M05: Handle various Reference Management Software (Apply)

Module VI: Information Searching
Search Engines: Chrome, Mozilla and Meta Search engines; Academic Gateways: e- ShodhSindhu, Shodhganga, Vidyamitra, e-PG Pathshala
Module Outcome:
After Completion of this module, the student should be able to:

M06: Searching through various search engines and academic gateways using search techniques and strategies. (Apply)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

> Assignments
> SeminarPresentationonselectedtopics
> Demonstration/Handsontraining

LEARNING RESOURCES
References

1. Adithya Tripathi, Prasad H. N & Rajan Mishra. Open Source Library Solutions. NewDelhi: Ess Ess Publications, 2010.

2. Brain, Suatin. WebDesign. NewDelhi: Dreamtech Publications, 2001.
3. Mahendra V Meta. Open Source Software in India Libraries. Jaipur: Yking Books, 2014.
4. Rohith Khurana. HTML 4U. NewDelhi: APH Publishing Corporation, 2001.
5. Sue, Jenkins.WebDesign. NewDelhi: Wiley India Publication, 2007.
6. UmaV,Suseela J. Automation of Library integration operation: A how to do manual. New Delhi: Ess Ess Publications, 2017.
7. Vinodkumar Mishar. Basics of library automation. KOHA library management software and data migration. NewDelhi: Ess Ess Publications, 2016.
8. Armstrong, C. J. and Large J. A. Manual of Online Search Strategies. Taylor & Francis group. 1992. Availableathttps://doi.org/10.4324/9780429450617
9. Khalid K Faruqi.Online database searching and retrieval: Strategies, procedures, commands, and problems: A brief Guide Khalid K Faruqi. Bangalore: Sarada Ranganathan endowment1995
10. Poornima G Naik and Girish R. Naik. Creating and Managing Institutional Repository Using DSpace: A Case Study. Chhattisgarh: Edu creation Publishing,
11. Priya Ranjan Trivedhi. User perceptions on Search Engines in Library and Information Science Priya Ranjan Trivedhi and Gururaj S Hadagali. NewDelhi: Ess Ess Publications 2019.
12. Stefan Buttcher. Information Retrieval: Implementing and Evaluating Search Engines. England: The MIT Press 2010.

Online Resources

13. Bhatnagar, A.(2005).Web-based library services.
14. Bingsi, F., & Xiaojing, H. (2006). Library2.0: Building the New Library Services [J]. Journal of Academic Libraries, 1,2-5.
15. Kumari, N. I. S. H. A. (2016). Web-based services in library and information science. International Journal of Next Generation Library and Technologies, 2(1), 8.
16. Rao,I. R.,& Ravichandra, I. K.(1995).Library automation: what is expected of?. DESIDOC Journal of Library & InformationTechnology,15(2).
17. Digital Library Planning and Implementation. (2020, March 18). https://www.youtube.com/watch?v=015urPL5FxM&feature=youtu.be
18. Library automation: Definition, need, purpose and advantages (LIB). (2016, June 6). https://www.youtube.com/watch?v=gw8_qc7kXoQ&feature=youtu.be
19. NetworkProtocols:Definition,Concept,Types–TCP/IP(LIB).(2016,June2). https://www.youtube.com/watch?v=JA5iTPP0O3A&feature=youtu.be
20. ISDN - Integrated Services Digital Network. (2018, November 27). https://www.youtube.com/watch?v=nhupbJ8t4N4&feature=youtu.be

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER III	Course Code: LIS-CC-535	Credits: 2

Name of the Course:
INTERNSHIP

Duration		**30 days**
Period	:	Preferably between Semester II and III
Place	:	Any Library and Information Centre approved by the Department
Valuation	:	Written Report in the prescribed format certified by the Head of the Library and Information Centre
Prerequisite	:	Attendance Certified by the Head of the LIC

SEMESTER III	Course Code: LIS-DE-536	Credits: 3

Name of the Course:
STATISTICAL METHODS

Course Outcomes:

CO1 Articulate and exemplify various statistical methods in Library and Information
: Science research.
CO2 Familiarize various concepts in statistics
:
CO3 Application of various statistical tools and techniques for data analysis.
:

COURSE CONTENT

Module I: General Introduction
Functions, applications and limitations of statistics, application of statistics in libraries and information centres

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Describe the definition, functions and applications of statistics (Understand)
MO1: Explain the limitations of statistics (Understand)

MODULE II: Collection of Data
Collection of data: sampling techniques

Module Outcome:
After Completion of this module, the student should be able to:

M02: Articulate different sampling methods(Understand)
M02: Articulate the data collection methods(Understand)

