# PONDICHERRY UNIVERSITY PUDHUCHERRY – 605 014

# DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

# M. L. I. Sc. (Master of Library and Information Science)

2 Years (4 Semesters) Programme

#### GUIDELINES, REGULATIONS, SYLLABUS and DETAILED COURSE CONTENTS

2009-10

# PONDICHERRY UNIVERSITY PUDHUCHERRY – 605 014

## **Department of Library and Information Science**

Guidelines and Regulations of the Programme leading to M.L.I.Sc (Master of Library and Information Science) (Two Years – Semester Scheme) Degree.

#### A. Programme Details

Name of the Department	:	Department of Library and Information Science
School	:	School of Physical, Chemical & Applied Sciences
Subject	:	Library and Information Science
Name of the Programme	:	M.L.I.Sc. (Master of Library and Information Science)
Duration of the Programme	:	2 Years – divided into 4 Semesters (Choice Based Credit
		System)

#### **B.** Objectives of the Programme

- 1. To familiarize students with basic concepts of information and its communication in society.
- 2. To learn advanced information processing techniques and develop capability in retrieving information by applying different search techniques.
- 3. To acquaint students with the activities and services of different information systems and introduce the repackaging and consolidation techniques.
- 4. To introduce the different methods and techniques of research.
- 5. To identify and learn the major issues in the development of new technology in the libraries.
- 6. To develop skills in using computer and communication technology; and
- 7. To introduce modern management techniques to students to manage Libraries and Information Centres effectively.

#### C. Eligibility for Admission to the Programme

#### i) Qualification for Admission

Candidates who have passed any Bachelor's Degree examination from a recognized university under 10+2+3 system and who have secured atleast 50% marks in aggregate,

in Part III (main subjects) are eligible to apply seeking admission to the M.L.I.Sc (Library and Information Science) Programme.

In case of candidates belonging to SC/ST category, relaxation in the percentage of marks shall be as per the University Guidelines issued from time to time.

#### ii) Entrance Examination

Candidates seeking admission to the programme shall be required to appear for a 2 hours written examination conducted by the university during the last week of May or in the first week of June or the date announced by the University. The written examination for 100 marks shall consist of multiple choice objective type questions to test mental ability, aptitude and general knowledge of the candidate. It will also have questions from current topics of general interest, books, authors, libraries, information resources, reading habits and other related areas.

#### iii) Selection for Admission

The selection of candidates shall be made on the basis of the marks scored in the entrance examination.

#### iv) Intake

The total number of Candidates to be admitted to the programme would be 31 (Thirty one) only.

#### v) Admission

All admissions shall be made provisionally and any candidate on scrutiny, if not found eligible shall be asked to leave the course. Normally admission process shall be over before the first Monday of July when classes will start or as per the schedule announced by the university from time to time.

#### vi) Internship

Each student shall take up internship during Summer Vacation, between Second Semester and Third Semester.

#### vii) Submission of Dissertation.

- a. M.L.I.Sc. (Master of Library and Information Science) students shall have to choose a topic for dissertation in the beginning of the 3<sup>rd</sup> Semester and preliminary preparation be carried out under the guidance of a teacher.
- b. They have to submit the Dissertation on the selected topic, as per (a) above, before the commencement of the theory examination of the 4<sup>th</sup> Semester.

- c. Candidates keeping terms but not appearing for the Theory and Practical Examinations and not submitted the Dissertation within the prescribed time may appear for respective examinations as Ex-students/Repeaters in subsequent Semester examinations and submit the Dissertation within the prescribed time.
- d. Candidates appearing for the examination under the provision of (c) above will not be eligible for the award of any rank, prize, medal etc.

## **D.** Programme Matrix

The Programme matrix of the M.L.I. Sc. course during the academic year/s shall be as follows:

Semester	No. of courses of study (Theory + Practice)/Project						
	Theory Examination	Project Dissertation / Internship	Practical Examination	Total			
First Semester	4	-	0	4			
Second Semester	3	-	2	5			
Third Semester	3	1	1	5			
Fourth Semester	3	1	0	4			
Total	13	2	3	18			

#### **E.** Scheme of Instruction

The scheme of instruction covers theory papers, practical, dissertation work and internship.

#### **F.** Medium of Instruction

The medium of instruction is English.

#### G. Attendance

The student shall be considered to have completed the programme if he/she has attended not less than 75% of the number of working periods (Lectures, Seminars, Practicals and Dissertation Guidance taken together) during each Semester.

#### H. Internal Assessment

- i. The internal assessment marks awarded to a student will be based on the assessment of the performance of the student in respect of the following:
  - Performance in sessional examinations. (atleast 2 written tests. The teacher may conduct 3 written sessional examinations spread periodically during the semester and select best two for contributing to the final marks.)

- > Assignments
- ➢ Seminars
- Practical work
  30% of the total marks of the course shall be for sessional examination.
  10% of the total marks of the course shall be for assignments, quizzes, seminars etc.
- ii. The class test, assignment, seminar shall be conducted in respect of each theory and practical paper (wherever applicable) for the purpose of awarding internal assessment marks.
- iii. The Department Council may decide to conduct test/seminar to the candidates who absent themselves for the above, only if the council is convinced that the absence of the candidates is on valid grounds. However, the Council will allow the candidates to avail this provision within the duration of that Semester.
- iv. Every student shall have the right to scrutinize answer scripts of sessional/end-semester examinations and seek clarifications from the teacher regarding evaluation of the scripts immediately thereafter or within three days of receiving the evaluated scripts.

The marks obtained in the Internal Assessment in the first attempt shall be carried over to the examination in the subsequent attempts.

## I. Appearance for Examination

A Candidate shall apply for all the papers of a semester when he / she appears for the examination of that semester for the first time.

#### J. Board of Examiners and Evaluation

There shall be a Board of Examiners for scrutinizing and approving the question papers and scheme of evaluation.

The composition of Board of Examiners is as approved by the University.

#### K. Grading Based on the Performance of Students

- 1. The grades awarded for the students based on their relative performance shall be S, A, B, C, D, E and F where S denotes superlative performance and A, B, C, D and E denote progressively lower performance. F denotes failure in the course.
- 2. A student getting an F in a hard core course must repeat that course to obtain the degree. A student getting an F in soft core or optional course may be permitted to replace that course and the grade by another soft core course or optional course as the case may be.
- 3. A student shall not be permitted to repeat any course only for the purpose of improving the grade.

4. **Grading and Grade Card:** Based on their semester performance each student will be awarded a letter grade to each of which the following grade points will be associated.

