

Paper Code: 41325B

M.A. ECONOMICS 2010-11
SEMESTER – I
Paper – V B
ELECTIVE-I: MATHEMATICAL ECONOMICS

Unit – I

Cardinal and Ordinal Analysis, Ordinal Utility Maximisation, Slutsky Equation – Income, Substitution and Price Effects, Concepts of Elasticities, Generalisation to n variable case, Theory of Revealed Preference, Consumer Behaviour under Uncertainty, N-M Theorem.

Unit – II

Production Function – Stages of Production Function, Homogenous and Non-Homogeneous Production Function, Cobb-Douglas Production Function, C.E.S. Production Function. Concept of VES and Translog Production Function, Producer's equilibrium under constraints Laws of Returns of Scale.

Unit – III

Simple derivation of Short and Long run Cost Functions and their relations, Concept of modern approaches to Theory of Costs, The concept of Revenue Functions, Total, Average and Marginal Revenue, Relation between AR, MR and Elasticities.

Unit – IV

Price determination in Perfect Competition, Monopoly and Monopolistic Competition, Marshallian and Walarasian Equilibrium conditions and Stability of Equilibrium, General Equilibrium Model.

Unit – V

Pricing under Duopoly, The Cournot Model, The Bertrand Model, The Edgeworth Model, and the Stackelberg Model, Pricing of Factors of Production, Bilateral Monopoly.

Basic Reading List

1. Allen, R.G.D. (1974) – Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986) – Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Henderson, J. M. and R. E. Quandt (1980) – Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
4. Mehta, B. C. (1987) – Mathematical Economics: Microeconomic Models. Sultan Chand and Sons, New Delhi.
5. Madnani, G.M.K. (2008) – Mathematical Economics, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
6. Mehta-Madnani (2008) – Mathematics for Economists, Sultan Chand and Company, New Delhi.
7. Arrow, K. J. and M. Intrigator (Eds.) (1982) – Handbook of Mathematical Economics, Vol. I, II and III, North Holland, Amsterdam.
8. Chung, J. W. (1993) – Utility and Production: Theory and Applications, Basil Blackwell, London.
9. Ferguson, C. E. (1976) – Neo Classical Theory of Production and Distribution.
10. Hadley, G. (1962) – Linear Programming, Addison Wesley Publishing Co., Massachusetts.
11. Mankiw, N. G. and D. Romer (Eds.) (1991) – New Keynesian Economics (2 Vols.), MIT Press, Cambridge, Mass.
12. Nash, J. F. (1996) – Essays on Game Theory, Cheltenham, U.K.

13. अग्रवाल, एच. एस. – अर्थमिति एवं गणितीय अर्थशास्त्र, आर.बी.एस.ए. पब्लिशर्स, जयपुर।