MODULE III: Summarization of Data
Tabulation and graphical methods of presentation; Measures of central tendency: mean, median, mode Measures of variability: range, percentile, inter quartile range,variance, standard deviation, Measures of skewness and kurtosis

Module Outcome:
After Completion of this module, the student should be able to:

M03: Explain the methods used for presentation of data (Understand)
M03: Articulate and exemplify different measures of central tendency (Understand)
M03: Compute arithmetic mean, geometric mean, harmonic mean, standard deviation and variance (Apply)

MODULE IV: Data Analysis
Probability and probability distribution, Normal distribution and Binomial distribution

Module Outcome:
After Completion of this module, the student should be able to:

M04: Articulate and exemplify basic concepts of probability (Understand)
M04: Evaluate the distribution of probability (Evaluate)
M04: Remember the Normal distribution and Binomial distribution (Remember)

MODULE V: Testing of Hypotheses
Regression, correlation and analysis of variance; Scaling techniques, Association of Variables, Chi Square Test, F Test, ANOVA

Module Outcome:
After Completion of this module, the student should be able to:

M05: Articulate the different statistical testing methods (Understand)
MO5: Articulate the concept of regression (Understand)
M05: Describe the F/T/Chi Square test/ANOVA (Understand)
M05: Derive correlation, scaling techniques and association of variables (Apply)

MODULE VI: Statistical Packages
SPSS, IDAMS and other packages

Module Outcome:
After Completion of this module, the student should be able to:

M06: Examine different statistical packages (Analyse)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

Assignments
SeminarPresentationonselectedtopics
Demonstration/Handsontraining

LEARNING RESOURCES
References

1. Agarwal, B.L. (2009). Basic statistics. New Delhi: New Age International Publishers.
2. Gupta, C.B.and Gupta,V.(2014).An Introduction to statistical methods. NewDelhi: Vikas Publishing House.
3. Gupta, K. R. (2012).Practical statistics. New Delhi: Atlantic Publishers.
4. Gupta, S.C.(2013).Fundamentals of statistics. Mumbai: Himalaya Publishing House.
5. Gupta, Santhosh. (2010). Research methodology and statistical techniques. New Delhi: Deep & Deep Publications.
6. Hooda, R. P.(2005).Data collection and Sampling: Introduction to statistics
7. Kothari, C. R. and Garg, Gaurav. (2014). Research methodology: methods and techniques. New Delhi: New Age International Publishers.
8. Pillai,R.S.N.and Bagavathi.(2013). Data analysis (Practical). New Delhi: Chand & Company.
9. Singh, G. B. (2011). Research methodology: Advanced techniques with statisticalmethods. Jaipur: Paradise Publishers.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).
60 % End-semester/Summative Assessment: 3 hour written Exam.

SEMESTER IV	Course Code: LIS-CC-541	Credits: 3

Name of the Course:
TECHNICAL COMMUNICATION

Course Outcome:
CO1: Articulate and exemplify basic knowledge about technical writing, presentation of
Information, and to familiarize students with various oral presentation skills.

COURSE CONTENT

Module I: Communication Process
Types, Verbal, Non-verbal, Formal, Informal; Types of writing; Technical writing- Principles,
characteristics; Language as a medium for communication, readability; AudienceResearch

Module Outcome:
After Completion of this module, the student should be able to:

M01: Explain different types of communication (Understand)
M01: Describe different types of writing (Understand)
M01: Explain the readability and audience research (Understand)

Module II: Organization Lay out and Presentation of Information
Learned papers and popular articles, Technical Reports and project proposals, Book design and page layout.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Design and develop the Organization, Lay out and Presentation of Information in Learned papers and
popular articles (Create)
M02: Design and develop the Organization, Lay out and Presentation of Information in Technical Reports
and project proposals (Create)
M02: Design and develop the Organization, Lay out and Presentation of Information in Book design and
page layout (Create)

Module III: Repackaging and Consolidation

Preparationoftrendreports,reviews,State-of-theartreport,digest.Abstracts–Types, Preparation,Guidelines

Module Outcome:

After Completion of this module, the student should be able to:

M03: Repackaging and consolidation of Information (Create)
M03: Analyse the products of repackaging and consolidation (Analyase)
M03: Prepare trend reports, reviews, state of the art report, digests and abstracts (Create)

Module IV: Mechanics of Writing

Common problems in spelling, grammar, usage and punctuation

Module Outcome:

After Completion of this module, the student should be able to:

M04: Solve the common problems in spelling grammar usage and punctuations (Apply)

Module V: StyleManuals

Use of Style manuals–Chicago, APA and MLA; Reference Management Software; Copy editing and proof reading.

