

B. A. ECONOMICS
III Year B. A. Programme (UG) Courses – Under
CBCS Semester – V
Paper – VI (Core Paper)
PAPER VI : QUANTITATIVE TECHNIQUES

(Mathematical derivations and proofs are not required. Only applications)

Quantitative Methods

Unit- I: Introduction - Meaning – definition – functions- importance and limitations of statistics – collection of data – primary and secondary data- schedule and questionnaire – frequency distribution – tabulation – diagram and graphic presentation of data(one dimensional and frequency curves) Applications

Unit – II: Measures of Central Tendency and Dispersion - Definition, objectives and characteristics of measures of central tendency – types of averages- arithmetic mean, geometric mean, harmonic mean – median – mode – quartiles – deciles – percentiles – properties of averages and their applications. Objectives of dispersions, range, quartile deviation, mean deviation, standard deviation- coefficient of variation. Applications

Unit – III: Measures of Correlation And Regression - Meaning, definition and use of correlation- types of correlation- Karl Pearson’s correlation coefficient- Spearman’s rank correlation- probable error- meaning, utility of regression analysis- comparison between correlation and regression. Applications

Unit – IV: :Functions , Graphs and equations-Types of Functions- Rectangular Co-ordinate System and graphs of functions - Slope and Intercept - Equations of straight lines. and solutions of Linear, Quadratic and Simultaneous Equations up to three unknowns. – simple Economic applications

Unit – V: Matrix: Definition – examples- types of matrices – matrix addition – multiplication – determinant of matrices – minors – co-factors – inverse of a matrix.Applications

References:

1. Sivayya K.V and Satya Rao, Business Mathematics , Saradhi Publications Guntur
2. Sancheti and Kapoor VK, Business Mathematics, Sulthan Chand & Sons, New Delhi
3. D.N Elhance , Fundamentals of Statistics , Kithab Mahal, Allahabad
4. Guptha SC, Fundamentals of Business Statistics, Sulthan Chand, New Delhi
5. Aggarwal, Business Statistics, Kalyani Publishers Hyderabad Reddy CR, Business Statistics, Deep & Deep Publications ,
6. S.P. Gupta & V.K Kapoor- "Fundamentals of Mathematical Statistics", S.Chand & Co., 2014.