SYLLABUS under CBCS

MASTER OF LIBRARAY & INFORMATION SCIENCE (To be effective from 2018-2020 academic sessions)

Department of Library and Information Science University of North Bengal Raja Rammohunpur, Darjeeling 2020

UNIVERSITY OF NORTH BENGAL

Department of Library and Information Science

MLIS Curriculum

Scheme of papers and marks

Semester – I

Four papers – 400 marks

Papers	Subject	Periods				Credits			
		L	Т	Ρ	TA	СТ	ESE	Total	
MLCC01	Information and Communication Process	3	1	0	10	15	75	100	4
MLCC02	Management of Library And Information	3	1	0	10	15	75	100	4
	System								
MLCC03	Information Retrieval	3	1	0	10	15	75	100	4
MLOC04	Creative and Technical Writing	3	1	0	10	15	75	100	4

Semester – II

Four papers – 400 marks

Papers	Subject	Periods			Credits				
		L	Τ	Ρ	TA	СТ	ES E	Total	
MLCC05	Socio-economic Foundation of Information	3	1	0	10	15	75	100	4
MLCC06	Resource Description (Theory)	3	1	0	10	15	75	100	4
MLCC07	Knowledge Organisation (Theory)	3	1	0	10	15	75	100	4
MLOC08	Statistical Method in Social Sciences	3	1	0	10	15	75	100	4

Semester – III

Four papers – 400 marks

Papers	Subject	Periods			Credits				
		L	Т	Ρ	TA	СТ	ESE	Total	
MLCC09	Information and Communication Technology (Theory)	3	1	0	10	15	75	100	4

MLCC10	Information and Communication Technology (Practice)	3	1	0	10	15	75	100	4
MLCC11	Information Organization and Processing (Practice)	3	1	0	10	15	75	100	4
MLOC12	Research Methodology in Social Sciences	3	1	0	10	15	75	100	4

Semester – IV

Four papers – 400 marks

Papers	Subject	Periods		E		Evaluation		Credits	
		L	Т	Ρ	TA	СТ	ESE	Total	
MLCC13	A. Dissertation					80	4		
	B. Viva Voce							20	
MLOC14	Field Study/Library Survey							100	4
MLCC15	Library Internship (to be completed in the							100	4
	University Library)								
MLCC16	Internship Appraisal Report (to be submitted							100	4
	to department)								

SEMESTER – I

MLCC01: INFORMATION AND COMMUNICATION PROCESS

Marks: 75

15 Hrs. X 4 units + 10 Hrs. for Assignment

4 Credits

Unit 1: Information: - Fundamental concepts, kinds, nature, characteristics and definitions. Data, Information, Knowledge and Wisdom. Information at various levels: Physical, Biological and Social. Information Theory - Shannon and Weaver, Entropy, Semantic aspect.

Unit 2: Information science as a discipline: -Definition, scope and philosophy, Information Science and its relation to library Science, Documentation, Information Storage and Retrieval.

Unit 3: Evolution of human communication: - Communication channels, Verbal and Nonverbal communication. Models of communication. Generation of Information modes and forms.

Unit 4: Informatics, Information Management, Cybernetics, Information Technology, Typology of information sectors in modern society, Information Professions and their specializations, Information Society. Data Security, Information Security

References:

- 1. BHATTACHARYA (G). Information science: a unified view through a systems approach. Calcutta: IASLIC, 1978.
- 2. CHANDLER, (George). International and national library and information services: a review of some recent developments 1970-100. Oxford: Pergamon, 1982.
- 3. DEBONS (A), ed. Information science: a search for identity. Dekker, 1974.
- 4. GRIFFITHS (J H). The value of information and related systems, products, and services (ARIST v.17; 1982)
- 5. JUDGE (P J). National information policy. (ASLIB proceedings. V.23, (7); 1971)
- 6. McGARRY (K J). The changing concept of information. London: Bingley, 1981.
- 7. MILLER (J G). Living systems. New York: McGraw-Hill, 1974.
- 8. PENLAND (P). Communication science. (ELIS v.3)
- 9. REPO (A J)' Economics of information. ARIST, 22; 1987.
- 10. SWANSON (D R). Evolution, libraries and national information policy (In Networks for networkers ed. By Harkuson (B), Wools (B), 19100.