Module Outcome:

After Completion of this module, the student should be able to:

M05: Describe the style manuals and its uses (Understand)
M05: Apply this style manuals in dissertations, thesis etc (Apply)

Module VI: Oral Presentation Skills

Module Outcome:

After Completion of this module, the student should be able to:

M06: Explain the oral presentation skill (Understand)
M06: Apply the oral presentation skill (Apply)
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ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments

- Seminar Presentation on selected topics

LEARNING RESOURCES
References

1. American Psychological Association. Publication manual of the American Psychological Association, 6th ed.Washington DC, The Author, 2010
2. Anderson, PaulV. Technical communication: A Reader centered approach, 6thed. Australia: Cengage Learning, 2007.
3. Ashraf Rizvi, M. Effective technical communication. NewDelhi: Tata McGraw Hill, 2011.
4. Chicago Manual of Style: For authors, editors and copywriters, 16th ed. New Delhi: PHI, 2010.
5. Day, Robert A.and Gastel, Barbara. How to write and publish a scientific paper, 7th ed. Cambridge, UK: Cambridge University Press, 2012.
6. Gerson, Sharon J. and Gerson, Steven M. Technical writing: Process and product. 3rd ed. New Delhi: Pearson Education, 2000.
7. Gibaldi, Joseph. MLA Handbook of writers and research papers, ed.6. NewDelhi: Affiliated East West Pvt Ltd, 2004.
8. Kumar, PSG. Information Analysis, Repackaging, Consolidation and Information Retrieval; Paper X and XI of UGC Model Curriculum. B.R. Publishing Corporation, 2004
9. Meenakshi Ramanand Sangeeta Raman. Technical communication: Principles and practices, 2nd ed. NewDelhi: Oxford University Press, 2012.
10. Satish Shah. Recent developments in technical writing. New Delhi: Arise Publishers, 2010.
11. Seetharama,S: Information consolidation and repackaging, Delhi, ESS publications,
12. Sunil Gokhale. Essentials in technical communication. Mumbai: Himalaya Publishing House, 2004.

Online Sources

13. Desai, M.Technical communication[PDF]. Retrievable from https://www.gtuelibrary.edu.in/publication/Technical%20communication%205th%20June'09.pdf.
14. Effective Technical Communication Unit-2 Technical Writing.(2020).[Video].retrievable fromhttps://www.youtube.com/watch?v=it6idQY87Mg
15. ReportWriting in Technical English.(2019). [video].
   Retrievable fromhttps://www.youtube.com/watch?v=yqyZwm6QDWI
16. Reviewsources,State-of-the-artreports,Trendsetc.(LIB).(2015).[Video].Retrievablefrom https://www.youtube.com/watch?v=Q2F6L5kqQ8Y&list=PL_a1TI5CC9RFrCKQlXnnKljecsurKY1B-&index=93
17. Using APA style for references and citations.[video].retrievable from https://www.youtube.com/watch?v=10eg_GB_A9E

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).
60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER IV	Course Code: LIS-CC-542	Credits: 2

Name of the Course:
INFORMETRICS

Course Outcome:
CO1: Concepts relating to bibliometrics and their applications
CO2: Familiarize with bibliometrics softwares

COURSE CONTENT

Module I: Overview
Concepts, Genesis, Definition, Librametry, Bibliometrics, Scientometrics, Informetrics, Webometrics

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Describe the concept and definition of bibliometrics and related terms (Understand)

Module II: Sources for Informetric Data
Web of Knowledge, Scopus, Google Scholar, Scimago, Indian Citation Index.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Analyse various databases for informetric data (Analyse)

Module III: Bibliometric Laws
Laws of Bradford, Lotka, Zipf, Brooks, Vickery, Bookstein, Garfield, Price. Informetric models.

Module Outcome:
After Completion of this module, the student should be able to:

MO3: Explain various bibliometrics laws (Understand)

Module IV: Bibliometric Applications

Citation studies, Bibliographic coupling, co-citation analysis, citation index, Agingand Obsolescence.

Module Outcome:

After Completion of this module, the student should be able to:

M04: Explain the concept of citation studies (Understand)
M04: Analyse the applications of citations such as bibliographic coupling co-citation etc. (Analyse)

Module V: Cito-analytical Products

Cito-analytical products–Journal ranking, Impact factor, Immediacy Index, Cited Half–life, H index.

Module Outcome:

After Completion of this module, the student should be ableto:

M05: Desribe the citation count methods(Understand)

MODULE VI: Bibliometric Softwares

Detailed Study of Bibexcel, VOSViewer

Module Outcome:

After Completion of this module, the student should be able to:

M06: Familiarize with Bibexcel software for bibliometrics analysis (Apply)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics

LEARNING RESOURCES
   References

1. Egghe, L. C. J. (2000). Lectures on Informetrics and Scientometrics. Sarada Ranganathan Endowment for Library Science.
2. Egghe,L., & Rousseau,R.(1990).Introduction to informetrics: Quantitative methods in library, documentation and information science. Elsevier Science Publishers.

