Paper Code: 41323

M.A. ECONOMICS 2010-11
SEMESTER – I
Paper – III
QUANTITATIVE ECONOMICS

Unit – I

Simple Differentiation – Process of Differentiation, Rules of Differentiation, Implicit Differentiation and Partial Differentiation.

Unit – II

Integration – Simple rules of Integration, Definite Integration – Application to Cost and Revenue Functions and Consumer's Surplus.

Unit – III

Matrix – Concept of Matrix and their types, Simple operations on Matrices, Matrix Inversion and Rank of Matrix, Difference equation – First and Second Order.

Unit – IV

Concept of Simple and Partial Correlation, Meaning and definition of Simple Regression Analysis, Concept of Least Square Method and lines of Regression, Estimation of Regression Equation and Regression Co-efficient.

Unit – V

Definition of Probability – Laws of Addition and Multiplication, Conditional and concept of Interdependence, Concept of Binomial, Poisson and Normal Distribution (without derivation).

Basic Reading List

1.   Allen, R.G.D. (1974) – Mathematical Analysis for Economists, Macmillan Press and ELBS, London.

2.   Chou, Y. (1975) – Statistical Analysis, Holt, Reinhart and Winston, New York.

3.   Croxton, Crowden and Klein (1971) – Applied General Statistics, Prentice Hall of India, New Delhi.

4.   Gupta, S. C. (1993) – Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.

5.   Handry, A. T. (1999) – Operations Research, Prentice Hall of India, New Delhi.

6.   Mehta & Madnani (2008) – Mathematics for Economists, Sultan Chand and Company, New Delhi.

7.   Nagar, A. L. and R. K. Das (1993) – Basic Statistics, Oxford University Press, New Delhi.

8.   Speigal, M. R. (1992) – Theory and Problems of Statistics McGraw Hill Book Co., London.

9.   लक्ष्मीनारायण नाथूरामका – अर्थशास्त्र में गणित के प्रयोग, कॉलेज बुक हाऊस, जयपुर।

10.   कैलाशनाथ नागर – सांख्यिकी के मूल तत्व, मिनाक्षी प्रकाशन, मेरठ।

11.   मेहता एवं मदनानी – अर्थशास्त्र में प्रारम्भिक गणित, लक्ष्मीनारायण अग्रवाल, आगरा।