

Ph. D. Course Work in Population Studies

| Paper Code | Paper Name | Marks | Credit |
|---------------------------|--|------------|-----------|
| Semester – I | | | |
| PS-701 | Research Methodology and Computer Applications | 100 | 8 |
| PS-702 | Elective Paper | 100 | 8 |
| PS-703 | Review of Literature/ Review Work | 100 | 8 |
| Total Credit Hours | | 300 | 24 |

PS-701: RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

Unit I

Research Process: Purpose, Types and Steps; Formulation of Research Problem; Research Design; Sampling: Concept and Types, and Sample Size Determination; Scaling: Likert Scale; Report Writing: Physical Content and References; Ethics in Social Research.

Unit II

Construction of Interview Schedule/Questionnaire; Data Collection Methods: Observation, Direct Interview and Focus Group Discussion; Data: Concept, Types, Validity and Reliability; Variable: Meaning and Types; Construction of Indices; Presentation of Data: Tabular and Graphic.

Unit III

Arithmetic Mean, Median, and Standard Deviation; Bi-variate Analysis: Cross-tabulation, Pearson Correlation Coefficient, Linear Regression; Theoretical Aspects of Multiple and Binary Logistic Regressions; Test of Significance: Parametric ('t' and 'F') and Non-parametric (Chi-square) Tests.

Unit IV

Components of Personal Computer: Central Processing Unit (CPU), Storage Device, Input Output Device, Other Accessories and Ports; Software: Language, Utility and Application Software; Windows: Basic Operations – File Management, System Maintenance, Protection from virus, worms, malware and spyware; Functions of MS-Office: Basic functions of Word, Excel and Power point.

Suggested Readings:

- Ahuja, Ram (2001), *Research Methods*, Rawat Publications, Jaipur.
- Blalock (Jr.), Hubert M. (1979), *Social Statistics*, McGraw-Hill, New York.
- Croxtan, F. E., D. J. Cowden and S. Klein (1982), *Applied General Statistics*, Prentice-Hall of India, New Delhi.
- Goode, William J. and Paul K. Hatt (1952), *Methods in Social Research*, McGraw-Hill, New York.
- Goon, A. M., M. K. Gupta and D. Dasgupta (1985), *Basic Statistics*, World Press, Calcutta.
- Kothari, C. R. (2004), *Research Methodology: Methods and Techniques*, New Age International Publishers, New Delhi.
- Summer M, Englewood and Cliffs (1988), *Computers: Concepts and Uses* 2nd ed., Prentice Hall Inc., New Jersey.
- Weiss, Robert S. (1968), *Statistics in Social Research: Introduction*, John Wiley and Sons, New York.
- Young, V. P. and F. C. Schmid (1973), *Scientific Social Survey and Research: An Introduction to the Background, Contents, Methods, Principles and Analysis of Social Studies*, Prentice-Hall of India, New Delhi.