

TRIBHUVAN UNIVERSITY
INSTITUTE OF SCIENCE AND TECHNOLOGY
SCHOOL OF MATHEMATICAL SCIENCES
Bachelor in Mathematical Sciences (B.Math.Sc.)

Course of Study

Code No.: MSEC 351

Paper: **Principle of Economics I (Micro)**

Nature: Theory

Full Marks: 75

Pass Marks: 30

Credit: 3

Course Description:

The course covers to Economic models, Competitive markets, Consumer Demand and Behaviour, Production, Cost and Revenue functions, Market, Pricing Strategies.

Learning Objectives:

On successful completion of the course the student will be able to introduce the core economic principles and how these can be used in a business environment to help decision making and behavior. It provides the fundamental concepts of macroeconomics that explain how economic agents make decisions and how these decisions interact. It explores the principles underlying macroeconomics that explain how the economic system works, where it fails and how decisions taken by economic agents affect the economic system.

Mode of Delivery:

The course will be taught by lecture (48 hrs), and problem solving and class discussion (24 hrs). The use of spreadsheet software for problem solving will be encouraged.

Contents:

Unit 1 Economic Models and Recent Historical Applications

8 hr

Relevance of economics to the world of business: opportunity cost and scarcity and their relevance to economic choice, economic concepts involved in choices made by businesses relevant to selection of outputs, inputs, technology, location and competition, microeconomics and macroeconomics, Main strands of economic thinking : Classical, Marxian, socialism, neo-classical, Keynesian, neo-Keynesian and post-Keynesian, Monetarist, Austrian, Progress of the world economy since the Great Depression: a history of banking crises and irrational behavior, consequences of banking crises, Banking crisis of 2008, the Great Recession and recovery, Effectiveness of the monetary policy in the 2008 financial crisis and the government's actions to combat recession, Aftershocks in Europe following the 2008 financial crisis., Stimulus-austerity debate and regulatory action after the 2008 crisis

Unit 2 Competitive Markets

10 hrs

Market operation, Price mechanism in a free market, Behaviour of firms and consumers in free markets, Market demand and supply, Market equilibrium quantity and price, Market reaction to changes in demand and supply, Price and income elasticities of demand, Price elasticity of supply, Effect of elasticity on the workings of markets in the

short and long run, Risk and uncertainty about future market movements, Price expectations and speculation, Price bubbles.

Unit 3 Consumer Demand and Behaviour

7 hrs

Concept of utility, Representation of consumer preferences as indifference curves, Rational choice, Optimal consumption choice, Perfect information and irrational behaviour in behavioural economics, Effects of advertising on sales and demand.

Unit 4 Production, Cost and Revenue Functions

8 hrs

Production function, production costs, Reflection of production function in the relationship between inputs and outputs in short and long run, average and marginal physical product, Measurement of costs and their relation with output in short and long run, Total, average and marginal costs, Economies of scale, Efficiency in selecting the level of inputs, Revenue and profit, Influence of market conditions on revenue and profit, Average and marginal revenue, Measurement of profit, Profit maximizing output of a firm, “shut-down” point in the short and long run.

Unit 5 Market

10 hrs

Profit maximization under perfect competition and monopoly, Market power of a firm, Main features of a market characterized by perfect competition, output and price in such markets in the short and long run, Monopolies, Barriers to entry in an industry and a contestable market.

Profit maximization under imperfect competition, Behaviour of firms under monopolistic competition, features of an oligopoly, Behaviour of firms in an oligopoly, Determining factors of competition and collusion of firms in an oligopoly, Explanation of the strategic decisions of such firms by game theory.

Unit 6 Pricing Strategies

5 hrs

Various pricing strategies of firms, Determination of prices in practice, Pricing ability of a firm, Average cost pricing, Price discrimination, Pricing strategy for multiple products, Pricing and life of a product.

Text Book

J., Hinde, K., and Garratta, D. Sloman, Economics for Business, Fifth edition (2010), Prentice Hall,

References

1. Begg, D. K. H.; Fischer, S.; Dornbusch, R., Economics, eighth edition (2005), Mc Graw-Hill.
2. Lipsey, R. G.; Chrystal, K. A., Economics, 11th edition (2007), Oxford University Press.
3. Mankiw, N.G.; Taylor, M P. Thomson, Economics, 2006.
4. Parian, M, Powell, M.; Matthews, K., Economics, 7th edition (2007), Pearson Education.
5. Sloman, J., Essentials of economics, 4th edition (2006), FT Prentice Hall.
