TRIPURA UNIVERSITY
Department of Library and Information Science
Suryamaninagr, Agartala, 799022

Syllabus Ph. D. Course Work Library and Information Science: 2017

Program Outcome:

The programme will enable the students to

1. Identify the research void that exists in the field of Library and Information Science and encourage them to work on those untouched areas
2. Identify the issues that exists in the discipline and find solutions for the same by applying well designed research methods, critical thinking and advanced technologies
3. Find out innovative ideas that will help grow the profession of Librarianship in general and in the state of Tripura in particular

The structure of the syllabus

Paper-I	**Research Methodology-I**	**4 Credits**
Paper-II	**Research Methodology-II**	**4 Credits**
Paper – III	**Information and Knowledge Society**	**4 Credits**
Paper – IV	**Library and Information Technology Management**	**4 Credits**

Ph. D. Course Work Syllabus for Course Work - I

Paper-I RESEARCH METHODOLOGY-I (4 Credits: 100 Marks)

Learning Outcomes

At the end of the Course student will be able to

1. Understand basics of computer application
2. Learn and apply quantitative methods and applications of computer in Statistics
3. Comprehend Research ethics and IPR
4. Learn the process of documentation and Scientific writing

The whole paper is divided into four units as follows:

Unit – 1: Basic Computer Applications

Unit – 2: Quantitative Methods, Statistics and Application of Computer in Statistics

Unit – 3: Research Ethics and IPR

Unit – 4: Documentation and Scientific Writing

DETAILED SYLLABUS FOR EACH UNIT

Unit – 1: Basic Computer Applications

Basic computer knowledge, Features and applications related to presentation of text in suitable format and saving the data for future applications. Use of word processing, Practical knowledge of MS Word to type the script, insert tables, figures and graphs, plotting of graphs in excel, Preparation of power point presentations based on the topic of research. Insertion of figures, graphs charts in presentation. Use of spreadsheet and database software, preparation of scientific posters for presentations. Internet and its application: Email, WWW, Web browsing, acquiring technical skills, drawing inferences from data, Cloud computing.

Unit – 2: Quantitative methods, Statistics and application of Computer in statistics

Measures of Central Tendency and Dispersion. Probability distribution – Normal, Binomial and Poisson distribution. Parametric and Non–parametric statistics. Confidence interval, Errors. Quantitative techniques: Levels of significance, Regression and Correlation coefficient. Statistical analysis and fitting of data; Chi–Square Test, Association of Attributes t–Test Anova, Standard deviation, Co-efficient of variations. Open source software for quantitative and statistical analysis.

Unit – 3: Research ethics and IPR

Environmental impacts–Ethical issues–ethical committees–Commercialization–Copy right–royalty–Intellectual property rights and patent law–Trade related aspects of Intellectual Property Rights–Reproduction of published material–Plagiarism–Citation and acknowledgement–Reproducibility and accountability.

Unit – 4: Documentation and Scientific Writing

Results and Conclusions, Preparation of manuscript for publication of research paper, Presenting a paper in scientific seminar, Thesis writing. Structure and Components of Research Report, Type of Report: research papers, thesis, Research Proposal, Research Project Reports, Pictures and Graphs, Citation styles, writing a review of paper, Bibliography.

Paper- II Research Methodology-II (4 Credits: 100 Marks)

Learning Outcomes

At the end of the Course student will be able to

1. Review published work in the area of Academic Library System
2. Review published work in the area of Public Library System
3. Review published work in the area of Special Library System

I. Review and Critics of Published Research in relevant field 2 Credits: 50 Marks

Review of published research work from among the following areas:

1. Academic Library System
2. Public Library System
3. Special Library System
4. Industrial Library System
5. Medical Library System
6. Engineering Library System
7. Bibliometrics/ Informertics/ Scientometrics/Webometrics/Citation Analysis
8. Automation/ICT/Network and Consortia Application in Library and Information Systems/Centres
9. Digital/ Hybrid Library System
10. Open Access Initiatives/ Knowledge Management System in Libraries

Each review will cover at least five original research articles published in last five years and are to be cited in the reference.