3. Elkana, Y. (1976). Sociology of Science-Theoretical and Empirical Investigations-Merton, Rk.
4. Tiwari,A. (2006). Bibliometrics, Informetrics and Scientometrics: Opening new vistas of information science. RBSA Publishers.
5. Vinkler,P. (2010). Thee valuation of research by scientometric indicators. Elsevier.
6. Zuckerman,H.(1977).Scientificelite: Nobel laureates in the United States. Transaction Publishers.
7. Nicholas D. and Ritchil, M. (1979). Literature and Bibliometrics. London: Clive Bingley.
8. Garfield, E. (1979). Citation Indexing: Its theory and application in Science and Technology and Humanities. New York: John Wiley.

Online Resource

9. Bailón-Moreno,R.,Jurado-Alameda,E.,Ruiz-Baños,R.,&Courtial,J.P.(2005).
10. Ball,R.,&Tunger,D.(2006).Bibliometricanalysis-anewbusinessareaforinformation professionals in libraries? support for scientific research by perception andtrend analysis.Scientometrics,66(3),561-577.
11. Bibliometriclaws:Empiricalflawsoffit.Scientometrics,63(2),209-229.
12. Garfield,E.,&Merton,R.K.(1979).Citationindexing:Itstheoryandapplicationinscience, technology,andhumanities(Vol.8).NewYork:Wiley.
13. Hood,W.W.,&Wilson,C.S.(2001).Theliteratureofbibliometrics,scientometrics,and informetrics.Scientometrics,52(2),291.
14. Hood,W.W.,&Wilson,C.S.(2001).Theliteratureofbibliometrics,scientometrics,and informetrics.Scientometrics,52(2),291.
15. Narin,F.(1976).Evaluativebibliometrics:Theuseofpublicationandcitationanalysisinthe evaluationofscientificactivity(pp.334-337).CherryHill,NJ:ComputerHorizons
16. Patra, S. K., Bhattacharya, P., &Verma, N. (2006). Bibliometric study of literature on bibliometrics.DESIDOCJournalofLibrary&InformationTechnology,26(1).
17. Librametry, Bibliometrics, Scientometrics, Informetrics and Webometrics: Historical Development—YouTube.   (n.d.).   Retrieved   July   27,   2020,   from https://www.youtube.com/watch?v=HxYUXF9_IK8&feature=youtu.be
18. Bibliometrics(8):PreparingaCitationNetworkFileusingBibExcel.(2018,February3). https://www.youtube.com/watch?v=_LHbZzgxjH8&feature=youtu.be

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).
60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER IV	Course Code: LIS-CC-543	Credits: 2

Name of the Course:
DIGITAL LIBRARIES

Course Outcome:
 CO1: Articulateandexemplifytheconceptofdigitallibrary
 CO2: Familiarise with the process of digitisation.
 CO3: Awarenessabouttypesofdigitallibrarysoftware.
 CO4: Understand the development of digital repositories.

COURSE CONTENT

MODULE I: Digital Libraries
Concept and definition; Historical Development of Digital Libraries.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Explain the concept of digital library (Understand)
MO1: Evaluate the historical development of digital libraries (Evaluate)

MODULE II: Copyright in DL
Copyright and license issues.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Describe the legal and rights issues in digital libraries (Understand)

MODULE III: Digitization Process
Software, Hardware and best practices; Scanners and scanner types; OCR and OCR software.

Module Outcome:
After Completion of this module, the student should be able to:

MO3: Explain various technologies used in digitization process (Understand)

MODULE IV: Technology for DLs
Open source software; DSpace, GSDL: Features and comparative study of DSpace, E-prints and Fedora.

Module Outcome:
After Completion of this module, the student should be able to:

MO4: Examine appropriate software for digital libraries (Analyse)
MO4: Compare the role of Dspace, E-prints and Fedora (Analyse)

MODULE V: Standards, Protocols and Formats for DL
Open Standards and File Formats, Harvesting Metadata, OAI-PMH and DL Interoperability; Data curation.

Module Outcome:
After Completion of this module, the student should be able to:

MO5: Identify standards and file formats in DL (Understand)
MO5: Describe DL Interoperability (Understand)

MODULE VI: Digital Library Architecture
Grid architecture; Open URL integration; Digital Preservation: Persistent identifiers: DOI and CNRI Handles; Multilingual digital repositories and Cross-language information retrieval.

Module Outcome:
After Completion of this module, the student should be able to:

MO6: Articulate different architectures used in DL (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- Seminar Presentation on selected topics

LEARNING RESOURCES
   References

1. Andrews,J.(2010).Digital libraries.London:Ashgate.
2. Cornish,G.P.(1990).Copyright interpreting the law for libraries and archives. London: Library Association.