GRADE	POINTS	DESCRIPTION
S	10	EXCELLENT
А	9	VERY GOOD
В	8	GOOD
С	7	ABOVE AVERAGE
D	6	AVERAGE
Е	4	SATISFACTORY
F	0	FAILURE
FA	0	FAILURE DUE TO LACK OF ATTENDANCE

- 5. A student is deemed to have completed a course successfully and earned the appropriate credit if and only if he receives a grade of E and above. A grade of F or FA denotes failure in the subject. A subject successfully completed cannot be repeated at any time.
- 6. The letter grades do not correspond to any fixed absolute mark. Each student is awarded a grade depending on his/her performance in relation to the performance of other students taking or has taken the course. For example, an S does not mean he or she has scored 100% or 95% but rather that he or she is in the top 5% of all the students who have taken/ are taking/will be taking the course in the judgement of the teachers.
- 7. Grades shall be awarded based on the absolute marks in a meeting of the program committee no later than 7 days after the semester examination. Normally not more than 5% of the students in the course shall be awarded the grade S and not more than 1/3 awarded A grade. Average marks in the class shall normally be C grade excepting in the case of practical/project where it may be B grade.
- 8. The university shall issue at the beginning of each semester a grade card for the student, containing the grades obtained by the student in the previous semester and his/her Grade Point Average (GPA) and his/her Cumulative Grade Point Average (CGPA).
- 9. Students who have secured a CGPA of more than 9.5 out of 10 will be awarded distinction and those with 7.0 out of 10 shall be placed in I Class and those who have secured a CGPA of 5.0 or more but less than 7.0 out of 10 shall be placed in II Class. Student whose CGPA is less than 5.0 will not be eligible for the award of the degree.

# PONDICHERRY UNIVERSITY DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE <u>Master of Library and Information Science (M.L.I. Sc.)</u>

# **Details of Scheme of Course and Scheme of Examination**

~		Hard Core/ Soft Core	Duration of Theory/Practical Examination (Hours)	Percentage of Weightage				
Semester Course Number				Title of the Course	Theory / Practicum / Dissertation	Internal Assessment	Total	No. of Credits
	1.1	Foundations of Information Science	HC	3	60	40	100	4
Ι	1.2	Information Resources	HC	3	60	40	100	4
I	1.3	Knowledge Organisation	HC	3	60	40	100	4
	1.4	Introduction to Information Technology	НС	3	60	40	100	4
п	2.1	Management of Information Centres	НС	3	60	40	100	4
	2.2	Information Systems & Services	HC	3	60	40	100	4
	2.3	Information Processing 1: Classification Practice (DDC Ed.22)	НС	3	60	40	100	5
	2.4	Communication Skills & Public Relations (PR)	НС	3	60	40	100	3
	2.5	Information processing 2: Cataloguing Practice: (AACR-2)	HC	3	60	40	100	4
III	3.1 3.2 3.3	Internship (Summer Vacation) Information Storage & Retrieval Research Methods	HC HC HC	- 3 3	60 60 60	40 40 40	100 100 100	3 4 4
	3.4	Information Technology (Practice)	HC	3	60	40	100	4
	3.5	Marketing of Information Products and Services	НС	3	60	40	100	3
IV	4.1 4.2	Knowledge Management Digital Libraries Optionals: ( <u>Any two)</u>	HC HC	3 3	60 60	40 40	100 100	3 4
		<ul><li>a) Web Technology</li><li>b) E-Publishing</li></ul>	SC SC	3 3	60 60	40 40	100 100	
	4.3	<ul><li>c) Informetrics</li><li>d) Industrial Information</li><li>System</li></ul>	SC SC	3 3	60 60	40 40	100 100	3+3=6
	4.4	e) Technical Writing Project	SC HC	3	60 60	40 40	100 100	5
Total No. of Credits								72

Note: HC = Hard Core course, SC = Soft Core course.

#### **PONDICHERRY UNIVERSITY**

## DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

#### M.L.I. Sc. (Master of Library and Information Science)

#### **Detailed Course Contents**

#### **Course - 1.1** Foundations of Information Science

**Unit 1:** Information - Notion and Nature; Contributions of Shanon & Weaver, Brookes, Ingwersen, Belkin & others.

Unit 2: Communication Theories & Models, Channels & Barriers.

Unit 3: Information Transfer cycle; - Diffusion Patterns; Emerging trends

Unit 4: Trans border data flow of information. Information Science as a Discipline

Unit 5: Information Institutions and Associations.

- 1. Bates, M.: Information science: the invisible substrate, (1999) http://www.gseis.ucla.edu/research/bates1.html
- 2. Belkin, N.: The cognitive viewpoint in information science. Journal of Information Science 16: 11-15. (1990)
- 3. Belkin, N.: Information concepts for information science. Journal of Documentation 34 (1): 55-85. (1978)
- 4. Bell, Daniel: The coming of the Post-Industrial Society Basic Books, 1976
- 5. Books, Bricks and Bytes: Libraries in the 21<sup>st</sup> Century. Edited by Stephen Grauberd and Paul Leclerc. Transaction Publishers, 1998
- 6. Brookes, Bertram C: The Foundations of Information Science. Part I. Philosophical Aspects. Journal of Information Science 2:125-133. (1980).
- Buckland, M: The landscape of information science: the American Society for Information Science at 62. Journal of the American Society for Information Science, Vol. 50, No. 11, pp. 970-974. (1999)

- 8. Burahohan, Alka. Various Aspects of Librarianship and Information Science. New Delhi: Ess Ess, 2000.
- 9. Chapman, Elizabeth A. and Lynden, Frederick C. Advances in Librarianship. 24<sup>th</sup> Vol. San Diego: Academic Press, 2000.
- Corcoran, Mary: Corcoran, Mary. "Changing Roles of Information Professionals: Choices and Implications." Online 24 (March/April 2000): 24, no.2, 72-4. (available on Wilson Web)
- Crawford, Walt: "Paper Persists: Why Physical Library Collections Still Matter." Online, (Jan/Feb 1998): v.22, p.42-44
- Dervin, B. and Nilan, M.: Information needs and uses: a conceptual and methodological review. Annual Review of Information Science and Technology 21: 3-33. (1986)
- 13. Khanna, J.K. Library and Society. Kurukshetra: Research Publisher, 1987
- Kumar, P.S.G. Foundations of Library and Information Science. Paper I of UGC Model Curriculum. New Delhi. Manohar, 2003
- 15. Kumar, P.S.G. Fundamentals of information science. Delhi: S. Chand, 1997.
- 16. Kumar, P.S.G. Indian Library Chronology, Ed.2 Bombay: Allied, 2000.
- 17. McGarry, Kevin: The changing context of information: An introductory analysis 2<sup>nd</sup> Ed. London, Library Association, 1993
- 18. McGarry. K.J Changing context of Information, 1993
- 19. Meadows, A.J: Origins of Information Science. Taylor Graham, 1987
- 20. Neill, S.: Dilemmas in the study of information. Greenwood, 1992
- 21. Noam, Eli M: "Will Books be the Dumb Medium?" Educom Review (March/April 1998): 18-24
- 22. Ranganathan, S.R. The Five Laws of Library Science, Ed. 2. Bangalore: Sarada Ranganathan Endowment for Library Science, 1999.
- 23. Rayward, W.B.: The History and Historiography of Information Science: Some Reflections. Information Processing and Management 32:3-18. (1996).
- 24. Roul, R.K. Ed.Library Legislation in India. New Delhi: Reliance, 1999.

