

Third		Hard Core				
	HC 3.1	Research Methods and Statistical	3	1	0	4
		Techniques				
	HC 3.2	Information sources	3	1	0	4
	HC 3.3	Technologies for Information	3	1	0	4
		Management				
	HC 3.4	Technologies for Information	0	0	4	4
		Management				
		Soft Core (Any one)				
	SC 3.1	Informatics, Scientometrics and	3	1	0	4
		Webo metrics				
	SC 3.2	Networks, Networking and Library	3	1	0	4
		Consortia				

Course Outline and Syllabus of MLISc under CBCS and CAGP, GUG

	Open Elective				
OE 3.1	Information literacy: Essential Skills for	4	0	0	4
	the information age				
	Education tour* after third semester and				
	before commencement of Fourth				
	Semester				
	Total Credits for Third Semester				24

\*Education Tour is Compulsory and the students shall submit Education Tour Observation report

\*Internship is compulsory and the students have to submit the completion certificate from the head of the Library and Information Centers

L= Lecture, T=Tutorial, P=Practical

structure And length, principles of paragraph, Characteristics of Good Writing and basic rules of writing.

**Unit-4:** Time Management skills: Understanding Time Management, Time Management principles- Identifying Time Loss, Urgency and Importance, Effective Decision making, Setting your Goals, And Defining your objectives; Time saving Techniques ; Organizing your work Space, and Communication effectively; Dealing with stress – Understanding overload, and Negotiating your workload; Practical Time Planning – Planning your Day, Using Activity Network, Critical Path Analysis, Effective Resource sharing and preparing planning Diagrams.

### **Reference:**

Amer, Beverly. Soft Skills at Work: Technology for career success, Cengage Learning, 2008, PP90.

Butterfield, Jeff. Written Communication: Soft Skills for digital Work Place, Cengage Learning, 2008, PP134

Klaus, Peggy. The Hard Truth about Soft Skills: Work place Lessons Smart people Wish They'd Learned Sooner. Collins, 2008, PP208.

Mitchell, Geana Watson. Essential Soft Skills for Success in the Twenty First Century workforce as perceived by Alabama Business/ marketing Educators . ProQuest, 2008,PP134 Rao, M.S. Soft Skills Enhancing Employability: Connecting Campus with Corporate. I. K. International pvt Ltd, 2010,PP 256.

# THIRD SEMESTER: HARD CORE:

### HC 3.1 RESEARCH METHODS AND STATISTICAL TECHNIQUES

(Hours of Teaching: L:T:P = 3:1:0)

(Lectures =  $3 \times 16 = 48 \text{ hrs}$ )

### (Tutorials = 1 X 16 = 16 x 2 = 32 hrs)

#### **Objectives:**

1. To provide an understanding of the nature of research and statistical methods applied in Library and Information Science.

2. To get familiar with design, interpret and present a research report.

**Unit-1**: Research: Meaning and Definition, Need and Purpose; Steps in Research as a process, Types of Research; Barriers to Research; Identification, selection and formulation of a research problem Hypothesis: Meaning and Definition, Types, Formulation and Testing of hypothesis; Research Design: Definition, Types and their Characteristics; preparation of a research proposal.

**Unit-2**:Research Methods and Techniques/Tools: Sciencetific Methods, Historical Method; Survey Method, Case Study Method, Experimenatl Method, Delphi Method, Content Analysis, Informetrics and Scientometrics: Questionnaire; Schedule; Interview; Observation; Scales and Checklist; Library Records and Reports. **Unit-3**: Sampling Methods and Techniques: Concept of Study Population and Sampling, Need for Sampling, Types of sampling – Random and Non- random sampling techniques; Sample size, Bias and Error; Data Analysis and Interpretation of Data including Statistical Testing of Hypothesis

**Unit-4:** Research Reporting and Evaluation: Structure, Style and Contents; Guidelines for reporting; Style Manuals – Chicago, MLA,APA; Criteria for Evaluation of a research report; Problems and Prospectus of LIS Research in India, Trends in LIS Research, Ethical Issues in LIS Research.