3. Dahl, Mark et al. (2006). Digital libraries: Integrating content and systems. London: Chandos.
4. Fenner,Audrey,ed.(2005).Managing digital resources in libraries.NewYork:Haworth.
5. Gopal,K..(2000).Digital libraries in electronic information era.NewDelhi:Authors Press.
6. Lesk,Michael.(1996).Understanding digital libraries, 2nd ed. SanFrancisco:Morgan Kaufman.
7. Pitkin,G.M,ed..(1996).National electronic library:A guide to the future for library managers. London: Green wood Press.
8. Tedd, LucyA. And Large, Andrew. (2005). Digital libraries: Principles and practiceina global environment. Munchen, Gernany: K.G.Saur.
9. William,Arms.(2005).Digital libraries.NewDelhi:Anne.
10. Witten,IanH.and Bainbridge,David.(2005).How to build a digital library.Amsterdam: Morgan Kaufman.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).
60% End-semester/ Summative Assessment: 3 hour written Exam.

SEMESTER IV	Course Code: LIS-CC-544	Credits: 4

Name of the Course:
DISSERTATION & VIVA-VOCE

AIM:
The aim of the project is to develop skills in using research methods, techniques and tools.

OBJECTIVES:
Students have to carry out research on a topic approved by the Departmental Council, under the guidance of a faculty member and prepare a dissertation. Appropriate size of the dissertation shall be 100 typed pages in A4 size paper. The students should also appear for a viva-voce.

ANY SEMESTER (I – IV)	Course Code:LIS-GC-501	Credits: 2

Name of the Course:
TECHNICAL WRITING

Course Outcome:
CO1: GainknowledgeabouttheCommunicationProcessanddifferenttypesof writing
CO2: Diagnose audience recognition and involvement.
CO3: Create layout and presentation of information.
CO4: Identify common problems spelling, grammar, usage and punctuation.
CO5: Gainawarenessaboutstylemanuals,proofreadingandreferencemanagement

COURSE CONTENT

MODULE I: Communication Process
Verbal and Non- Verbal communication; Different types of writing; Characteristics features of technical writing; Principles of technical writing; audience recognition and involvement; pre-writing, writing and rewriting.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Explain Verbal and Non-Verbal communication (Understand)
MO1: Describe the basic concepts and different types of writing (Understand)
MO1: Gain awareness about technical writing, its process, characteristic and principles (Understand)
MO1: Evaluate audience recognition and involvement (Evaluate)

Module II: Organization, layout and presentation of information in
Learned Papers, Popular Articles, Technical reports, Project Proposals, Books.

Module Outcome:
After Completion of this module, the student should be able to:

M02: Achieve familiarity in layout and structure of reports, articles, proposals, books etc. (Understand)

Module III: Mechanics of Writing
Common problems in spelling, grammar, usage and punctuation; use of style manuals; copy editing; proof reading; reference management.

Module Outcome:
After Completion of this module, the student should be able to:

M03: To have broader introduction to mechanics of writing (Understand)
M03: Examine the various problems in spelling, grammar, usage and punctuation (Analyse)
M03: Use of style manuals (Apply)
M03: Describe copy editing; proof reading; reference management (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics

LEARNING RESOURCES
References

1. Anderson Paul V. Technical Communication: A Reader centered approach 6th ed. Australia: Cengage Learning 2007.
2. Ashraf Rizvi, M. Effective technical communication. New Delhi: Tata McGraw Hill, 2001.
3. Chicago Manual of Style: For authors, editor and copy writers,16th ed. NewDelhi: PHI,2010.
4. Day,Robert A and Gastel, Barbara. How to write and publish a scientific paper, 7th ed. Cambridge,UK: Cambridge University Press, 2012.
5. Gerson,Sharon and Gerson, Steven M. Technical Writing: Process and Product. 3rd ed. New Delhi:Pearson Education, 2000.
6. Gibaldi joseph, MLA Handbook of writers and research papers, ed.6. NewDelhi: Affiliated East West Pvt Ltd, 2004.
7. Meenakshi Ramanand Sangeeta Raman. Technical communication: Principles and practices, 2nd ed. NewDelhi: Oxford University Press, 2012.
8. Sathish Shah. Recent developments in technical writing. New Delhi: A rise Publishers, 2010.
9. Sunil Gokhale. Essentials in technical communication. Mumbai:Himalaya Publishing House, 2004.
10. Devarajan,G(Dr.)."Technical Communication for Information Managers", NewDelhi: ESS ESS Publications,2012.
11. Sajitha Jayaprakash."Technical Writing",Mumbai: Himalaya Publishing House,2013.
12. Ashraf Rizvi, M. " Effective Technical Communication", New Delhi: Tata MC Graw Hill Education Private Limited,2011.

