

MCA 105 ENGINEERING ECONOMICS

Module 1 (8 Hours)

Introduction to Economics: definition, scope and nature of economics, consumption laws, demand & supply analysis, elasticity of demand, indifference curve analysis, consumer surplus and its application.

Module 2 (10 Hours)

Production : factors of production, production function, law of variable proportion, laws of return to scale, elasticity of factor-substitution, optimal combination of factor-inputs, production efficiency, economies of scales,
Cost of Production: types of costs, economic costs: fixed cost and variable costs, Average and Marginal costs, short-run and long-run cost functions.

Module 3 (10 Hours)

Market Structure: pure competition, perfect competition, imperfect market, monopoly and oligopoly. Indian Banking System, Functions and Roles of Commercial Banks and Reserve Bank of India.

Module 4 (12 Hours)

Foundations of Engineering Economics, Time value of money and interest formulae, Nominal and effective rate of interest, Present, Annual and Future worth analysis, Rate of Return Analysis, Cost-Benefit analysis in Public sector projects.

Module 5 (06 Hours)(as per choice of faculty)

Portion covered can be tested through Internal evaluation only not to be included in University examination)

References:

1. Koutsoyiannis, A., 'Modern Microeconomics', English Language Book Society, Macmillan.
2. Pindyck, R S, Rubinfeld, D L &Mehta , 'Microeconomics', 6 th Edition, Pearson Education India.
3. Varian, H R, 'Intermediate Microeconomics', 7th edition, East West Press India.
4. Samuelson, Paul A, 'Economics', 5th edition, McGraw Hill New York.
5. Basics of Engineering Economy; Leland Blank and Anthony Tarquin, TMH
6. Contemporary Engineering Economics, Chan. S Park, Pearson
7. Engineering Economics, Paneerselvam, PHI
8. Engineering Economics; Sasmita Mishra, PHI