- 25. Saracevic, T: Information Science revisited: Rutgers University School of Information and Communication Studies, 1990
- 26. Saracevic, Tefko: Information Science: Origin, Evolution and Relations. In: P. Vakkari and B. Cronin (Eds.), Conceptions of Library and Information Science: Historical, Empirical, and Theoretical Perspectives (pp. 5-27). London: Taylor Graham. (1992).
- 27. Shera, J.H and Cleveland, D.B : History and foundations of information science. Annual Review of Information Science and Technology 12: 249-275. (1977).
- 28. Surendra Singh and Sonal Singh. Ed. Library Information and Science and Society. New Delhi: Ess Ess, 2002.
- 29. Venkatappaiah, V.Indian Library Legislation. 2<sup>nd</sup> Vol. New Delhi: Daya, 1990

# **Course - 1.2** Information Resources

**Unit 1:** Types of Information resources – Documentary – Non documentary – characteristics – Scope and value. Primary and Secondary; Human sources of Information – Invisible colleges.

**Unit 2:** Ready Reference Sources –Types and value - Dictionaries, Encyclopedias, Annuals, Biographical sources, Handbooks and Manuals, Geographical sources.

**Unit 3:** Bibliographical sources – Bibliographies, list of serials; Union Catalogues; – Indexing and abstracting sources, news summaries.

Unit 4: Internet as a Source of Information; Web Resources – Subject Gateways

Unit 5: Evaluation of Information sources – Print Reference sources; Web Resources

- 1. Alan Poulter, Gwyneth Tseng and Goff Sargent: The Library and Information Professional's Guide to the World Wide Web. London: Facet Publishing, 1999.
- 2. Chowdhruy, G.G. and Sudatta Chowdhury: Searching CD-ROM and Online Information Sources. London: Facet Publishing, 2001.
- 3. Chowdhury, G.G. and Sudatta Chowdhury. Information Sources and Searching on the World Wide Web. London: Facet Publishing, 2001.
- 4. Gopinath, M.A: Information Sources and Communication Media. DRTC Annual Seminar, Bangalore-1984.

- 5. Grogan, Dennis: Science & Technology: An Introduction to Literature, London, Clive Bingley, 1982.
- 6. Higgens, Gavin. Printed Reference Materials. London: Library Association, 1980
- 7. Katz, W.A: Introduction to Reference Work, London, Butterworths, 2000, 2V.
- 8. Krishnakumar: Reference Service, Ed.3, New Delhi, Vikas, 2003.
- 9. Kumar (PSG). Ed. Indian Encyclopedia of Library & Information Science. New Delhi: S. Chand & Co., 2001.
- 10. Parker, C.C and Turley, R.V. Information sources in Science and Technology Ed.2 1986
- 11. Rao, I.K.R : Electronic Sources of Information, DRTC Annual Seminar, 2001
- 12. Sewasingh. Hand book of International Sources on Reference and Information New Delhi: Crest Publication, 2001.
- 13. Sharma, J.S & Grover, D.R. Reference Service and Sources of Information, New Delhi: Ess Ess, 1998.
- 14. Subramanayam, K: Scientific and Technical Information Resources, New Delhi: Anmol, 2001
- 15. Teague, S John: Microforms, Video and Electronic media Librarianship, London, Butterwoths, 1985.
- 16. Walford, A.J: Guide to Reference Materials, London, Library Association, 1990, 3V.
- 17. www.libraryspot.com
- 18. www.refdesk.com
- 19. www.infolibrarian.com

#### **Course - 1.3 Knowledge Organisation**

Unit 1: Universe of Subjects and Knowledge Organization

**Unit 2:** Basic principles of classification - idea, verbal & notation planes; Facet analysis. An overview of Universal Library classification schemes CC, UDC, LC & DDC

**Unit 3:** Cataloguing: Purpose, structure, types including OPAC –Normative principles, Canons & Laws; Standard codes of Cataloguing – ISBDs and AACR

Unit 4: Subject cataloguing – subject heading lists; thesauri and vocabulary control

**Unit 5:** Bibliographic formats – ISO 2709, MARC-21, UNIMARC, CCF and National formats.

**Unit 6:** Organisation of digital resources – Metadata standards – Dublin core, Mark up languages; DOI (Digital Object identifier)

- 1. Anglo American Cataloguing Rules. 2<sup>nd</sup> Edition Rev. New Delhi, Oxford, 1988
- 2. Barbara M Westby, Ed. Sears List of Subject Headings, New York, HW Wilson, 1977.
- 3. Berwick Sayers, W.C. Introduction to Library Classification. London, Andra dautch, 1950.
- 4. Byrne, Deborah J. MARC Manual: Understanding and Using MARC Record. Englewood, Libraries Unlimited, 1998.
- 5. Chernyi, A.I. Introduction to Information Retrieval Theory. London, ASLIB, 1973.
- 6. Dhyani, Pushpa. Library Classification: Theory and Practice. New Delhi: Vishwa Prakashan, 1998.
- 7. Fritz, Deborah A. Cataloguing with AACR2 and US-MARC Records. Chicago, ACA, 1998.
- 8. Jennifer, E. Rowledy. Organising Knowledge: An Introduction to Information Retrieval. Aldershot, Gower, 1987.
- 9. Krishan Kumar. Theory of Library Classification, ED.2, New Delhi, Vikas, 1980.
- 10 Kumar. PSG. Knowledge Organization, Information Processing and Retrieval Theory, Delhi: BR, 2003.
- 11 Maxwell, Robert and Maxwell, Margaret F. Maxwell's handbook of AACR2R: Explaining and illustrating the Anglo American Cataloguing Rules and the 1993 amendments. Chicago: ACA, 1997.
- 12 Ramalingam, MS. Library Cataloguing and Classification Systems. Delhi: Kalpaz, 2000.

- 13 Ranganathan, SR. Headings and Canons. Madras, S. Vishwanathan, 1955.
- 14 Ranganathan, SR. Classified Catalogue Code. Madras, UBSPD, 1988.
- 15 Ranganathan, SR. Colon Classification, 6<sup>th</sup> ed. Banalore: Sarada Ranganathan Endowment for Library Science, 1960.
- 16 Ranganathan, SR. Library Catalogue: Fundamentals and Procedures, Madras, L.A, 1950.
- Ranganathan, SR. Prolegomena to Library Classification, Ed2, London, LA, 1957 & 1965.
- 18 Ranganathan, SR, The Five Laws of Library Science. Bangalore: Sarada Ranganathan Endowment for Library Science, 1999.
- 19 Rijsbergen, CJ Van. Information Retrieval, 2<sup>nd</sup> ed., London, Butterworths, 1970.
- 20 Sinha, Suresh C and Dhiman, Anil K. Prolegomena to Universe of Knowledge. New Delhi: Ess Ess, 2002.
- 21 Srivastava, A P. Theory of Knowledge Classification in Libraries. New Delhi, Sage, 1993.