### **Reference:**

Busha C H and harter S P. Research Methods in Librarianship. New York: Academic, Publishing House, 1993

Fowler F J Jr. Survey Research Methods. New Delhi: Sage, 1993

Glazer J D and Powell R R. Qualitative Reseach in Information Management. Englewood: Libraries Unlimited, 1992

Goode Wj and Hatt P K. Methods in Social Science Research Auckland: McGraw-Hill, 1981 Kin Robert K. Case Study Research: Design and Methods. New Delhi: Sage Publication, 1989

Kraft D H and Royce B R. Operations Research for Libraries and Information Agencies. San Diego, CA: Academic Press, 1991

Krishnaswamy O R. Methodology for Research in Social Sciences. Delhi: Himalayan

Lancaster F W. If you want to evaluate Your Library. London: LA, 1993

Line M B. Library surveys. London: Clive – Bingley, 1967

McClure Charles r and Hernon Peter Eds. Library and Information Science Research:

Perspectives and Strategies for Improvement. NJ, Ablex 1980

Simpson I S. How to Interpret Statistical Data. London: LA, 1990

Slater M. Research Methods in Library and Information Studies. London: 1990

Stevens R E (Ed),. Research Methods in Librarianship. London: Clive-Bingley, 1971

### HC 3.2INFORMATION SOURCES

(Hours of Teaching :L:T:P= 3:1:0) (Lectures = 3 X 16 =48hrs) (Tutorials = 1 X 16 = 16 X 2 =32 hrs)

**Objectives:** 

1. To familiarize students with a broad range of Information resources.

2. To develop skills in handling Information resources.

**Unit-1:** Information Sources: Concept, Origin, Types, Characteristics and Importance of Primary, Secondary and Tertiary Information Sources.

**Unit-2**: Primary and Secondary Sources: Periodicals, Technical Reports, Conference Proceedings, Standards, Patents, Theses and Dissertations; Secondary Sources: Dictionaries, Encyclopedias,

Biographies, Geographical Sources – Gazetteers, Maps and Atlases, Bibliographies, Yearbooks, Almanacs, Manuals and Handbooks, Abstracting and Indexing Periodicals, Directories, Union

Catalogue and Annual reviews.

**Unit-3**: Tertiary Sources and Non- Documentary Sources: Guides to Subject Literature, Bibliography Of bibliographies; Non- Documentary – Human and Institutional Sources of Information

**Unit-4:** Electronic Information Sources: Origin, Growth and Development Including Internet As a source of Information; Evaluation of Print, Non- Print, and Electronic Information Sources;

# **Reference:**

Chenny F N and Williams W J. Fundamntal Reference Sources Ed ,2. Chicago: ALA, 1980 Fjallbrant N and Stevenson M. User Education in Libraries. London: Clive- Bingley, 1978

Gale Group, Information industry Association. Information Sources, The Association, 1998,

Grogan D J. Science and Technology: An Introduction to the Literature. Ed,4. London: Clive-Bingley, 1982

Katz, W A. Introduction to Reference work. New York: McGraw-Hill, 1992

Krishankumar. Reference service Rev Ed,3. New Delhi: Vikas, 1987

Lambart and Others. How to find Information in Science and Technology. London: Library Association, 1991

Rogers R. Teaching Information Skills: A Review of the Research and its Impact on Education. London: Bowker-Saur,1993

Sharma J S and Grower D Reference Service and Sources of Information. New Delhi: ESS, 1987

Shores Louis. Basic Reference Sources. Chicago: ALA, 1959

Subramanyam K. Scientific and Technical Information Resources. New York: Marcel Dekker, 1981

# HC 3.3 TECHNOLOGIES FOR INFORMATION MANAGEMENT

(Hours of Teaching: L:T: P=3:1:0)

(Lectures= $3 \times 16 = 48 \text{ hrs}$ )

# (Tutorials= 1 X 16 = 16 X 2 = 32hrs)

### **Objectives:**

**1.** To provide introduction to the concepts and techniques of Computing and other Information Technology.

**2.** To develop basic Information Technology handling skills.

**Unit-1:** Micrographic Technology: Microforms – Micro card, Microfilm, Microfiche and their Readers and Printers; Multimedia Technology: Concept, Scope and Development, Multimedia PCs, Audio,

Video, Image Representation and Manipulation; Hypertext and Hypermedia; Optical Meida: Origin, History and Development, Hardware and software requirements, Unit-2: Database Design, Development and Management: Concept of database and DBMS;Types,

Design, Structure, Organization and Development of Database; Data Security; Study of MS-Access

and WINISIS: System Overview, System Installation, Database Construction, Techniques, Menus,

Tools and Creation of database

**Unit-3**: CD-ROM Technology: Origin, History, Development and Impact, Retrieval Software; CD-ROM databases in Science and Technology, social Sciences, Humanities and other fields

Unit-4: Communication Technology: Fundamentals of Telecommunication Technology; Media,

Mode and Components; Telefascimile, Teleconferencing; Information Technology: Conceptual and

Theoretical Considerations, History and Development, Impact on Libraries and Information Services