MLCC02: MANAGEMENT OFLIBRARY ANDINFORMATION SYSTEM

Marks: 75

15 Hrs. X 4 units + 10 Hrs. for Assignment

4 Credits

Unit- 1: General Concepts of Management Thought, Information Systems. Planning: Concepts need and purpose, principles of planning, planning process- steps and factors, Management by Objective, Management Functions: their relevance to libraries and information centres. Organizational Behavior: Theories and structure.

Unit- 2: Types of Management Processes: Quality management: Quality concept, element and application to libraries and information centres. Quality management and standards- ISO-9001 Quality Audit; Total Quality Management: Definition, scope and purpose and application to Libraries and information centres. Project management: Organizational planning, PERT/CPM, SWOT Analysis. Change Management: Concepts of Change; Change in Procedures, Methods, use of new tools and techniques.

Unit-3: Human Resource Planning and Development: Managerial Quality and leadership: Supervision, Control, Leadership, Group Dynamics and Performance Evaluation. H R Planning, staffing, job analysis, job description, job evaluation, staff recruitment; selection, training and development. Inter personal relations.

Unit-4: Financial management: Budgeting and Types:PPBS and Zero-based. Budgetary Control, Budgetary Control System, Cost Effectiveness and Cost Benefit Analysis Information as a Marketable Commodity, Marketing: Approach and Techniques, E-Marketing.

References:

- 1. ASHWORTH (W), ed. Handbook of special librarians hip and information work. 3rded. London: Aslib, 1967.
- 2. Application of management techniques in library and information systems. Ith IASLIC Conference, Roorkee, 1979.
- 3. ATHERTON (P). Handbook *for* information systems and services. Paris: Unesco, 1977. COWLLEY (1). Personnel management in libraries. 1982.
- 4. DOUGHT (R M). Scientific management of library operations.. London: Scarecrow Press, 1982. EINDOR (P). Information systems management: analytical tools and techniques. 1985.
- 5. GUPTA (B M). and NATHAN (S S), ed. Handbook of libraries, achieves and information centers in India. V.8. 1990.
- 6. HARTMAN (W) et al. Management information systems handbook. London: McGraw Hill, 1972.
- 7. INSDOC. Workshop on planning of branch information centers in CSIR. New Delhi 1975.
- 8. LAZAR (Peter). Information system design and management. Bangalore: 1982 (Sarada Ranganathan lectures; 15).\

MLCC03: Information Retrieval

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Information Sources: Definitions, Characteristics, Scope and usage. History, growth, characteristic features and scope of Social Sciences, Humanities, Arts, Science and Technology including their manifestation in different classification schemes.

Unit 2: Role of Information Centres, IR Systems: Meaning, Role. Vocabulary Control, Search and Retrieval

Unit 3: Indexing Languages: Contributions of Cutter, Kaiser, and Ranganathan etc. Evaluation of IR System. Automatic Indexing and Intelligent IR. Users of IR Systems.

Unit 4: Information Systems and Services in India and abroad: National and International organizations and their role in dissemination *of* information- united Nations, UNESCO- PGI, FID, IFLA, etc. Global Information Systems and Services- UNISIST, AGRIS, INIS, DEVSIS, CAS, INSPEC, MEDLARS, NATIS, etc. Information Services: information transfer and dissemination: specific types *of* Information Services - CAS, SDI, Abstracting services, Translation services, Literature search, etc.

References:

- 1. BERNAL (J D). Science in history. 4th part. Social science.
- 2. Encyclopedia of Library and Information Science. V. 26.
- 3. FOSKETT (A C). The subject approach to information. 4thed. London: Clive Bingley, 1982.
- 4. FOSKETT (D n. classification and indexing in the social sciences. Clive Bingley.
- 5. GROGAN (Denis). Science & Technology: an introduction to the literature. 4th ed. London: Clive Bingley, 1982.
- 6. HERBER (S). A brief guide to sources of scientific &technical information. 2nded. 1910.
- 7. HOUGHTO (B). Scientific periodicals: their historical development, characteristics and control.1975.
- 8. IMMORTH (John P). Humanities and its literature in encyclopedia of library and information Science.
- 9. KAUFMANN (Walter). The future of the humanities. New York: Readers Digest Press, 1977.
- 10. MEADOWS (A n. Communication in science. Butterworth's. 1974.
- 11. PRICE (J DeSola).Little science big science. Columbia University Press, 1963.
- 12. SUBRAMANANYAM (K). Scientific and technical information resources. 1981.
- 13. TECHNICAL 'information sources: a guide to patents, standards, literature. 1972.