#### **Course - 1.4** Introduction to Information Technology

**Unit 1:** Understanding Information Technology: Components of Information Technology – Computer and Communication Technologies, types of computers – CPU, Storage and I/O Devices, client-server architecture.

**Unit 2:** Data representation in Computers: Binary Number System, Character encoding standards – ASCII, ISCII and UNICODE

**Unit 3:** Computer Software: System Software and Application Software; Programming Concepts: Open source and Propriety, Operating Systems: Windows & LINUX / UNIX. Working with windows.

Unit 4: File organization & Database Management.

**Unit 5:** Office Management: Word processing, Spreadsheet, Presentation Software, Database (MS-Access)

# **Suggested Readings:**

- 1. Arvind Kumar. Ed. Information Technology For All (2 Vols.) New Delhi, Anmol, 2006.
- 2. Bansal, S.K. Information Technology and Globalisation, New Delhi: A.P.H. Publishing corporation, 2005.
- 3. Basandra, S.K: Computers Today and Globalisation, New Delhi, Golgotia, 2002.
- 4. Deeson, Eric. Managing with Information Technology, Great Britan, Kogan page Ltd. 2000.
- 5. Forrester W.H. and Rowlands, J.L. The Online searcher's companion. London, Library Association, 2002.
- 6. Gupta, Vikas, Rapidex computer course, New Delhi, Pustak Mahal, 2005.
- 7. Hunter & Shelly: Computers and Common sense, New Delhi, Prentice-Hall, 2002.
- 8. Kashyap, M.M: Database Systems, New Delhi, Vikas, 2003.
- 9. Rowely, Jennifer: Information Systems, Ed.2, London, Clive Bingley, 2001.
- 10. Satyanarayana, R. Information Technology and its facets. Delhi, Manak 2005.
- 11. Sunders, R: Computers Today Ed.2, John Wiley, 2000.
- 12. Taxali Ravikant: PC software made easy, New Delhi, 2006.

#### SECOND SEMESTER

#### **Course - 2.1** Management of Information centres

**Unit 1:** Management: Concept, Definition and scope – Schools of Management Thought – Systems Analysis and Design.

**Unit 2:** Human Resource Management: Organisation models – job description and job analysis – selection, recruitment training development Leadership – Team – building – Motivation.

**Unit 3:** Financial Management: Planning and Control – Resource generation. Budget and Budgeting – Budgetary control techniques – Cost Benefit, Cost Effective analysis and accounting.

**Unit 4:** Materials Management: Collection development and evaluation – Policy, Issues relating to selection acquisition; Library routines, Circulation, Preservation and conservation.

**Unit 5:** Planning and planning strategies: Concept – definition – need and steps in planning – MBO – Planning techniques – Decision making.

- 1. Beardwell, Ian and Holden, Len. Ed. Human Resource Management: Contemporary Perspective. New Delhi: McMillan, 1996.
- 2. Bratton, John and Gold, Jeffery. Human Resource Management: Theory and Practice. Basingstoke: Macmillan, 1994.
- 3. Brophy, Peter and Courling Kote. Quality Management for Information and Library Managers. Bombay: Jaico, 1997.
- 4. Bryson, J.O. Effective Library and Information Management. Bombay: Jaico, 1996.
- 5. Evans, Edward G. Ed. Management Information Systems. New Delhi: S.Chand & Co. 1986.
- 6. Katz, W.A. Collection Development Selection of Materials for Libraries. New York: HRW, 1980.
- 7. Krishna Kumar. Library Administration and Management. Delhi: Vikas, 1987.
- 8. Kumar P.S.G. Management of Library and Information Centres. Delhi: B. R. Publishing Corporation, 2003.
- 9. Martino, R.L. Information Management: Dynamics of Management Information Systems. New York: McHill, 1969.
- 10. MerDick, Robert G. et.al. Information Systems for Modern Management. New Delhi: Prentice Hall, 1992.
- 11. Mittal, R.L. Library Administration: Theory and Practice. Ed. 4, New Delhi" Metropolitan, 1984.
- 12. Paliwal, P.K. Compendium of Library Administration. New Delhi: Ess Ess, 2000.
- 13. Paranjpe, Vivek. Strategic Human Resource Management. New Delhi: Allied, 1997.

- 14. Parker, Charles and Café, Thomas. Management Information Systems: Strategy and Action. New York: McGraw Hill, 1993.
- 15. Pearson, R.J. Ed. Management Process: Selection of Readings for Librarians. Chicago: ALA, 1983.
- 16. Prasher, R G. Developing library collection. New Delhi: Medallion Press, 1993.
- 17. Ranganathan, S R. Library manual. 2<sup>nd</sup> ed. Bangalore : Sharada Ranganathan Endowment, 1988.
- 18. Ranganathan, S R. Library administration. Bombay: Asia, 1959.
- 19. Siwatch, Ajit Singh. Library Management: Leadership style strategies and organizational climate. New Delhi: Shree, 2004.
- 20. Stuert, Robert D. and Moran, Barbara B. Library and Information Center Management. Colorado: Libraries unlimited, 2004.

#### **Course - 2.2** Information systems and Services

**Unit 1:** Information systems: Concept, purpose & types. Reference & Documentation services; Digital reference service. CAS, SDI; Information analysis & consolidation

Unit 2: Alerting services: Newspaper clipping, Listserv, Blogs.

Unit 3: Information use & user studies, Information Literacy.

**Unit 4:** Global & National Information Systems; UN Information Systems; NISCAIR, NASSDOC, Library Networks: INFLIBNET, DELNET, etc.

**Unit 5:** Library consortia-India; Current trends in scholarly communication: Open Access Movement

- 1. Atherton, P. Handbook of Information Systems and Services, 1977.
- 2. Burch, J.C. and Stretev, F.R. Information Systems: Theory and Practice, 1974.
- 3. Colin, H. Ed. Management Information Systems in Libraries and Information Services. London: Tayler Graham, 1989.
- 4. Guha, B. Information and Documentation. Calcutta: World Press, 1983.

- 5. Gupta, B.M. et.al. Handbook of Libraries, Archives, Information Centres in India. New Delhi, Aditya Prakashan, 1991. Related volumes.
- 6. Kochtanek, Thomas R. and Mathews, Joseph R. Library and Information Systems: From Library automation to distributed information access solutions. West port: Libraries unlimited, 2004.
- 7. Krishna Kumar. Reference Service. New Delhi: Vikas, 1977.
- 8. Lancaster, F.W. Towards Paperless Information System. New York: Academic Press, 1978.
- 9. Lucas, Amy, Ed. Encyclopedia of Information Systems and services. Detroit: Gale Research, 1989.
- 10. Medow, C.T. Analysis of Information Systems. New York: Wiley, 1967.
- 11. Murdick, Rober G. et.al Information systems for modern management. 3<sup>rd</sup> ed. New Delhi: Prentice-Hall, 1996.
- 12. Osborne, Larry N. and Nakamura, Margaret. System analysis for librarians and information professionals. 2<sup>nd</sup> ed. Engewook: Libraries unlimited, 2004.
- 13. Ranganathan, S.R. Reference Service.Bombay: Asia, 1967.
- 14. Vickery, B. Information Systems. London: Butterworths, 1987.
- 15. Wiseman, H.M. Information Systems, Services and Centres. New York: Becker and Hanyes, 1972.

