Scheme of Examinations

Paper-I : Research Methodology

a. Theory	=	60 marks
b. Internal Assessment	=	40 marks

Paper-II : Computer Applications

a. Theory	=	60 marks
b. Practical(s)	=	40 marks

Paper III : Review of Literature

a. Conceptualization and writing skills	=	60 marks
b. Viva-voce	=	40 marks

Paper I Research Methodology

Unit- I Concept of Research, Designing a Research Problem- Selection of the topic, Background Studies, Factors affecting the selection (including Media and Social Media). Types of Research on the basis of intent and method, Research Methodology and Method, approach and method, Research Technique, Strategy Elements of Research Proposal – Title, Background, objectives, Hypothesis, Review of Literature, Research Gap Analysis etc, Data Analysis and Data Interpretation

Unit-II Statistical and Quantitative Techniques- Measures of central Tendency, Standard Error, Standard Deviations, Tests of Significance, correlation- regression, sampling selection, sample size, type of sampling

Unit-III Documentation- relevance and purpose, The MLA style, The APA Style, Editing and Proofereading, Mechanics of Writing- writing concisely, avoiding sentence fragments and run-ons, Sentence faults-concord, modifiers, tense, case and agreement, etc. parallelism, coherence, consistency, logicality, paragraphing, problems of Translation, Anuvad etc.

Syllabus
Ph.D. Course work
Paper II-Computer Applications

Unit I

Basic computer organization; System software, application software, introduction to operating system Types of OS, Services and Components of OS, MS-windows, Linux; Computer Languages, Computer Networks, LAN, MAN, WAN, The Internet: quick look, what is internet, major internet services, working of internet, E-mail, searching the keyword search engines.

Unit II

Application of Internet in research: INFLIBNET, Use of Internet sites, DOAJ, Use of E journals, Use of E-library, use of EBSCO HOST online database of Academic Libraries.

Unit III

Introduction to Word processing package- Creating and editing a word document, creating a research paper, creating a cover letter and a resume, creating a document with a title page, table, chart and watermark, creating a webpage using word, Mail Merge, creating a professional newsletter.

Unit IV

Acquaintance with Data analysis software-SPSS, R package, Matlab, Spreadsheet package etc. Introduction to Spreadsheet package-Features and functions of spreadsheet, creating spreadsheet and enter data, format worksheets, adding graphics, printing, Calculate, Manipulate and analyse data, custom calculations, consolidating worksheets, pivot tables, charts, performing what- if analysis

Unit V

Introduction to presentation Tools-Features and functions, Creating presentation, master page, adding animation, Customizing presentation, showing presentation, printing handouts.

Developing Small utility programs for research : Introduction to C++ programming

Suggested Readings-

1) Computer fundamentals, Pradip K. Singha and Priti Singha, BPB Publication
2) The Internet: A users guide, K.L. James (PHI publication)
3) Internet Research skill by Niall O Dochartaigh, SAGE publication
4) Programming in C++ by E. Balaguruswamy, Tata McGraw Hill publication
5) Fundamentals of computers by Rajaram V., Prentice Hall of India, New Delhi
6) Computer Today by Sanders D.H, McGraw Hill, New York
7) Computer Fundamentals by Sinha P.K, BPB publication, New Delhi