

QUANTITATIVE TECHNIQUES FOR BUSINESS DECISIONS

(for the candidate admitted from the academic year 2009-2010 onwards)

Credit Allotted: 5

Max. Marks: 75

Objective : To make the students to understand the various techniques of statistics used in business for taking decisions.

Unit I: Meaning of Quantitative Techniques – Role of Quantitative techniques – Advantages and limitations of Quantitative Techniques Correlation analysis – simple – partial and multiple, Regression analysis – Time Series.

Unit II: Probability – Elements of probability – Theorems of probability – theoretical distributions – Binomial – poisson – Normal distribution – Normal distribution.

Unit III: Definition of Hypothesis – Types of Hypothesis – Type I Error – Type II Error – t test – F test – ANOVA – Chi – Square test.

Unit IV: Transportation problem – Initial Basic feasible solutions by North West Corner rule – Minimization method – Maximize method – Vogel's approximation method – optimization test by Modi method – Assignment methods.

Unit V: Linear programming – Basic Concepts and notation – Linear programming formulation – solution through graphic methods, Simplex Method (Simple problem)

Note: 80 % Problem 20 % Theory

Book for Reference:

- 1 Quantitative Technique – C.R. Kothari
2. Statistical Methods – S.C. Gupta
- 3.Statistical Methods – S.P. Gupta
- 4.Advanced Statistics – D.L. Enclave