#### **Course - 2.3** Information Processing - I: Classification Practice

Classification of Books and periodicals according to DDC, Ed.22

### Course - 2.4 Communication Skills & Public Relations

**Unit 1:** Personality development: Understanding personal strengths and weaknesses, work and organisational psychology - Stress management, Time management and crisis management.

Unit 2: Communication skills: Effective speaking, elements, types and stages.

**Unit 3:** Writing skills. Principles of presentation of ideas. Techniques, skills and tools for effective writing; preparation of a project proposal.

**Unit 4:** Non-verbal communication. Body language. Leadership and working in teams. Working collaboratively. Working and sharing knowledge and experience. Team development.

Unit 5: Public Relations; Meetings and Negotiation-strategies. Different types of meetings.

# **Course - 2.5** Information processing - II: Cataloguing Practice:

Cataloguing of Documents: Print and Non-Print using AACR-2, MARC – 21.

# **THIRD SEMESTER**

# **Course - 3.1** Internship (Summer Vacation)

## **Course - 3.2** Information storage and retrieval

Unit 1: components of an Information Retrieval System – Basic concepts

**Unit 2:** Indexing systems – Indexing: Pre coordination Vs. Post coordination – Citation Indexing – Key word Indexing

Unit 3: Query formulation - search process; Search strategies - search engines

**Unit 4:** Information Retrieval Models: Structural model, Probabilistic, Cognitive and Vector models

**Unit 5:** Evaluation of Information Retrieval Systems: Purpose – Criteria and steps in evaluation – Major Evaluation Studies – MEDLARS to SMART Retrieval. Experiment of the STAIRS, Project TREC.

- 1. Alberico, Ralph and Micco Mary. Expert Systems for reference and information retrieval. West port: Meckler, 1990.
- 2. Atchison, Jean & Gilchrist, Alan. Thesaurus construction: a practical manual. London: ASLIB. 1972.

- 3. Atherton, Pauline. Handbook for information systems and service, Paris: UNESCO, 1977.
- 4. Austin, D. Precis, A manual of concept analysis and subject indexing. 2<sup>nd</sup> ed. 1984.
- 5. Barbara Allan. E-learning and teaching in library and Information Services. London: Facet Publishing, 2002.
- 6. Bikowitz., W R. Knowledge Management. Delhi: PHI, 2000.
- 7. Cawkell, A.E., Ed. Evolution of an Information Society. London: ASLIB, 1987.
- 8. Chernyi, A.I. Introduction to Information Retrieval Theory. 1983.
- 9. Chowdhruy, G.G. Introduction to Modern Information Retrieval. 2<sup>nd</sup> Ed. London, Facet Publishing, 2003.
- 10. Cleaveland, D. B., Cleveland, A. D. Introduction to Indexing and Abstracting. 1983.
- 11. Crawford, Marshall Jean. Information broking: a new career in information work. London: LA, 1988
- 12. Dearnley, James and Feather, John. The Wired World: An introduction to the theory and practice of the information society. London : Facet Publishing, 2001
- 13. Ford, Nigel. Expert Systems and artificial intelligence: An information manager's guide. London: LA, 1991.
- 14. Houghton B & Convey J. Online information retrieval system and introductory manual to principles and practices. Clive Bingley, London, 1977.
- 15. Kochen, M. Principles of information retrieval. 1974.
- 16. Lancaster, F.W. Information retrieval systems, characteristics, testing and evaluation. 1968.
- 17. Lancaster, F.W. Indexing and abstracting in theory and practice. London: Facet Publishing, 2003.
- 18. Malwad, N.M. and others. Digital libraries: Dynamic store house of digitized information. New Delhi: New Age, 1996.
- 19. Meadow, Charles T. The analysis of information systems. 2<sup>nd</sup> ed. Los Angeles: Melville publishing, 1973.

- 20. Pandey, S.K. Ed. Library information retrieval. New Delhi, Anmol, 2000.
- 21. Peter Brophy. The Library in the 21<sup>st</sup> Century: New services for information age. London: LA, 2001.
- 22. Prasher, R. G. Information and its communication. New Delhi: Medallion Press, 1991.
- 23. Rowley, Jennifer. E. Organising Knowledge: Introduction to Information Retrieval. Gover, Aldershot., 1987
- 24. Singhal, Aravind and Rogers, E M. India's information revolution. New Delhi: Sage, 1989.
- 25. Van Rijsbergen, C J. Information retrieval. 2<sup>nd</sup> ed. London: Butterworths, 1970.
- 26. Vickery, B.C. Techniques of Information Retrieval. Butterworth, London, 1970.

## **Course - 3.3 Research Methods**

**Unit 1:** Introduction: Concepts, Definition, Objectives and Significance of Research. Types of Research and Research Problems.

**Unit 2:** Research Design: Definition, Need, Sampling, Fundamentals and Techniques, Hypothesis: Definition, Formulation, Types and Testing.

**Unit 3:** Methods and tools of data collection: Survey, Experimental, Case-study, Observation, statistical, Delphi Tools: Questionnaire, Interview schedules.

**Unit 4:** Processing and Analysis of Data: Measures and Scaling Techniques. Interpretation, inferences, Presentation of data.

Unit 5: Report Writing: Components of a Research Report; Style manuals

- 1. Auger, Current trends in scientific research. UNESCO, Paris, 1961.
- Bhandarkar. P.L & Wilkinson. T. S. Methodology & techniques of Social research Ed.9 Himalaya. Bombay, 1992
- 3. Bundy.M.L & Wasserman.P. Reader in research methods in librarianship; techniques and interpretation: academic, New York, .1970.