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Marks: 75

Marks: 75

14. WEBB (W H) & others. Sources of information in the social sciences. CHICAGO: ALA, 1986

MLOC04: CREATIVE AND TECHNICAL WRITING

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Information analysis and repackaging. Levels of information analysis. Structure, organization, maintenance and use of specific types of information repackaging and consolidation products Abstract and Abstracting: Concepts, Types procedures of Abstracting, Guidelines in preparing abstract.

Unit 2: Creative writings, Creative Vs Technical Writings, Content Development: Guidelines and norms. Web-based and multilingual content development

Unit 3: IACR Methodology: Designing and Development, Condensation, abstracting, digesting and standards, Presentation of IACR products.

Unit 4: Technical writing and Editing: Definition attributes of Technical writing, documentation and referencing, Editorial Jobs and Tools, Proof correction.

References:

- 1. CHATTERJEE (Amitabha). Elements of Information analysis, consolidation and repackaging (IACR).Kolkata: Prova Prakashani, 2013.
- 2. KUMAR (PSG). Information Analysis, Repackaging, Consolidation and Information Retrieval. Delhi: B. R. Publ., 2004.

SEMESTER – II

MLCC05: SOCIO-ECONOMIC FOUNDATION OF INFORMATION

Marks: 75

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Generalities of information: mode and forms, Communication process and media. Barriers to communication and remedial propositions. Sociology of information: role of information in social change and national development. National Information policy - Aims, objectives, approach, policy statement and planning with special reference to India.

Unit 2:Trans border Data Flow. Value of socio-cultural information and its relation to civilization. Pre-industrial Industrial and Post Industrial societies. Right to Information-freedom of access. Confidentiality and privacy of information. IPR, Information Literacy.

4 Credits

Unit 3: Economics of information: - Information as a commodity, Information as a resource and Information as a factor of production. Matchup's model of production and distribution of knowledge. Economic analysis models and their application to information industry. Cost benefit and Cost effectiveness; value, price and cost of information. Marketing of information products and services-Planning and processes.

Unit 4: Information Management and Knowledge Management: Scope, Coverage and application in Library & Information Science.

Reference:

- 1. BHATTACHARYA (G). Information science: a unified view through a systems approach. Calcutta: IASLIC, 1978.
- 2. CHANDLER (George). International and national library and information services: a review of Some recent developments 1970-100. Oxford: Pergamon, 1982.
- 3. DEBONS (A), ed. Information science: a search for identity. Dekker, 1974.
- GRIFFITHS (J H). The value of information and related systems, products, and services (ARIST v.17; 1982)
- 5. JUDGE (P J). National information policy. (ASLIB proceedings. V.23, (7); 1971)
- 6. McGARRY (KJ). The changing concept of information. London: Bingley, 1981.
- 7. MILLER (J G). Living systems. New York: McGraw-Hill, 1974.
- 8. PENLAND (P). Communication science. (Ell's v.3)
- 9. REPO (A J). Economics of information. ARIST, 22; 1987.
- 10. SWANSON (D R). Evolution, libraries and national information policy (In Networks for Networkers Ed. By Harkuson (B), Wools (B), 19100.
- 11. VICKERY (B C) & VICKERY (A). Information science in theory and practice. Butterworth's, 1990.

MLCC06: RESOURCE DESCRIPTION (THEORY)

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Theory of Cataloging: canons and principles. Comparison and evaluation of different cataloging codes in terms of their objectives, principles, rules and concept of authorship. Components and levels of cataloguing codes, Comparative study between AACR2 & CCC

Unit 2: Standardization of bibliographic description and format- ISBD, FRBR, RDA

Marks:75

Unit 3: Content designator based cataloging: MARC, UNIMARC, MARK 21, CCF, Distributed cataloging standards (Z39.50), Information Exchange Format: - ISO 2709, Z39.2 etc.