### **Reference:**

Benfold J. Welcome to CDROM. New York. MIS Press, 1993 Bowers D S. From data to database Ed,2. London: Chapman and Hall, 1993 Brown K R Challenge of Information Technology, 1983 Buschman J. Critical Approaches to Information Technology in Librarianship : Foundation and Applications. Greenwood Press:1993 Daniels N C. Information Technology: The Management challenge. Wildinghham, Berks, Addison-Wesley, 1994 Feldman T. Multimedia. London: Chapman and Hall, 1993 Hanson T and Day T. CDROM in Libraries: Management Issues. London: Bowker - Sauer, 1994 Jones V A. Handbook of Microfilm Technology and Procedure. Ed,4. Crestview,QP Publising, 1993 Lucas. Information Technology for Information Management, Tata McGraw - Hill Education, 2001, Pp 719. Saffaday W. Optical Storage Technology 1992: A State of the Art Review . Westport, Meckler, 1992 UNESCO. Micro CDS/ISIS Ver 3.07 Paris, UNESCO, 1988 Williats J Database Design and Construction: An Open Learning Course for Students and Information Managers. London: LA, 1992

### HC 3.4 TECHNOLOGIES FOR INFORMATION MANAGEMENT

(Hours of Teaching: L: T: P= 0:0:4)

(Practicals = 4 X 16 = 64 X 2 = 128 hrs)

Hands on experience and work assignment in Design and Development of varieties of database Using MS-Access and WINSIS

Hands on experience and work assignments in searching and using Selected CD-ROM database in Science and technology, Social Sciences, Humanities and other fields

(Each Student shall compulsorily maintain Practical record and submit the same at the time of Practical examination)

## SOFT CORE (ANY ONE)

### SC 3.1: INFORMETRICS, SCIENTOMETRICS AND WEBOMETRICS

(Hours of Teaching: L:T:P = 3:1:0)

#### (Lectures = $3 \times 16 = 48 \text{ hrs}$ )

(Tutorials = 1 X 16 = 16 X 2 = 32hrs)

#### Objectives: 1. To acquaint students with various qualitative techniques. 2. To study characteristics of literature .

**Unit-1**: Informatics : Origin, Meaning and definition, Terminologies, Evolution of Infometrics and

Scintometrics: Informatics Data: Sources of Informetric Data, Planning and carrying out a Informetric Tools; Informetrics Laws and Distributing : Bradford's Law of Scattering, Lotka's Law

of Scientific Productivity, Zip's Law of Word Occurrences, price's Square Root Law, 80/20 Rule

**Unit-2:** Describing Literature: Growth Models; Scattering and Seepage; Identification, Defining and describing of Subject Literature; Authorship and Collaboration: Concept of Solo and Collaborative Research – Identification, Measurement and quantification

**Unit-3**: Citation Analysis: Concept, Reasons for Citations: Origin, History and Development of Citation Analysis; Normative Theory of Citing, Citation Behavior; Co-citation,

Bibliographical Coupling; Obsolescence: Concept, Synchronous v/s Dichronous Studies; Methodology for study of Obsolescence of literature

**Unit-4:** Cybermetrics (Webometrics): Quantitative Analysis of Scholarly Scientific Communications, hypertext links and Various phenomena on the Web

### **Reference:**

Bradford S C. Documentation London: Crosby Lockwood, 1971
Bruce, Harry. CoLIS 4: Proceedings of the Fourth International Conference on Conceptions of Library and Information Science, Seattle, WA, USA, July 21-25, 2002
Libraries Unlimited, 2002, pp336
Christiaan, Everard and Noyons, Marie. Biblimetrics Mapping as Science policy and Research Management Tool. DSWO press, 1999, pp220.

Communication London: Taylor Graham, 1984
Cronin B. The Citation Process: The Role and Significance of Citations in Scientific
Egghe L. Introduction to Informetrics. Amsterdam: Elsevier , 1990
Leo Egghe, R. Rousseau. Introduction to Informetrics, Quantitative Methods in Library, Documentation and Information Science, Elsevier Science publishers, 1990,pp450
Meadows A J. Communication in science. London: Butterworths, 1974
Nicholas D and Ritchie M. Literature and Bibliometrics . London Clive-Bingley, 1963.
Ravichandra Rao I K. Informetrics, 1991. Bangalore: Sarada Ranganthan Endowment in Library Science, 1992
Thelwall, Michael. Introduction to Webometrics: Quantitative Web Research for the Social Sciences, Morgan and Claypool Publishers, 2009, pp115

