

## Appendix-1

### Department of Library and Information Science Aligarh Muslim University , A.M.U Syllabus for Ph.D.Course Work for

Papers	Particulars	Hours of Instruction per Semester	Duration of Examination (Hrs)	Marks		
				Internal Assessment	End Semester	Total
Paper I	Research Methodology and Computer Application	40	02	40	60	100
Paper II	Paper on Research Theme*	40	02	40	60	100

\*This paper will be designed for each candidate, which may deal with the review of published works in the area of research proposed and some theoretical facets of research problem prescribed by the BOS.

#### **PAPER-I (PCW 111)**

#### **RESEARCH METHODOLOGY AND COMPUTER APPLICATION**

##### UNIT-I

- LIS research: Types, technique and trends
- Research design
- Sampling techniques and hypothesis
- Research tools: Questionnaire, schedule, interview, observation, scales and checklists, records and reports etc.

##### UNIT-II

- Statistics: Introduction and application in LIS research
- Hypothesis tests
- Chi-Square Test, ANOVA, T-Test
- Standard Deviation, Co-efficient of Variation, Time Series Analysis
- Use of SPSS for research analysis

##### UNIT-III

- Structure and components of research report
- Pre-writing considerations
- Types of report and steps in report writing
- Standards for bibliography and references
- Copyright infringement and plagiarism
- Evaluation of Research Report

##### UNIT-IV

- Web search using search engines
- Advanced searching techniques
- Database search- Emerald, JSTOR, DOAJ, J-Gate, Science Direct etc
- Citation tools for research: SCOPUS, Web of Science etc.
- Spread sheet tools: Formulas, functions, charts, graphs and other features

##### UNIT-V

- Concept and application of Library 2.0
- Institutional Repositories: concept, types with examples
- ICT application in research: Video conferencing, online discussions, online questionnaires etc.
- Introduction to presentation tools: Creating, Customizing and Screening