

202 : Business Statistics

1. Statistics: Meaning, Definition, Importance with reference to Business and Management, Statistical Investigation, Collection of Data. Classification and Tabulation of Data: Measures of central tendency: Median, Mode, A.M., G.M, H.M. and Weighted Means. Partition values.
2. Measures of Dispersion: Ranges, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of variation, Lorenz curve. Skewness: Karl Pearson's and Bowley's measures. Interpolation and Extrapolation: Binomial Expansion, Newton's forward and backward Interpolation formula and Lagrange's methods.
3. Correlation & Regression: Bivariate Linear correlation & Regression from grouped & ungrouped data. Probable error, Coefficient of determination & non-determination. Spearman Rank correlation. Association of Attributes: Two Attributes.
4. Index Number: Concept, Utility, methods of construction-aggregate, price relative & chain base methods. Cost of living index number, requisites of an ideal index number. Base shifting, splicing & deflating. Analysis of Time Series: Trend, Seasonal variations.
5. Probability: Fundamental concepts. Addition, Multiplication and conditional laws of Probability. Bayes Rule. Mathematical Expectation. Elements of Theoretical distributions- Binomial, Poisson and Normal distributions with their properties and applications.

Suggested Readings:

1. Gupta S. P. : Statistical Methods, Sultan Chand & Sons, N. Delhi.
2. Gupta B. N.: Statistics
3. Gupta S. C. and Gupta Indira: Business Statistics, Himalaya Publishing House, Mumbai.
4. Hoel & Jessen: Basic Statistics for Business and Economics; John Wiley and Sons, New York.
5. Hooda, R.P.: Statistics for Business and Economics; Macmillan, New Delhi.
6. Lewin and Rubin: Statistics for Management; Prentice-Hall, New Hall.
7. Sancheti, D.C. and Kapoor V. K. : Statistics (Theory, Methods and Applications) Sultan Chand and Sons Delhi:
8. Ya-Lun Chou: Statistical Analysis with Business and Economic Applications, Holt; Rinehart & Winster, New York