- 4. Busha, Charles, H. and Harter, Stephen, S. Research Methods in Librarianship. Techiques and Interpretation. Orlando, Academic press, 1980.
- 5. Chapin.F.S (1974): Experimental designs in sociological research Rev Ed. Greenwood Press, Westport.
- 6. Charles, H. et.al. Research Methods in Librarianship: Techniques and Interpretations. New Delhi, Sage, 1993.
- 7. Downs, R.B & Down, E. How to do library research university of illinois press, Urbana, 1966.
- 8. Fowler, F.J. Survey Research Methods. New Delhi, Sage, 1993
- 9. Goode, W.J & Hatt, P.K. Method of Social Research. McGraw Hill. Auckland, 1989
- 10. Gopal, M.H. An introduction to research procedure in social sciences. Asia, Bombay, 1990.
- 11. Kothari, C.R.. Research methodology: Ed2 Wishwa. New Delhi, 1990.
- 12. Krishna Kumar: Research methods in library in social science. Vikas, New Delhi, 1992
- 13. Krishna Swamy, O.R. Methodology of research in social sciences. Himalaya, Bombay, 1993
- 14. Line, Maurice.B. Library surveys; an introduction to the use, planning procedure and presentation of survey. Ed2 Clive Bingley, London, 1982:
- 15. Ravichandra Rao, I.K. Quantitative methods in library and information science, Wiley Eastern. New Delhi, 1988.
- 16. Slatter, Margaret, Ed. Research, methods in library and information science. London, L.A, 1990.
- 17. Stevens, Rolland, E. Research methods in librarianship, Clive Bingley, London, 1971.
- 18. Tabuer, M.F and Stephens, I.R. Ed. Library surveys. Columbia University Press, New York, 1968.
- 19. Wilson, E.S. Introduction to scientific research McGraw Hill, New Delhi, 1952.
- 20. Young, P.V. Scientific social surveys and research. Ed4. Prentice Hall of India, New Delhi, 1982

# **Course - 3.4** Information Technology: Practice

Hands-on experience with the following Softwares:

1: Library Automation Softwares: WINISIS, LIBSYS, Koha, SOUL,

2: Digital Library Softwares: Greenstone, Dspace and E-Prints.

**3:** Web blog designing

## **Course - 3.5** Marketing of Information products and services

**Unit 1:** Information as a Resource: Economics of Information; Marketing concepts; - Corporate Mission; Marketing Strategies

**Unit 2:** Portfolio Management BCG Matrix Model; Product Market Matrix; Product Life Cycle, Pricing Information

Unit 3: Marketing Mix; Kotler's Four C's; McCarthy's Four P's

**Unit 4:** Marketing Plan & Research: Corporate Identity, marketing plan: Marketing Research. Market Segmentation and Targeting; Geographic and Demographic Segmentation; Behavioral and Psychographics Segmentation; User Behavior and Adoption

Unit 5: Information industry marketing information Products & Services.

- 1. Anderson, A.R. Advancing library marketing. Journal of Library Administration. 1(3), 1980, pp. 17 32.
- 2. Anderson, W. T. Jr., Bentley, C. C. and Sharpe, L K IV. Multi-dimensional marketing: Managerial, societal, and philosophical. Austin TX: Austin Press 1976.
- 3. Bellardo, T. and Waldhart, T J. Marketing products and services in academic libraries, Libri. 27(3), 1977. pp. 181 194.
- 4. Berry J. The test of the marketplace. Library Journal. 104. Sept. 1979. pp. 1605.
- 5. Dragon, A C. Marketing the library. Wilson library bulletin. 53, 1979, pp. 498 500.
- 6. Eisner, J, ed. Beyond PR: Marketing for libraries. A Library Journal Special Report, 1981.

- 7. Ferguson, D. Marketing online services in the university. Online 1, Jul. 1977. pp. 15 23.
- 8. Kelley E. J. Marketing: Strategy and functions. N J. Prentice Hall, 1965.
- 9. Kotler, P. Marketing for non-profit organizations. Englewood Cliffs, New Jersey: Prentice Hall, 1975.
- 10. Kotler, P. Marketing decision making: A model building approach. New York: Holt, Rinehat and Winston, 1971.
- 11. Massey, M E. Marketing analysis and audience research for libraries. Library Trends. 24(3), 1976, pp. 473 481.
- 12. Moulton, B. Marketing and Library cooperatives. Wilson Library Bulletin. 55, Jan 1981, pp. 347-352.
- Seetharama. S. ed. Libraries and information centres as profit making organizations. (DRTC Workshop. 9 – 11 Aug. 1995). Bangalore: DRTC Indian Statistical Institute, 1995.
- 14. Wasserman, P. and Ford F T. Marketing and marketing research: What the library manager should learn. Journal of library administration. 1(1), 1980, pp. 23 30.
- 15. Weingand, Darlene E. Marketing for information agencies. New Jersey: Ablex Publishing, 1984.

#### Course - 4.1 Knowledge Management

**Unit 1**: Knowledge Management: Concept and definitions – Need for Knowledge Management in the emerging and changing business environment – Understanding knowledge; Types of Knowledge – explicit and tacit Knowledge – Knowledge works - changing role of Library and Information Professionals.

**Unit 2:** Knowledge creation and capturing: Knowledge creation model – Capturing tacit knowledge

**Unit 3:** Knowledge codification and organization: Knowledge base - knowledge mapping, decision trees, decision tables, frames etc.

**Unit 4:** Tools and techniques of knowledge management: Neural network, Data Mining, knowledge management

Unit 5: Case studies

- 1. Argyris, C. "Organizational Learning and Management Information Systems," Accounting, Organizations and Society, 2(2), 1977, pp. 113-123.
- 2. Arthur, W. B. "Increasing Returns and the New World of Business." Harvard Business Review, July-August 1996, 74(4), pp. 100-109.
- 3. Baatz, E.B. "Making Brain Waves," CIO, 9(7), pp. 23-29.
- 4. Bartlett, C.A. & Ghoshal, S. "Changing the Role of the Top Management: Beyond Systems to People," Harvard Business Review, May-June 1995, pp. 132-142.
- 5. Bikowitz, W. R. Knowledge Management. Delhi: PHI, 2000.
- 6. Birkett, B. "Knowledge Management," Chartered Accountants Journal of New Zealand, Feb 1995, 74(1), pp. 14-18.
- Boland, R.J. "The In-formation of Information Systems," In R.J. Boland and R. Hirschheim (Eds.), Critical Issues in Information Systems Research, pp. 363-379, Wiley, Chichester, 1987.
- Candlin, D.B. & Wright, S. "Managing the Introduction of Expert Systems," International Journal of Operations & Production Management, 12(1), 1992, pp. 46-59.
- 9. Daft, R.L. & Weick, K.E. "Toward a Model of Organizations as Interpretation Systems," Academy of Management Review, 9, pp. 284-295.
- 10. Davenport, T.H. "Saving IT's Soul: Human-Centered Information Management," Harvard Business Review, Mar-Apr 1994b, pp. 119-131.
- 11. Davenport, T.H. "Think Tank: The Future of Knowledge Management," CIO, December 15, 1995a.
- 12. Dragoon, A. "Knowledge Management: Rx for Success," CIO, 8(18), July 1995, pp. 48-56.
- 13. Due, R.T. "The Knowledge Economy," Information Systems Management, 12(3), summer 1995, pp. 76-78.
- 14. Ford, N. "From Information- to Knowledge-Management," Journal of Information Science Principles & Practice, 15(4, 5), 1989, pp. 299-304.