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).
60% End-semester/ Summative Assessment: 3 hour written Exam.

ANY SEMESTER (I – IV)	Course Code: LIS- GC-502	Credits: 2

Name of the Course:
ELECTRONIC PUBLISHING

Course Outcome:
CO1: The students would be able to understand the basics of Electronic Publishing
CO2: The students would be able to understand the types of e-publications
CO3: The students would be able to understand methods of Electronic Publishing
CO4: The students would be able to familiarise different agencies of Electronic Publishing
CO5: The students would be able to understand different aspects of Open Access Publishing
CO6: The students would be able to understand the copyright issues of e-publishing

COURSE CONTENT

Module I: Basics of Electronic Publishing
History of scholarly publishing; Types of e-publications; Migration of peer review journals from print to Web-based; Role of the Internet in access to scholarship; Digital publishing as a catalyst to interdisciplinary communication; Peer review process; Archival options for short and long term preservation; Software options for managing peer review publications.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Describe the history of scholarly publishing (Understand)
MO1: Define different types of electronic publications (Remember)
MO1: Compare the print and online journals (Analyse)
MO1: Explain the peer review process in e-publishing (Understand)
MO1: Describe the archival options for preservation (Understand)

Module II: Stakeholders of Electronic Publishing
Universities, research institutions, university presses, libraries and commercial publishers in scholarly communication; newspapers and the transformation of journalism. Open Access Publishing; Large scale digitization projects at the international level.

Module Outcome:
After Completion of this module, the student should be able to:

M02: List out different agencies of Electronic Publishing (Remember)
M02: Evaluate the transformation of journalism (Evaluate)
M02: Examine the opportunities of Open Access Publishing (Analyse)
M02: Describe the Open Access Movements in the world (Understand)

Module III: Economics of Scholarly Publishing
Economics of digital publishing- different models; funding agencies; Copyright: The rights of publishers, authors, and readers; Protecting copyright vs. Creative Commons, copyleft.

Module Outcome:
After Completion of this module, the student should be able to:

M03: Examine the economic factors of e-publishing (Analyse)
M03: Describe the copyright issues of scholarly publishing (Understand)
M03: Compare the copyright and copyleft movement (Analyse)
M03: Explain the Creative Commons (CC) (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics
- Tutorials

LEARNING RESOURCES
References

1. Aliprandi,S.(2011).Creative Commons: Auserguide.Italy:Ledizioni.
2. Burke,P.S.(2013).E Publishing with In Design CS6: Design and produce digital publications fortablets,ereaders, smart phones, and more. Indian apolis,Ind: Wiley.
3. Eger, T., & Scheufen, M. (2018). Economics of open access: On the future ofacademic publishing.Cheltenham:EdwardElgar.
4. Hadfield, Amelia; Institute for European Studies, Vrije Universiteit Brussels, Belgium, & Zwitter, AndrejJ.; Faculty of Law, University of Groningen, The Netherlands.(2013). Open Access Publishing. Politics and Governance.
5. In Smith, K.L., & In Dickson, K.A.(2017). Open access and the future of scholarly communication implementation. Lanham: Rowman&Littlefield.
6. Knezo,G.J.,& Library of Congress.(2006).Open access publishing and citation archives: Background and controversy.
7. Lessig,L.,American Library Association.,& American Library Association.(2002). The creative commons. Palm Desert, Calif.: Produced and distributed by Teach'em Continuing Education.
8. Lumb,P.D.(December01,2012).Open Access Publishing. Journal of Critical Care,27,6, 535-536.
9. Positioning and Power in Academic Publishing: Players, Agents and Agendas -Proceedings of the 20th International Conference on Electronic Publishing. (2016).Hindawi Limited.

10. Roosendaal,H., Zalewska-Kurek,K.,Geurts,P., Hilf,E., & Safari,anO' Reilly Media Company. (2010). Scientific Publishing.
11. Solomon,D.J.(2008). Developing open access journals: A practical guide. Oxford: Chandos.

On-line Sources

12. https**://**shodhganga.inflibnet.ac.in**/**bitstream**/**10603/40585/6/12_chapter3.pdf
13. https://quod.lib.umich.edu/j/jep/3336451.0001.111?view=text;rgn=main
14. https://www.scielo.br/pdf/ci/v35n2/a06v35n2.pdf
15. http://cscc.scu.edu/trends/v26/v26_n3.pdf
16. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6624418/
17. https://www.researchgate.net/publication/306118962_Present_Scenario_of_Open_Access_Publishing_in_India

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations). 60%End-semester/ Summative Assessment: 3 hour written Exam.

