SUBJECT CODE : RACCO4C

AC V - Statistical Methods

Unit 1. Definition of statistics- collection of data – primary and secondary data- Census method and sample method: Random sampling method and non-random sampling classification of data- diagrammatic presentation: significance, rules, types: one and two dimensional diagrams- graphic presentation: graph of frequency distribution.

Unit 2. Measures of central Tendency: Meaning, Objectives, Requisites of a good average - Types of averages: Arithmetic Mean, Median, Mode - relationship among averages - Limitations. Dispersion : Meaning, characteristics, Absolute and Relative measures - Range. Quartile deviation, Mean deviation, Standard Deviation, Coefficient of Variation

Unit 3. Correlation: Meaning, types, methods: Karl Pearson's Coefficient method, Spearman's Rank method. Regression: Meaning, Regression lines, Regression Equations.

Unit 4. Index Number: Meaning, use, type, method of index number, tests of consistency – Fixed Base and Chain Base – Cost of Living Index and family budget.

Unit 5. Analysis of Time Series: Meaning, Components of time series- Measurement of secular trend: moving average method, method of least square - Seasonal variation. Chi square test: Meaning, Degrees of freedom, X^2 test.

Question Paper should cover Theory 2 5%, and Simple and Moderate Problems 75%

Reference

1) Chambers, E.G. *Statistical Calculation for Beginners,* Cambridge University, London, 1955
2) Chou – Ya Lun, *Statistical Analysis,* Mc Graw Hill, New York, 1968