Unit 4: Meta-data: Generic and domain specific meta-data schema: DCEMES, GILS, TEI, EAD, Meta-data harvesting, Interoperability and crosswalks. Controlled vocabulary, Search & retrieval

References:

- 1. ATHERTON (P), ed. Classification research: proceedings of second International Study
- 2. Conference on Classification, 1964. Copenhagen: Munksgaard, 1965.
- AUSTIN (D) & DYKSTRA (M). PRECIS: a manual of concept analysis and subject indexing. 2nd ed. British Library. 1984.
- 4. BORKO(H) & BERNIER (C L). Indexing concepts and methods. New York: Academic Press, 1978.
- 5. FOSKETT (D J). Classification and indexing in social sciences. 2nded. London: Butterworth, 1974.
- 6. FOSKETT (A C). The subject approach to information. 4thed. London: Clive Bingley, 1982.
- HARTER (S P). Online information retrieval: concepts, principles and techniques. Orlando: Academic Press, 1986..
- HOUGHTON (B) & CONVEY (J). On line information retrieval systems: an introductory manual to principles and practice. 2nded. London: Clive Bingley, 1984.
- 9. HUNTER (Eric). Computerized cataloguing. 1985.
- 10. HUNTER (E) & BAKEWELL (K G B). Cataloguing. 2nded. London: Clive Bingley, 1982.
- INTERNATIONATIONAL study conference on classification research. Dorking, 1957. Proceedings. ASLIB, 1958.
- 12. LANCASTER (F W). Information retrieval systems: characteristics, testing and evaluation. 2nded. New York: John Wiley, 1978.
- 13. LANGRIDGE (D). Classification and indexing in the humanities. London: Butterworth, 1976.
- 14. NEEDHAM (C D). Organizing knowledge in libraries. 2nded. 1971.
- 15. NEELAMEGHAN (A),ed. Ordering systems for global information networks: proceedings of the 3rdInternational study conference on classification research. Bombay, India. FIDICR and Sarada Ranganathan Endowment for Library Science, 1979.

MLCC07: KNOWLEDGE ORGANIZATION THEORY

Marks: 75

4 Credits

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Universe of Subjects- Structure and development; subject as a system. Systems approach to Universe of subjects, Absolute syntax, Theory of integrative levels.

Unit 2: Library classification: General theory of Library classification-Canon, Principles and postulates. Comparison and evaluation of different Classification schemes. DDC, UDC, CC, BSO- their structures and features.

Unit 3: Depth classification - Design and its application. Recent trends and development in classification. Role of CRG, FID / CR and DRTC. Development of special classification scheme. Use of computers in classification.

Unit 4: Comparison among classification schemes. Recent treads in Knowledge organization. Automated Classification.

Reference:

- 1. ATHERTON (P), ed. Classification research: proceedings of second International Study Conference on Classification, 1964. Copenhagen: Munksgaard, 1965.
- AUSTIN (D) & DYKSTRA (M). PRECIS: a manual of concept analysis and subject indexing. 2nd ed. British Library. 1984.
- 3. BORKO (H) & BERNIER (C L). Indexing concepts and methods. New York: Academic Press, 1978.
- 4. FOSKETT (D J). Classification and indexing in social sciences. 2nded. London: Butterworth, 1974.
- 5. FOSKETT (A C). The subject approach to information. 4th ed. London: Clive Bingley, 1982.
- 6. HARTER (S P). On-line information retrieval: concepts, principles and techniques. Orlando: Academic Press, 1986.
- 7. HOUGHTON (B) & CONVEY (J). On line information retrieval systems: an introductory manual to principles and practice. 2nded. London: Clive Bingley, 1984.
- 8. HUNTER (Eric). Computerized cataloguing. 1985.
- 9. HUNTER (E) & BAKEWELL (K G B). Cataloguing. 2nded. London: Clive Bingley, 1982.
- 10. INTERNATIONATIONAL study conference on classification research. Dorking, 1957. Proceedings. ASLIB, 1958.
- 11. LANCASTER (F W). Information retrieval systems: characteristics, testing and evaluation. 2nded. New York: John Wiley, 1978.
- 12. LANGRIDGE (D). Classification and indexing in the humanities. London: Butterworth, 1976.