ANY SEMESTER (I – IV)	Course Code: LIS- GC-503	Credits: 2

Name of the Course:
ELECTRONIC RECORDS MANAGEMENT

Course Outcome:
CO1: Understand the electronic record keeping techniques
CO2: Capture electronic records and identify the preservation of electronic documents
CO3: Illuminate the concept of various information systems

COURSE CONTENT

Module I: Management of Electronic Records –1
Types of electronic data; Developing Record keeping Requirements - Identifying and Measuring Evidence, Risk, and User Needs.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Understand the different types of electronic data (Understand)
MO1: Identify the user needs (Understand)
MO1: Analyse the risk in keeping and using electronic data (Analyse)

Module II: Management of Electronic Records –2
Identifying and Capturing Electronic Records; Description and the Role of Metadata; Appraisal and Custody of Electronic Records; Long-Term Preservation.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Capture electronic data (Understand)
MO2: Analyse the appraisal and custody of electronic data (Analyse)
MO2: Understand the long time preservation of electronic records (Understand)

Module III: Data and Information Systems
Types of Systems and Design Features: Transaction Processing Systems and Decision Support Systems; Enterprise Content Management Systems and Cloud Computing; InstitutionalRepositories; E-Mail and Web Management Systems, SocialMedia.
Laws, Regulations relating to electronic records management – Compliance and Auditing.

Module Outcome:
After Completion of this module, the student should be able to:

MO3: Analyse Transaction Processing Systems and its features (Analyse)
MO3: Evaluate Decision Support Systems (Evaluate)
MO3: Remember Institutional Repositories (Remember)
MO2: Understand the laws and regulations in electronic records management (Understand)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT
Suggested Class Room Activities:

- Assignments
- Seminar Presentation on selectedtopics

LEARNING RESOURCES
References

1. Bonczek,R.H.,Holsapple,C.W.,&Whinston,A.B.(2014).Foundationsofdecisionsupport systems. AcademicPress.
2. Harvey,D.R.(2008).Preserving digital materials.Walterde Gruyter.
3. Smith, K. (2007). Planning and implementing electronic records management: a practical guide. FacetPublishing.
4. Sprague,R.H.,&Watson,H.J.(Eds.).(1986).Decisionsupportsystems:puttingtheoryinto practice.EnglewoodCliffs,NJ:Prentice-Hall.
5. Turban,E.(1993).Decision support and expert systems: management support systems. Prentice HallPTR.
6. Velte,T.,Velte,A.,&Elsenpeter,R.(2009).Cloud computing,apracticalapproach.McGraw- Hill,Inc..

On-line Sources

7. Asproth, V. (2012). Information technology challenges for long-term preservation of electronic information. International Journal of Public Information Systems,1(1).
8. Duranti,L.(2001). Concepts, principles, and methods for the management of electronic records. The Information Society, 17(4),271-279.
9. Eden,B.L., & Seadle,M. (2006). Content management systems. Library hitech.
10. Electronic Records Management 101:Reduce Risk & Restore Control 2014 050617011— YouTube. (n.d.). Retrieved July 28, 2020, from https://www.youtube.com/watch?v=PGgJktP-Vqg&feature=youtu.be
11. Lin,L.S., Ramaiah,C.K., & Wal,P.K.(2003). Problems in the preservation of electronic records. LibraryReview.
12. Marston,S., Li,Z., Bandyopadhyay,S., Zhang,J., & Ghalsasi,A. (2011). Cloudcomputing— The business perspective. Decision support systems, 51(1), 176-189.
13. PerrittJr, H.H.(1991). Electronic records management and archives. U.Pitt.L.Rev.,53,963.

14. Walch, V. (1990). The role of standards in the archival management of electronic records.TheAmericanArchivist,53(1),30-43.
15. Wallace,D.A.(1993).Metadata and the archival management of electronic records: A review. Archivaria,36.

ASSESSMENT

40% Continuous/ Formative Assessment (seePGRegulations). 60%End semester/ Summative Assessment: 3 hour written Exam.

ANY SEMESTER (I – IV)	Course Code: LIS- GC-504	Credits: 2

Name of the Course:
KNOWLEDGE MANAGEMENT

Course Outcomes:
 CO1: Articulate and exemplify basic knowledge about knowledge Management
 CO2: Enunciating the concepts of KM Systems, Knowledge architecture etc
 CO3: Express effectively about Knowledge Management tools and portals
 CO4: Articulate basic knowledge about Knowledge capturing, Codification, transferring and Sharing

COURSE CONTENT

Module I: Knowledge Management Basics
Definition; Need; Data, Information, Knowledge; Types of knowledge; KM Systems; Knowledge creation and knowledge architecture – Nonaka's model.

