Paper III

Total Marks: 100

Ph.D. Coursework Examination Syllabus (Computer Applications)

UNIT-1 Introduction, aims and objective of scientific research: Types of research Formulation of Research problem. Hypothesis generation and testing. Data collection. Primary and secondary Data.

UNIT-2 Research Ethics: Ethical norms. Misconduct in research. Data management. Conflict of interest. Publication. Authoship. Peer review. Plagiarism and its detection Collaboration. Social responsibilities. Whistle blowing.

UNIT-3 Quantitative analysis: Introduction and need of quantitative techniques. Data analysis and presentation. Frequency distribution. Measures of Central tendency and dispersion. Normal. Binomial and poission distribution. Samling techniques. Testing of Significance.

UNIT-4 Correlation and Regression T-test Chi square test. Experimental designs. R.B.D and other designs. Analysis of variance. Probability and its types.

UNIT-5 Research Paper writing: Research paper writing, steps and process. Paper submission (off line and online) to journals. Types of Journals. Peer review process. Paper Presentation. Report writing. Thesis writing. Important considerations. Poster presentation.

Reference:
1. Garg, B.L. Kaeadia, R. Agrawal. F. anf Agrawal. U.K. 2002. An introduction to research methodology,
RBSA Publishers.
2. Kothari. C.R. 1990 Research methodology and Techniques. New Age.
3. Sinha. S.C and Dhiman. A.K.2002. Research methodology. EssEss Publications. 2 volumes.
4. Teochim, W.M.K 2005 Research methos: the concise knowledge base, Atomic Dog Publishing. 270p
5. Suedecor. GW and Cochram. WG (1968) 'Statistical Methods' Oxford & IBH, Delhi.