#### SC3.2: NETWORKS, NETWORKING AND LIBRARY CONSORTIA

(Hours of Teaching: L:T:P=3:1:0) (Lectures = 3 X 16 =48hrs) (Tutorials = 1 x 16=16 X 2 = 32hrs)

#### **Objectives:**

Student will understand1. What a telecommunication network is?2. About Switched Network3. About different consortia

**Unit-1:** Networks: Concept, Definition, Need, Uses, Network Topologies, Types of Networks – LAN, WAN and MAN

**Unit-2:** Network Architecture: Comparison of Different Network Architectures; Network Protocols – TCP/IP, Net Bul, IPX; Network Protection and Security **Unit-3:** Network Media and Hardware: UTP, Thick and Thin Ethernet, Optical Fiber, Wireless; Networks Interface Cards, Hubs/Switches; Communication Networks: NICNET, I-NET,BSNL, ERNET

**Unit-4:** Origin and History of Library Networks in India, INFLIBNET, CALIBNET and DELNET; Network based Services: Document Delivery service, on-line Service, and Teleconferencing etc.: Consortia- Concept, definition, Need, uses, and types of consortia; Criteria for selection of consortia; INDEST, CSIR e-journals consortia, UGC-Infonet, FORSA consortia, IIM'S consortium

### **Reference:**

Cauchi P and Denmison S.Steps for Implementing Local Area Networks: A business Guide Chichester: John – Wiley, 1993

Kaul H K. Library Networks: An Indian Experience. New Delhi: Virgo, 1992 Zuck G and Flanders B. Wide Area Networks in Libraries: Technology, Applications and Trends. Westprot: Meakler, 1962

YGC (India). INFLIBNET Report. New Delhi: UGC, 1989

## Open Elective: OE 3.1: INFORMATION LITERACY: ESSENTIAL SKILLS FOR THE INFORMATION AGE Objectives:1.To help students understand the structure of knowledge . 2. To impart skills in literature search

**Unit-1**: Information Literacy: Definition, Visual, Media, Computer, Network Literacies; Elements of Information Literacy, Evolution of the concept of Information Literacy, Nature and Scope, and the value of Information literacy.

**Unit-2:** Information: Data, Information and Knowledge – Definition, Importance and Characteristics of Valuable Information; Information Anxiety; Role of information in education, decision making, research and development and leisure and recreation; Recognition of information needs and formulation of questions.

**Unit-3**: Understanding the Structure of Subject Literature: Primary, secondary, Tertiary and Non- Documentary Sources including print, Non- print, Electronic and Web Resources with hands on experience and exposure.

**Unit-4:** Developing Search Strategies – Search process and Strategies: Accessing Sources of Information; Organization, Synthesis and Integration of new information into existing body

of knowledge; Evaluation of Information; Big 6 Skills – Task Definition, Information Seeking strategies, Location and Access, Use of Information, Synthesis, and Evaluation.

#### **Reference:**

American Association of School Librarians and Associations for Educational Communications and Technology. Information Standards for student Learning. (1998) American Library Association, Chicago.

American Library Association. Information Literacy: a position paper on information Problem solving (2000). Available at : <u>www.ala.org/assl.</u> <u>positions/PS\_infolit.html</u> (accessed 21 July 2003)

Association of college and Research Libraries. Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians. (2001). ACRL, available at www.ala.org/acrl/guides/objinfolit.html (accessed 21 july 2003)

Baldwin V A. Information Literacy in Science and Technology Disciplines. Library Conference Presentation and Speech. (2005). University of Nebraska, Lincoln. http://digitalcommons.unl.edu/library\_talks/11

Delcourt M and Higgins C A. Computer technologies in teacher education: the measurement of attitudes and self- efficacy. Journal of Research and Development in Education.(1993). 27;31-7.

Eisenberg M B et al. Information Literacy: Essential Skills for the Information Age. 2<sup>nd</sup> Ed,.(2004),

Libraries Unlimited, Westport.

Grassin E S. Learning to lead and manage information literacy instruction.(2005) Neil Schuman Publishers, New York.

Grassin E S. and Kaplowitz J R. Information Literacy Instruction: Theory and practice. (2001). Neil Schuman, New York .

Smith S. Web-based Instruction. A guide for Libraries. (2001). American Library Association, Chicago.

Tight M. Lifelong Learning: Opportunuty or Compulsion?. British Journal of Education Studies. Vol. 46;3 September 1998;251-263.

#### **EDUCATION TOUR:**

#### Objectives

**1.** To expose the students to different types of Libraries and their functioning in digital environment.

There shall be education tour of one week after the Third Semester and before the commencement of Fourth Semester. Each Student shall compulsorily attend the tour, prepare and submit a detailed tour observation report.