

M.Phil. / Ph.D – POPULATION STUDIES

PART – I SYLLABUS (effective from the academic year 2006-07 onwards)

PAPER-I RESEARCH METHODOLOGY

UNIT I: RESEARCH METHODOLOGY - AN INTRODUCTION :

Meaning of research: Problems of social science research in India.

Defining the Research Problem: What is a research problem? Selecting the problem: steps in research.

UNIT II: RESEARCH DESIGN :

Meaning of a research design: Need for research design : Features of a good design: concepts relating to research design;

Different research designs; developing a research plan. Exploratory, descriptive, explanatory designs; cross-section, longitudinal, cohort, evaluation, experimental, case-control studies.

UNIT III: OPERATIONALIZATION OF CONCEPTS AND MEASUREMENT:

Concepts, Operational definitions, levels of measurement (nominal, ordinal, interval and ratio), scale construction validity and reliability.

Methods of Data Collection: Types of data: Primary and Secondary; Methods of data collection; Observation, Interview method and case study; participant observation; focus group discussions.

Tools of data Collection: Schedule and questionnaire.

Construction of Schedule and Questionnaire: Qualities of a good schedule and questionnaire, pre-test.

UNIT IV: DATA COLLECTION AND PROCESSING:

Organization of field work, recruiting and training investigators, supervision and monitoring. Editing- manual and computer; data entry on computers - use of spreadsheets, databases, software.

UNIT V: REPORT WRITING

Purpose, structure and writing style of a research report. Utilization and presentation of diagrams, graphs and tables in the research report. Preparing manuscripts for scientific journals.

REFERENCES:

- 1 Black J. A. and Champion D. J., *Methods and Issues in Social Research*, New York: John Wiley and Sons.
- 2 Goode W. J. and H. K. Hatt, *Methods in Social Research*. Tokyo: McGraw Hill Book Co., 1952.
- 3 Kothari C. R., *Research Methodology-Methods and Techniques*. Second edition. New Delhi: Wishwa. 1990.
- 4 Selitz E. et al., *Research Methods in Social Sciences*. New York: Holt Reinahard and Winston. 1966.
- 5 Wilkinson T.S. and P.L. Bhandarkar, *Methodology and Techniques of Social Research*, Bombay: Himalaya Publishing House, 1979.
- 6 Campbell, D.T. and J. C. Stanely, *Experimental and Quasi- Experimental Design for Research*. Chicago: Rand McNally & Company, 1966.
- 7 Morgan, Davis L., *Focus Groups as Qualitative Research*. New Delhi: Sage Publications, 1991.

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PART – I SYLLABUS (effective from the academic year 2006-07 onwards)

PAPER-II STATISTICAL METHODS IN SOCIAL RESEARCH

UNIT I: INTRODUCTION:

Purpose and limitations of statistics. Functions of statistics. The place of statistics in research process.

Probability, random variables: Binomial, Poisson, Geometric, Normal and Exponential Distributions, properties.

UNIT II: STATISTICAL INFERENCE:

Estimation: Methods of estimation (point estimation and interval estimation), Unbiasedness, efficiency, standard error of an estimate. Confidence intervals.

Tests of Hypotheses: Test statistic, types of errors, tests for means and proportions.

UNIT III: REGRESSION ANALYSIS:

Simple linear regression, multiple linear regression, use of dummy variables, logistic regression, path analysis.

UNIT IV : TECHNIQUES IN MULTIVARIATE ANALYSIS:

Multiple classification analysis, Principal, component Analysis, Factor Analysis, Discriminant Analysis, Cluster Analysis.

UNIT V : TECHNIQUES IN DEMOGRAPHIC ANALYSIS:

Cohort analysis; period-cohort analysis, survival analysis, hazard rates, proportional hazards models; logit and Gompertz transformations.

Note: The emphasis is on the rationale and the application of the techniques. No derivations and reproduction of formulas are expected.

REFERENCES:

- 1 Walpole, Ronald E., Introduction to Statistics, 2nd Ed., New York: Macmillan Publishing Co., Inc., 1974.
- 2 Blalock, Hubert Social Statistics, Second Edition, New York: McGraw Hill Book Company, 1984.
- 3 Snedecor, George W. and William G. Cochran, Statistical Methods, Sixth Ed., New Delhi: Oxford & I B H Publishing Co., 1967.
- 4 Kurtz, Norman R., Introduction to Social Statistics, Tokyo: McGraw-Hill International Book Company, 1983.
- 5 Gupta S. P., Statistical Methods, New Delhi: Sultan Chand and Sons, 1976.
- 6 Kendall, M.G., Multivariate Analysis, London: Charles Griffin & Company, 1975.