Module Outcome:
After Completion of this module, the student should be able to:

MO1: Understand the basic concept of Knowledge Management (Understand)
MO1: Understand about the knowledge Management systems (Understand)
MO1: Remember the Knowledge creation and Knowledge architecture (Remember)

Module II: Knowledge Capture, Codification, Transfer and Sharing
Capturing tacit knowledge–methods; Knowledge codification– tools and procedures; Knowledge testing; Knowledge transfer.

Module Outcome:
After Completion of this module, the student should be able to:

MO2: Understand the about Knowledge capturing (Understand)
MO2: Understand about the tools and procedures used in knowledge codification. (Understand)
MO2: RemembertheconceptofKnowledgetestingandknowledgetransfer(Remember)

Module III: Knowledge Management System Tools and Portals
Data visualization; Datamining; Managing knowledge workers. Knowledge Management in the field of Library and Information Centres.

Module Outcome:
After Completion of this module, the student should be able to:

MO3: Understand about Data mining, data Visualising (Understand)
MO3: Understand about Managing of knowledge workers. (Understand)
MO3: Application of Knowledge Management in the field of Library and Information Centres (Remember)

ACTIVITIES, LEARNING RESOURCES & ASSESSMENT

Suggested Class Room Activities:

- Assignments
- SeminarPresentationonselectedtopics

LEARNING RESOURCES
References

1. Al..avi,M.,& Leidner, D.E. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Quarterly, 25(1), 107-136,2001
2. Ambarish Gupta. Application of knowledge management in digital era. New Delhi: Centrum Press,2015.
3. Anil Kumar Dhiman and Hemant Sharma. Knowledge management for librarians. New Delhi,Essess Publication, 2009.
4. Becerra-Fernandez, I., & Sabherwal, R. Knowledge Management: Systems and Processes. Routledge,2014
5. D.G.Schwartz,538–543.Hershey,PA:IdeaGroupPublishing,2006
6. Davenport,T.H.,&Prusak,L,Workingknowledge.Boston,MA:HarvardBusinessSchool Press,1998
7. Desouza, K.C. & Paquette, S. Knowledge management: an introduction, London: Neal Schuman Publishing,2011.
8. Earl, M.. Knowledge management strategies. Journal of Management Information Systems 18(1):215–223,2001
9. Elliasm,AwadandHassanMGhaziei.Knowledgemanagement.2nded.NewDelhi:PHI Leans,2010.
10. King,W.R..In"Knowledgetransfer":The encyclopedia of knowledge management, ed.
11. Koenig,MichaelEP& Srikantalah,T.K.(Eds.).Knowledge management lessons learned: what works & what doesn't. NewDelhi, EssEss Publications,2008.
12. Liebowitz,J.andWilcox,L.C. Knowledge management and its integrative elements. USA:CRC Press,1997.
13. Liebowitz,J.Knowledge management: lessons learned from knowledge engineering.US:CRC Press,1957.

14. Managementsystems:Conceptual foundations and research issues. MISQuarterly,
15. McInerney, Claire, and Koenig, Michael E. D., Knowledge Management (KM) Processes in Organizations: Theoretical Foundations and Practice, Morgan and Claypool, 2011
16. Natarajan,M. Knowledge management: challenges and applications. New Delhi: Ess Ess Publication, 2015.
17. Nonaka, I., Takeuchi, H., "The Knowledge-Creating Company: How Japanese Companies Createthe Dynamics of Innovation", Oxford University Press,1995.
18. Rupali Shah. Practical knowledge management. New Delhi: Horizon Press, 2013.
19. Sanchez,R. Strategic Learning and Knowledge Management. Chichester: Wiley, 1996.
20. Srikantaiah.T. K., Koenig, M., "Knowledge Management for the Information Professional" Information Today, Inc.,2000.

On-line Sources

21. Knowledge codification(2017).[video] retrievable from https://www.youtube.com/watch?v=CLxS-jX28mA
22. Knowledge management system (2017).[video] retrievable fromhttps://www.youtube.com/watch?v=1K3mUa0-1Js
23. Knowledge Management. [pdf]. Retrievable, from https://www.tutorialspoint.com/knowledge_management/knowledge_management_tutorial.pdf.
24. Knowledge Managment.(2020).[video] Retrievable fromhttps://www.youtube.com/watch?v=Zaffxj5f5hg
25. Ponzi, Leonard., & Koenig, M.E.D. (2002). Knowledge Management: Another Management Fad?" Information Research, 8(1). Retrievable from http://informationr.net/ir/8- 1/paper145.html

ASSESSMENT

40% Continuous/ Formative Assessment (see PG Regulations).

60% End-semester/ Summative Assessment: 3 hour written Exam.