

Cost & Management Accounting Level 1



Paper 2 – Statistics

Duration of Examination: 3 hours

OBJECTIVE: -The object of this paper is to test: - the appreciation of the significance of statistics in the practical work of an accountant, the ability to choose relevant information for statistical purposes, the understanding and command of the mathematical techniques commonly used in management and business activities.

<u>SYLLABUS</u>	<u>Knowledge Requirements</u>
1. THE USE OF STATISTICAL ANALYSIS Role of statistics in business analysis and decision-making. Sources of data, nature, appreciation, precautions in use. Descriptive and Inferential Statistics. Presentation of data.	A
2. FREQUENCY DISTRIBUTION AND METHODS OF GRAPHICAL DESCRIPTION -The frequency distribution, histograms, frequency polygrams, frequency curves, ogives. Other methods of graphical description.	A
3. MEASURE OF CENTRAL TENDENCY -The arithmetic mean, the median, the quartiles, the mode. Relationship among the mean, median, mode.	
4. MEASURING DISPERSION -The range, the quartile deviation, the mean deviation, the standard deviation, the co-efficient of variation, measure of skewness.	A
5. PROBABILITY /PROBABILITY DISTRIBUTIONS -Meaning of probability, nature of probability distributions. Binomial, Normal and Poisson Distributions.	B
6. SAMPLING, ESTIMATING AND HYPOTHESIS TESTING -Role of sampling distributions; point estimation, confidence intervals for population means and proportions; hypothesis testing principles, levels of significance. Sample design, sample bias and error, confidence levels, level of significance, simple tests of hypothesis.	A
7. CHI-SQUARE TEST -Comparing observed frequencies to expected frequencies, contingency tables, interpretation of the X ² test.	A
8. REGRESSIONS AND CORRELATION -Simple linear regression, (least squares analysis). Simple forecasting using regressions scatter graphs. Meaning of correlation co-efficient, computation in simple correlation analysis, rank correlation.	A
9. TIME-SERIES ANALYSIS -Components of a time series; Trend analysis, seasonal. Variations, cyclic, and irregular variations, use of time series analysis in forecasting.	A
10. INDEX NUMBERS -Construction of Index Numbers, leading indexes -Paasche, Laspeyres, use of index numbers.	A
11. NETWORK ANALYSIS -Construction of simple networks. Critical Path Analysis.	C