13. NEEDHAM (C D). Organizing knowledge in libraries. 2nded. 1971.

 NEELAMEGHAN (A), ed. Ordering systems for global information networks: proceedings of the 3rdInternational study conference on classification research. Bombay, India. FID/CR and Sarada Ranganathan Endowment for Library Science, 1979.

MLOC08: Statistical methods in Social Sciences

Marks: 75

15 Hrs. X 4 units + 10 Hrs. for Assignment

4 Credits

Unit – 1: Measurement of Variables, Presentation of Data: Types of data – Primary and Secondary. Data collection techniques: Primary-- data – Questionnaire, Interview and Observation. Scales and Check Lists. Secondary data – Historical / recorded. Sampling theory: Basic concepts;

Unit -2:Sampling and non- sampling errors; Practical method of drawing random samples; sampling techniques- simple, random, stratified, multistage, multiphase, cluster, convenience, judgmental, quota, snow-ball, etc.; sample size decisions; sampling distribution

Unit-3: Statistical Techniques: Measurement of Central Tendency, Measures of Dispersion, Correlation Studies and Regression Analysis, Hypothesis testing Parametric and Non parametric tests, Correlation Studies

Unit 4: Statistical packages: R or SPSS etc.

References:

- 1. Asthana & Braj Bhushan. Statistics for Social Sciences (with SPSS Applications) •PHI
- 2. Best & Kahn. Research in Education, 10th ed. PHI
- 3. Mangal & Mangal Research Methodology in Behavioural Sciences PHI
- Bogdan & Biken Qualitative Research for Education: An Introduction to Theories and Methods, 5th ed.PHI
- Creswell. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research, 4th ed.

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6. Mangal. Statistics in Psychology and Education, 2nd ed. • 295.00

SEMESTER – III

MLCC09: INFORMATION & COMMUNICATION TECHNOLOGY (THEORY)

Marks: 75

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit1: Online and CD-ROM database—online search services. Learning a suitable programming language. Computer - Aided decision making. Electronic spreadsheet, DSS.

Unit 2: Database Management System (DBMS) - Use of DBMS package for local database creation. Computer software for information works and services. Development of software packages with special references to India.

Unit 3: Telecommunication systems and Network: Telecommunications-meaning & operation, Transmission of signals. Transmission media-fiber optics, satellite communication, Microwave.

Unit 4: Network concepts-gateway, switching systems, types: LAN, MAN, WAN etc., remote access network, satellite network ALOHA. Examples: Telnet, Time net, Indent, Sirnrt, Nicnet, ERNET. Electronic mail, Teleconferencing, Teletex. Library networks: INFLIBNET, CALIBNET, DELNET, etc. Online IR Systems.

References:

- 1. BRODY (E W). Communication tomorrow: new audiences, new technologies, new media. New York: Praeger,1990.
- 2. CAWKELL (A E). World information technology manual. Vol. 1. Computers, telecommunications and information processing. Vol. II. Systems and services. Amsterdam: Elsevier, 1991.
- 3. CRAWFORD (Waif). Current technologies in the library: an informal overview. Boston: G. K. hall, 1988.
- 4. KENDALL (P A). Introduction to systems analysis and design: a structures approach. Boston: Allyn & Bacon, 1987.

MLOC10: INFORMATION & COMMUNICATION TECHNOLOGY (PRACTICE)

- 15 Hrs. X 4 units + 10 Hrs. for Assignment **Unit 1:** Learning the Operating Systems: DOS, Windows, and Linux.
- Unit 2: Learning the general-purpose package: Word processor, Power-point.
- Unit 3: Learning Hyper Text Markup Language (HTMLCC), XMLCC, ASP, PHP

Marks: 75

4 Credits

Unit4: Learning a special purpose package: Usage of CDS/ISIS, Winisis. Database: Access and other library related tools.

