

M.PHIL. (Ed.) C.C. 201: QUANTITATIVE TECHNIQUES AND QUALITATIVE RESEARCH

UNIT-I: Sampling Theory and Fundamentals

1. Need and purpose of sampling
2. Sampling theory
3. Important sampling distributions
4. Various techniques/methods of sampling
5. Sampling and non-sampling errors
6. Hypotheses testing
7. Type-I and Type-II errors
8. Two-tailed and One-tailed tests
9. Sampling of attributes and sampling of variables
10. Data Collection

UNIT-II: Quantitative Techniques in Educational Research

1. Regression and Correlation Analysis: Simple, Partial and Multiple
2. Parametric Tests
 - a. Comparing two means: (i) T-test (ii) Z-test (iii) F-test
 - b. Comparing more than two means: (i) Two and three way analysis of variance (ii) Analysis of covariance
3. Non-parametric Tests
 - a. Chi-square test
 - b. Sign test
 - c. Median test
 - d. Kolmogorov- Smirnov test
 - e. Kruskal-Wallis or H-test

UNIT-III: Multivariate Analysis

- a. Characteristics and applications
- b. Factor analysis
- c. Discriminant analysis
- d. Cluster analysis
- e. Meta-analysis
- f. Typology

UNIT-IV Report Writing

- a. Dissertation
- b. Research report
- c. Research paper
- d. Technical aspects in report writing

References

1. Louis Cohen and Lawrence Manion, *Research Methods in Education*, London: Routledge, 1980.
2. Bruce W. Tuckman, *Conducting Educational Research*, New York: Harcourt Brace Jovanovich, inc., 1972.
3. Robert M.W. Travers, *An Introduction to Educational Research*, New York: Mac Millan Publishing Co., Ince., 1978.
4. Martyn Hammersley, *The Dilemma of Qualitative Method*, London: Routledge, 1989.
5. James H. Mc. Millan and Sally Schomachers, *Research in Education: A Conceptual Introduction*, New York: Harper Collins, 1989.
6. C.R. Kothari, *Quantitative Techniques*, New Delhi: Vikas publishing House, 1998.
7. Y.P. Aggarwal, *Statistical Methods*, New Delhi: Sterling Publishers Pvt, Ltd., 1998.
8. S.P.Gupta, *Sttistical Mathods*, New Delhi: Sultan Chand & Sons, 1996.
9. Clark Moustakas, *Phenomenological Research Methods*, New Delhi: Sage, 1994.
10. Cole, A. & Beglelow, K. W. *A Manual of Thesis Writing*. New Delhi: Cosmo Publication, 2006.
11. Almack, J.C. *Research and Thesis Writing*. New Delhi: Cosmo Publication, 2006.

CORE COURSE-2

Objectives

To enable the learners to:

1. Have a clear understanding of Education as a discipline.
2. Understand the scope and application of educational philosophy.
3. Understand the role of education in different perspectives.
4. Have a thorough knowledge of significant concepts in educatinal theory and practice.
5. Critically examine the past and the contemporary issues in education.
6. Make an attempt at formulation of their own view points: