MAJOR – I

INTRODUCTORY MICROECONOMICS

Learning Objectives of the Course

Unit I: The objective of unit I is to research and analyse the variables influencing demand; quantify demand elasticity; anticipate demand; and define equilibrium and describe stable and unstable equilibrium.

Unit II: Unit II objective is to give insights into the behaviour of consumers and understand the decision-making processes that consumers go through as they make a purchase.

Unit III: Unit III objectives are to help the students comprehend how a producer makes decisions about what to produce and how much to produce and how to optimise his profit.

Unit IV: Unit IV purpose is to understand the concepts of short- and long-term costs, cost function forms, and how the long-term cost function fluctuates based on external economies and diseconomies of scale. Additionally, this section explains the ideas of revenues and the connections between TR, AR, and MR.

Unit-I: Theory of Demand and Supply: Determinants of individual demand and supply, law of demand and law of supply, demand and supply schedule, demand and supply curve, market versus individual demand and supply, movement along and shift of the demand curve and supply curve. Market equilibrium: static & dynamic, Existence, Uniqueness and Stability of equilibrium (Walrasian and Marshallian Approach). Elasticity of demand: point and arc elasticity, cross price elasticity and income elasticity of demand, elasticity of supply. Concept of equilibrium, Impact of tax and subsidy on market equilibrium, Tax burden, Concept of floor and ceiling price, Consumers' surplus and Producers' surplus.Mathematical applications of theory of demand and supply.

Unit-II: Consumer and Households Behaviour: Cardinal utility theory: Law of diminishing Marginal Utility, derivation of Marshallian demand curve. Ordinal utility theory: Indifference curves and their properties, budget line, consumer 's equilibrium. Income Consumption Curve, price consumption curve and Engel's curve. Elasticity of demand and classification of commodities, Normal, Inferior and Giffen goods, Price effect, Income effect and Substitution effect, Hicks & Slutsky Approaches, Price & Substitution Effects in case of Inferior and Giffen goods, Shapes of Indifference Curves in exceptional cases, Indirect utility function, compensated demand curve, Revealed Preference Theory: Concept, Weak and Strong Axioms, Derivation of the Law of Demand. Mathematical applications of Consumer and Household Behaviour.

Unit-III:Theory of Production: Concept of Production function, Production with a single variable input: TP, AP & MP; Production with two variable inputs, Law of variable proportion, Returns to Scale; Iso-quant and its properties, Iso-cost line, ,Marginal Rate of Technical Substitution (MRTS), Optimal input combination, Economic region of production, Constrained output maximisation, Cost minimisation, Elasticity of substitution, Scale elasticity of output, Wicksell-Jhonson Theorem, Cobb-Douglas and CES production function (basic properties only). Mathematical applications of Theory of Production.

Unit-IV:Theory of Revenue and Cost: The concepts of Total Revenue (TR), Marginal Revenue (MR) and Average Revenue (AR), Relation between AR and MR. Various concepts of Cost - Total Cost, Fixed and Variable Cost, Average and Marginal Costs, Shape of Cost Curves - Short-run and Long- run analysis;Modern concept: Saucer-type SAVC curve, J and L Shaped LAC curve, Economies and diseconomies of Scale. Mathematical applications of the theory of Revenue and Cost.

Recommended Readings:

1. Allen, R. G. D.: Mathematical Analysis for Economics, Macmillan.
2. Chiang, A. C. and K. Wainwright: Fundamental Methods of Mathematical Economics, McGraw Hill.
3. Gregory Mankiw, N. (2015): Principles of Micro Economics, CENGAGE Learning, Australia.
4. Henderson, J. M. and Quandt, R. D.: Micro Economic Theory – A Mathematical Approach, McGraw Hill.
5. Joseph E. Stiglitz and Carl E. Walsh: Economics, W.W. Norton.
6. Karl E. Case and Ray C. Fair: Principles of Economics, Pearson Education Inc.
7. Kalyanjit Roy Choudhury: Modern Micro Economic Theory, Pragati Publications.
8. Koutsoyiannis, A. (1975): Modern Microeconomics, Palgrave Macmillan, London
9. Maddala G. S. and Ellen Miller. (2004): Microeconomics Theory and Application, Mc Graw Hills.
10. Mukherjee, B. and Pandit, V.: Mathematical Methods for Economic Analysis, Allied.
11. Pindyck, Rubinfeld and Mehta: Microeconomics, Pearson Education Asia. (CTB)
12. Salvatore, D. (2003):Principles of Micro Economics, fourth edition OxfordUniversity Press, New York.
13. Simon & Blume: Mathematics for Economists, Viva Books.
14. Varian H.R: Intermediate Microeconomics: A Modern Approach, (CTB)
15. Satya Chakrabarty, Microeconomics, Allied Publishers