Readings:

- 1. Adikesavan. Management Information Systems: Best Practices and Applications in Business, 2nd Ed. New Delhi; Prentice Hall, 2015
- 2. Bansal. Computing for Management. New Delhi; Prentice Hall, 2015
- 3. Rajaraman & Adabala. Fundamentals of Computers, 6th Ed.New Delhi; Prentice Hall, 2015
- 4. Rajaraman. Introduction to Information Technology, 2nd Ed.New Delhi; Prentice Hall, 2015

MLCC11: INFORMATION ORGANIZATION & PROCESSING (PRACTICE)

20 Hrs. X 3 units + 10 Hrs. for Assignment

Unit 1: Classification of micro documents by UDC (International Medium edition).

Unit 2: Classification of micro documents by CC6th Edition by S.R. Ranganathan

Unit 3: Bibliographic description of Non-book materials and determination of Access Points by using AACR 2 (R)

Readings:

- 1. Universal Decimal Classification. International Medium Edition. 1985
- 2. Ranganathan, (SR). Colon Classification. 6th ed. New Delhi, Ess Ess Publ. 1963.
- 3. Anglo American Cataloguing Rules, 2nd Ed. Revised 2005.

MLCC12: RESEARCH METHODOLOGY

15 Hrs. X 4 units + 10 Hrs. for Assignment

Unit 1: Research Methods: Meaning objectives and characteristics of research. Kinds of research fundamental, Basic and Applied. Types of research methods- Historical, Experimental and Descriptive or Survey. Historical Research: Nature, scope and importance - Sources of historical data - documentary and non-documentary. Relics, Document Research - External criticism and internal criticism. Experimental Research: Research in science and technology - Laboratory, Variables, Experimental design, Sources of scientific data.

Unit 2: Descriptive/Survey Research: Nature and Types. Research in social sciences. Sampling - Types and techniques. Techniques of collecting primary data: Observation, Questionnaire, Schedules, Interview, case study. Research Setting and Design: Steps of research - selection and statement of the problem. Hypotheses, Collection, Evaluation, Organization, Analysis and Interpretation of Data; Research Proposal and Research Design; Research Report - format, style and structure.

Marks: 75

4 Credits

Marks: 75

Unit 3: Bibliometrics: Origin and definitions & scope. Bibliometrics Laws. Zapf's law, Lotka's law and Bradford's law - Obsolescence; Half-life. Validity informetric measurement & application in libraries and information centres. Citation process, , co-citation and coward clustering, bibliographic coupling. Bibliomatric applications- Bibliomatric analysis of literature in different subjects. Operations Research.

Unit 4: Application of Research Methods in Library & Information Science: Role of libraries and information centers in Research Development and modern trends in research -Trends and techniques of research in humanities, social sciences; sciences and technologies. Research in Library & Information Science.

References :

- 1. BEST (J W). Research in education. New Delhi: Prentice-Hall, 1983.
- BUSHA (C H) & HARTER (S P). Research methods in librarianship: techniques and interpretation.New York: Academic Press, 19100.
- 3. CARPENTER (R L) & VASU (E S). Statistical methods for librarians. Chicago: ALA, 1978.
- 4. DONOHUE 0 C). Understanding scientific literature: a bibliometric approach. London: MIT Press, 1973.
- 5. KRISHAN KUMAR. Research methods in library and information science. New Delhi: Vikas, 1992.
- 6. RAVICHANDRA RAO (I K). Quantitative methods for library and information science. New Delhi: Wiley Easter, 1983.
- 7. SIMON (J. L). Basic research methods in social science: the art of empirical investigation, 1989.
- 8. STEVENS (R E). Research methods in librarianship. London: Bingley, 1971.

SEMESTER - IV

MLCC13:	A. Dissertation (on given topic)	Marks 80	
	B. Viva Voce on Dissertation	Marks 20	
		Credit 4	
MLCC14: Field Study/Library Survey			
		Credit 4	
MLCC15: I	Library Internship (to be completed in the University Library)	Marks 100	
	Mandatory 12 weeks	Credit 4	

MLCC16: Internship Appraisal Report (to be submitted to department) Marks 100