- 15. Garvin, D.A. "Building a Learning Organization," Business Credit, 96(1), January 1994, pp. 19-28.
- 16. Gopal, C. & Gagnon, J. "Knowledge, Information, Learning and the IS Manager," Computerworld (Leadership Series), 1(5), 1995, pp. 1-7.
- 17. Hamel, G. & Prahalad, C.K. Competing for the Future, Harvard Business School Press, Boston, MA, 1994.
- 18. Hannabuss, S. "Knowledge Management," Library Management, 8(5), 1987, pp. 1-50.
- 19. Harari, O. "The Brain-based Organization," Management Review, 83(6), 1994, pp. 57-60.
- 20. Hildebrand, C. "Information Mapping: Guiding Principles," CIO, 8(18), July 1995, pp. 60-64.
- 21. Jarvenpaa, S. L. & Ives, B. "The Global Network Organization of the Future," Journal of Management Information Systems, 10(4), Spring 1994, pp. 25-57.
- 22. Kanter, R.M. The Change Masters: Innovation & Entrepreneurship in the American Corporation, Simon & Schuster, New York, NY, 1984.
- 23. Kerr, S. "Creating the Boundary less Organization: The Radical Reconstruction of Organization Capabilities," Planning Review, Sep-Oct 1995, pp. 41-45.
- 24. Manville, B. & Foote, N. "Harvest your Workers' Knowledge," Datamation, July 1996, v42 n13, pp. 78-80.
- 25. Morgan, G. "Toward Self-Organization: Organizations as Brains," In Images of Organization, Sage, Newbury Park, CA, 1986, pp. 77-110.
- 26. Nonaka, I. "The Dynamic Theory of Organizational Knowledge Creation," Organization Science, 5(1), February 1994, pp. 14-37.
- 27. Nonaka, I. and Takeuchi, H. The Knowledge-Creating Company, Oxford University Press, New York, NY, 1995.
- 28. Quinn, J.B. Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry, Free Press, New York, NY, 1992.
- 29. Shen, S. "Knowledge Management in Decision Support Systems," Decision Support Systems, 3(1), 1987, pp. 1-11.

- 30. Strapko, W. "Knowledge Management," Software Magazine, 10(13), 1990, pp. 63-66.
- 31. Zeleny, M. "Management Support Systems," Human Systems Management," 7(1), 1987, pp. 59-70.

# **Course - 4.2** Digital Libraries

**Unit 1:** Digital Libraries: Definitions, Fundamentals and Theoretical Aspects; Characteristics of Digital Libraries and nature of Digital Library collections - Major Digital Library Initiatives, Open Archives Initiative (OAI) and similar developments

**Unit 2:** Design and Organisation of Digital Libraries: Architecture, Interoperability, Protocols and Standards; User Interfaces

**Unit 3:** Digital content creation: Electronic documents, files & formats & conversion to PDF

**Unit 4:** Digital Resources Management; Access to and Use of Digital Libraries; Storage, Archiving and Preserving Digital Collections

Unit 5: Digital Libraries Technology: Digital Software - D-Space, E-Prints, GSDL

- 1. Chowdhury, G.G. Introduction to Digital Libraries. London: Facet Publishing, 2003.
- 2. Cooper, Michael D. Design of Library Automation Systems: File Structure, Data Structures and Tools, New York: John Wiley, 1996.
- 3. John M. Cohn, Ann L. Kelsey and Keith Michael Fiels, Planning for Library automation: A Practical Handbook London: Library Association, 1998.
- 4. John M. Colon, Annl Kelsey, Keith Michael Fiels. Planning for Automation: A How-to-do-it for Librarian. 2<sup>nd</sup> ed.(S.I.): Neal-Schuman, 1997.
- 5. Kausik Bose Information Networks in India: Problems and Prospects / New Delhi: Ess Ess Publications, 1994.
- 6. Leona Carpenter, Simon Shaw & Andrew Prescott. Towards the Digital Library. London: LA, 1998.
- 7. Lovecy, Ian. Automating Library procedures: a survivor's handbook. London: Library Association, 1984.

- 8. Paul Pedley. The invisible Web: Searching the hidden parts of the Internet. London: Aslib, 2001.
- 9. Reynolds, Dennis. Library automation: Issues and applications. New York: Bowker, 1985.
- 10. Satyanarayana, N.R. A Manual of Computerization of Libraries. New Delhi: Viswa Prakashan, 1995.
- 11. Xavier, C. World Wide Web Design with HTML, New Delhi: TMH, 2000.

#### Course - 4.3 Optionals: (Any Two)

## 4.3.1 Web Technology

Unit 1: Web Technology: An overview

Unit 2: Web Browsers and Services

Unit 3: Mark-up Languages

Unit 4: Web sites: Tools and Techniques

**Unit 5:** Search Engines

- 1. Atwood, R. The net grows. Internet world. 10, Sept. 1996. pp. 30 32.
- 2. Benedikt, M. ed. Cyberspace: First steps. Cambridge, MA. MIT Press. 1991.
- 3. Berners-Lee T. Weaving the Web. London: Orion business books. 1999.
- 4. Burnett, Robert and Marshall P David. Web theory: An introduction. London: Routledge, 2003.
- 5. Cheung. A home on the web: Presentations of self on personal homepages. (In: Guantlett, D: Web studies: Rewiring media studies for the digital age. London: Arnold 2000.)
- 6. Gilder, G. Life after television, New York: WW Norton, 1994.

- 7. Herman and Swiss T, Eds. The World Wide Web and contemporary cultural theory. New York. Routledge, 2000.
- 8. Jones S G. ed. Virtual culture: Identity and communication in cyber society. London. Sage publications 1997.
- 9. Yahoo! The history of Yahoo! How it all started. Online at http://docs.yahoo.com/info/misc/history.html.

# **4.3.2 E- Publishing**

**Unit 1:** Technology for Print: Document structure, document preparation systems, DTP, DDLs, page description languages, text databases, standards;

Unit 2: Design for Print: Type design, graphic design, composition products, separation;

Unit 3: Technology for presenting static and dynamic content on the Internet

**Unit 4:** Technology for Multimedia: Hypermedia etc., music and sound, interactive software, multimedia databases, intelligent systems, visualization, virtual reality, CAL, standards;

**Unit 5:** Design for Multimedia: Design methodologies, media evaluation, HCI considerations;

**Unit 6:** Multimedia Publishing: Financial strategies, market sectors (educational, music, art, etc., versus academic, business, popular, etc., versus newspaper, magazine, journal, book, video, etc.), comics.

- 1. Bommel, Patrick Van. Information Modeling for Internet Applications, 2002.
- 2. Eyal Amiran, Elaine Orr, and John Unsworth. Refereed Electronic Journals and the Future of Scholarly Publishing. Advances in Library Automation and Networking, (1991)
- 3. JEP: the Journal of Electronic Publishing. Published by the University of Michigan Press.
- 4. Levine, Mark. The fine print of self publishing: the contracts and services of 48 major self publishing companies Analyzed, Ranked and exposed 2006.
- 5. Maran, Ruth; Whitehead, Paul. Internet and World Wide Web Simplified, 3rd Ed. Marangraphics Inc., and Internet and World Wide Web Simplified 1999.