AN OUTLINE PROFORMA OF THE REVIEW SHOULD BE GIVEN TO THE STUDENTS

II. Methodology of Research-II 2 Credits: 50 Marks

1. Research Design
2. Research Methods
3. Hypothesis and Testing of Hypothesis
4. Data Collection Tools and Techniques
5. Sampling
6. Statistical Application in Library and Information Science
7. Citation Analysis

Paper III: Information and Knowledge Society (4 Credits: 100 Marks)

Learning Outcomes

At the end of the Course student will be able to

1. Understand the advanced concepts of Knowledge Society
2. Understand the advanced concepts of Information Society
3. Get an idea of current trends of research in the field

Unit – I: Information Society

- Origin, Growth and Development of Information Society, Characteristics and Components.
- Information Infrastructure: National and Global
- Information Economics and Economics of Information
- Information as Economic Resource

UNIT – II: Knowledge Society

- Emergence of Knowledge Society, Characteristics and Components
- Knowledge Economy and Knowledge Industry
- Knowledge Capital and Knowledge Management
- Role of Library and Information Profession in the Knowledge Society

Unit – III: Trends and Developments

- Research and Innovation in Information and Knowledge Society
- Conventional Learning Vs. Virtual Learning
- LIS Education and Research in the Knowledge Society

Unit – IV: Social and Legal Issues in Knowledge Society

- Right to Information
- Right to Education
- Cyber Security
- IPR and Patents

Paper IV: Library and Information Technology Management (4 Credits: 100 Marks)

Learning Outcomes

At the end of the Course student will be able to

1. Learn Information Resource management
2. Understand the working mechanism of Library Networks
3. Create Digital libraries and understand the process of digitization

Unit – I: Information Resource Management

- Resource Management: Human, Financial and e- Resources
- Resource Mobilisation and Out sourcing
- Marketing of Information Products and Services
- Digital Information Resource Management

Unit – II: Library Networks and Consortia

- Networks and Networking: Hardware and Software Requirements
- Data Networking and Library Networking
- Library Consortia
- Management of Library Networks and Consortia

Unit – III: Digitisation

- Digitisation: Need, Methods and Equipments
- Content Development: Concept, Scope, Content Development and Analysis
- Digitisation Processes, Tools and File Formats

Unit-IV: Digital Library

- Digital Library Tools , Techniques and Software
- Library Website : Design and Development
- Digital Preservation Strategies
- Institutional/Knowledge Repository
- Legal issues in Design and Development of Digital Library

Suggested Readings:

1. Arms, William Y. (2001), *Digital Libraries (2nd Ed.),* Digital Libraries and Electronic Publishing Series. Chicago: MIT Press.
2. Bellardo, T. & Waldhart, T. J. (1977). Marketing products and services in academic libraries. *Libri*. 27(3). 181-194.
3. Bishop, A. P., et al. (Eds.). (2005). *Digital Library Use: Social Practice in Design and Evaluation*. Delhi: Ane Books.
4. Booth, W. C., Williams, J. M. & Colomb, G. G. (2003). *The Craft of Research*. Chicago: University of Chicago Press.
5. Borgman, Christine L., (Ed.) (1990). *Scholarly Communication and Bibliometrics*. Newbury Park, CA: Sage Publications, Inc.
6. Charles H and Harter, Stephen. (1980). Research Methods in Librarianship. NY: Academic Press.
7. Chowdhury, G. G. & Chowdhury, Sudatta. (2003). *Introduction to Digital Libraries*. London: Facet Publishing.
8. Deborah, E. Bouchoux. (2012). *Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets*. Amazon.com.
9. Deegan, Marilyn & Tanner, S. (2006). *Digital Preservation*. London: Facet Publishing.
10. Dragon, A. C. (1979). Marketing the library. *Wilson library bulletin*. 53. 498-500.
11. Egghe, L & Rousseau, R. (1990). *Introduction to Informetrics: Quantitative methods in Library, Documentation and Information Science*. Amsterdam: Elsevier.
12. Federico, Munari & Raffaele, Oriani. (2011). *The Economic Valuation of Patents: Methods and Applications (New Horizons in Intellectual Property Series).* Amazon.com
13. Fishman, Stephen. (2008). *The copyright handbook: what every writer needs to know*. Berkeley, CA: Nolo.
14. Freeman, Lee & Peace, A. Graham. (2005). *Information ethics: privacy and intellectual property*. Hershey, PA: Information Science Pub.
15. Garfield, E. (1979). Citation Indexing - Its theory and application in science and technology and humanities. New York: John Wiley.
16. H. Busha, Charles & Harter, Stephen P. (1980). Research Methods in Librarianship Techniques and Interpretation. New York: Academic Press.
17. Hjerppe, R. (1980). *An outline of bibliometric and citation analysis*. Stockholm: Royal Institute of Technology Library.