- 6. Meyerhoff, Dirk et al ... Software Quality and Software Testing in Internet Times (High-tech Software Quality Management), 2002.
- 7. Norton Internet Security for Dummies by Greg Holden, 2004.
- 8. Rising, David. Best in Self-Publishing & Print on Demand: Plus Marketing Your Book on the Internet, 3rd Ed., 2006
- 9. Sebastian, Liane. Digital design. Business Practices.
- Strong, William S. Copyright in the new world of electronic publishing (Workshop on Electronic Publishing Issues – II, Washington, Association of American University Presses (AAUP) Annual meeting, June 17, 1994).
- 11. Straubhaar Joseph D. Media now, p.554.
- 12. Strauch, Katina, Abel, Richard E, Newlin, Lyman W. Scholarly Publishing: Books, Journals, Publishers, and Libraries in the Twentieth Century, Hardcover Nov 2001
- 13. Tom, C. Swanson. Capturing Intellectual Knowledge with E-mail Systems: Justifying the Business Case and Return on Investment, Sep 19, 2006.

# 4.3.3. Informetrics

**Unit 1:** Evolution of the concept of Informetrics: Librametry, Bibliometry, Scientometrics, Webometrics.

Unit 2: Theory and Laws: Zipfs Law, Lotka's Law Bradford's Law, Price Theory and circulation theory

Unit 3: Quantitative and Qualitative Techniques – Types

**Unit 4:** Citation analysis: Definition – Theory of citing, different forms of citations, age of citation – Citation counts, self-citation

**Unit 5:** Application of quantitative and qualitative tools and Techniques in Library and Information science

- 1. Baker S L. and Lancaster S W. Measurement and evaluation of library services. 2ed. Arlinglon, Information resources press, 1991.
- 2. Carpenter R L. and Vasu E S. Statistical methods for librarian. Chicago. ALA, 1979.

- 3. Donohue, J C. Understanding scientific literature. A Bibliometric approach. London: MIT. 1990.
- 4. Egghe, L and Rousseau R. Introduction to Informetrics: Quantitative methods in Library, Documentation and Information Science. Amsterdam, Elsevier. 1990.
- 5. Garfield, E. Citation Indexing Its theory and application in science and technology and humanities. John Wiley, New York. 1979.
- 6. Hernon. P. Statistics: A component of the research process. Assblex, 1991.
- 7. Hernon. P. Handbook of statistics for library decision making. Ables 1989.
- 8. Hjerppe R. An outline of bibliometric and citation analysis. Stockholm: Royal institute of technology library, 1980.
- 9. Kraft D H. and Boyce B R. Operations research for libraries and information agencies: techniques for the evaluation and management decision alternative. San Diego: Academic Press. 1991.
- 10. Mores P M. Library effectiveness: A system approach. Cambridge: The MIT Press. 1968.
- 11. Nicholas D. and Ritchil, M. Literature and Bibliometrics. London, Clive Bingley, 1979.
- 12. Ravichandra Rao, I.K. Quantitative Methods for Library and Information Science, New Delhi, Wiley Eastern, 1985

#### 4.3.4. Industrial Information System

**Unit 1:** National Science, Technology and Industrial Policy with special reference to India; Role of information in Industrial development

Unit 2: Nature and needs of industrial users; Information needs of industry, Types of information services for industry

**Unit 3:** Global and national industrial information systems & services; Role of UNIDO, national level organizations

**Unit 4:** Intellectual Property issues; Patents as a source of Industrial Information; Information systems for patents

# **Suggested Readings:**

- 1. Bakewell, K G B. Industrial Libraries throughout the world. Oxford: Pergamon Press. 1969. (International series of monographs in LIS ed. by Chandler.)
- 2. Bhattacharya, G and Gopinath M A., eds. DRTC Annual Seminar. 18: Principles procedures and products. Bangalore. DRTC Feb. 23 27. 1981.
- 3. Burkett, J. ed. Special library and information science in the UK.
- 4. Guha, B. Documentation in information services, Techniques and systems. 2ed. Calcutta: The World Press, 1983.
- 5. Harris Katharine G and Jackson Eugene B eds. Library service to industry. 14(3), 1966. pp. 223 362.
- 6. Kumar H. Management information systems. New Delhi. Ashish 1989.
- 7. Mukherjee S and Mukherjee I. International transfer of technology. New Delhi: Mittal 1989.
- 8. Neelameghan A. ed. DRTC Seminar on information service for business and industry. Dec 2 7, 1974.
- 9. Rogers, Evert M. Diffusion of innovations. New York. Tefee Press of Gleence, 1962.
- 10. Saunders, W L. ed. British librarianship today. London Library Association 1976.

# 4.3.5. Technical Writing

**Unit 1:** Communication Process: Overview of Communication process – Characteristic features of Technical Writing – Target group in Written Communication – Reader / Writer Relationship.

**Unit 2:** Planning and Organisation of Technical / Scientific Writing: Definition, Structure, Purpose, Characteristics and functions. Aberrations in Technical Writing – Collection, Organisation and presentation of data including illustrations – Cast Studies: Preparation of Short Communications, Review Articles, Technical Report, Monographs, Project proposals, dissertations and House Bulletins.

**Unit 3:** Technical Editing and Editorial Tools: Editor – Editorial process – Editorial Tools.

**Unit 4:** Publication Process: Planning, Preparation, Production and dissemination of Technical Information products.

Unit 5: Publication Ethics: Copy Right, IPR, Legal Issues and Professional Ethics.

# **Suggested Readings :**

- 1. Elbow, Peter. Writing without teachers. New York. Oxford University Press. 1973.
- 2. Gowers, Sir. Ernest. The complete plane words. London: HMSO. 1954.
- 3. Holsinger, Donald C. A classroom laboratory for writing history. Social studies review. 31(1), 1991. pp. 59 64.
- 4. Kapp, Ro. The presentation of technical information. London: Constable 1948.
- 5. Kirkman, John. Good style for scientific and engineering writing. London: Pitman. 1980.
- 6. Parry, John. The psychology of human communication. London. University of London Press. 1967.
- 7. Ramage John D and Bean John C. The allyn and bacon guide to writing. 2ed. London, Allyn and Bacon. 2000. pp. 658.
- 8. Turk, Christopher and Kirkman, John. Effective writing: Improving scientific, technical and business communication. 2ed. London: Spon Press. 2007.
- 9. Winokur, Jon. Ed. Writers on Writing. Philadelphia running press: 1986.

# Course - 4.4 Project / Dissertation

- a. M.L.I. Sc. (Master of Library and Information Science) students shall have to choose a topic for project / dissertation in the beginning of the 3<sup>rd</sup> Semester and preliminary preparation be carried out under the guidance of a teacher.
- b. They have to submit the Dissertation on the selected topic, as per (a) above, before the commencement of the theory examination of the 4<sup>th</sup> Semester.

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