18. Jessica, Litman. (2001). *Digital Copyright: Protecting Intellectual Property on the Internet*.Amazon.com
19. Jones, Richard, et al. (2006). *The Institutional Repository*. Oxford: Chandos Publishing.
20. Kochtanek, Thomas R. & Joseph R. Matthews. (2002). *Library Information Systems*: From Library Automation to Distributed Information Access Solutions. London: Libraries Unlimited,
21. KOTHARI (C R). "Research Methodology: Methods and Techniques". 1990; New Delhi; Wiley Eastern.
22. KOTHARI (C R). "Research Methodology: Methods and Techniques". 1990; Wiley Eastern; New Delhi.
23. Kothari, C. R. (2008). *Research Methodology: Methods and Techniques*, New Delhi: New Age International (p) Limited
24. KRISAN KUMAR. "Research Method in Library and Information Science". 1992; New Delhi; Har-hand Publications.
25. Krishan Kumar. (1992). *Research Method in Library and Information Science*, Delhi: Har-Anand Publications.
26. KUMAR (P S G). "Research Methods and Statistical Techniques". 1996; Delhi; B.R Publishing Corporation.
27. LESK (MICHAEL). "Understanding Digital Libraries". 2004; Morgran Kauffman Press.
28. MEAGHAN (Brierley). Joomla- Content Management System and Web Application Framwork [presentation] 22-Apr-2008. Available online at http://hdl.handle.net/1807/10363.
29. Powel, Ronald R. (1991).*Basics Research Methods for Librarians*. 3rd Ed. Norwood NJ: Ablex. Busha,
30. RABIN (Jack) and JACKOWSKI (Edward M). Handbook of information Resource Management. 1998. New York; M. Dekker.
31. RUGAAS (Benedict). Library/Information Science Education for the 21st Century: Conference on Curriculum Design for the Information Market Place. Tromso Conference (Paperback)
32. SARDANA (J L), and SEHGAL (R L). "Statistical Methods for Librarians". 1996; New Delhi; Ess Ess Publications.
33. SEHGAL (R L). "Applied Statistics for Library Science Research". Vol.1 (2); 1998; New Delhi; Ess Ess Publications.
34. SEHGAL (R L). "Design and Evolution of Research in Library Science". Vol.1; 1998; New Delhi; Ess Ess Publications.
35. Sudman, Seymour. (1976). *Applied Sampling*. New York: Academic Press.
36. Torras, M. C. & Saetre, T. P. (2009). *Information Literacy Education*. Oxford: Chandos Publishing.
37. Trochim, William. (2002). *Research Methods Knowledge base* 2nd ed., Cincinnati: Alemic Dog Publishing.

38. Vaughan, Liwen. (2001*). Statistical methods for Information professionals: A Practical painless approach to understanding, using and interpreting statistics*. N.J.: Information Today.