

**SYLLABUS FOR THE SUBJECT OF ECONOMICS
PAPER - I
MICROECONOMICS**

Total Marks: 100

Part I

1. **Microeconomics:** Meaning of microeconomics. Choice, scarcity and opportunity cost. Production Possibility frontier. Goals of microeconomic policy: efficiency and equity.
2. **Market economy:** Demand, Supply and Price determination. Individual and market demand. Changes in demand. Individual and market supply. Changes in supply. Market equilibrium and impact of changes in demand and supply on market equilibrium. Elasticity of Supply and Demand. Point and Arc elasticity. Price, income and cross elasticities. Application of the concept of elasticity.
3. **The theory of Consumer Behaviour:** Concept of utility and derivation of Demand curve. Cardinal and ordinal Utility. Consumer's Surplus. Indifference Curves and their shapes. Marginal rate of substitution and convexity of Indifference Curves. The budget constraint and the equilibrium of the consumer. Income-Consumption and the Engel's Curve. Price- consumption and Demand curve. Income and Substitution effects of a price change, the Hicksian method and the Slutsky method. Identification of normal goods, inferior goods and Giffen goods.
4. **The theory of Production:** The concepts of production cost and profit. Production function. The law of variable proportions. Cost curves in the short run and in the long run. Choice of input mix. The principle of Substitution. Iso- quants, Iso-cost line and the condition for cost minimization. The expansion path and returns to scale. Economies of scale. The very long run and the endogenous technical change.
5. **Market structures and behaviour of firms.**

Perfectly competitive markets. Assumptions of the model. The supply curve of a firm and an industry in the short run. Short run and the long run equilibrium of the firm and industry. The shape of the long run industry supply curve and the effects of changing technology. The allocative efficiency of perfect competition.

Monopoly: Shape of the demand curve under monopoly. Elasticity of the demand curve and its implication for a monopolist. Short run and long run equilibrium. Price discrimination and its consequences. Analysis of price discrimination between markets. Dumping. Cartels as monopolies. The allocative inefficiency of monopoly. Comparison between perfect competition and monopoly.

Imperfectly competitive market structures: Monopolistic competition. The concept of industry and group. Short run and long run equilibrium of a firm. Excess capacity. Comparison with perfect competition and monopoly.

Oligopoly and its basic dilemma. Duopoly. Models of Non-collusive oligopoly: Cournot's duopoly model, Chamberlain's oligopoly model, Sweezy's kinked demand model.

Collusive Oligopoly. Cartels: Joint profit maximization and market sharing cartels. Price leadership models. Mergers.

6. **The theory of Factor Pricing:** Demand and Supply of inputs. Input demand in the short run and in the long run. The firm's demand curve. The industry's demand curve for an input. Elasticity of demand for inputs. The supply of inputs. Determination of price, quantity and income of an input. Monopsony.

RECOMMENDED BOOKS:

1. *Lipsey and Chrystal, Economics. 10th edition. Oxford University Press.*
2. *Koutsoyiannis, A., Modern Microeconomics, London, Macmillan.*
3. *Miller, E. and Maddala, G.S., Microeconomics Theory and Applications, McGraw-Hill International.*

PART II
MATHEMATICAL ECONOMICS.

1. Variables, Constants and parameters. Relations and functions. Types of functions: algebraic and non-algebraic. Graphic representation of economic functions. Equations and identities, simultaneous equations. Solution of market models, income determination model and IS-LM analysis.
2. Derivatives and their application in economics. Slope versus elasticity. Price, income and cross elasticities of demand. Income determination, multipliers and comparative statics. Optimization of economic functions. Constrained optimization in economics.

RECOMMENDED BOOKS

1. *Chiang, A.C., Fundamental Methods of Mathematical Economics, McGraw Hill, Kogakusha, Ltd.*
2. *Dowling, E.T., Introduction to Mathematical Economics, Schuam's outlines.*

PAPER - II
MACROECONOMICS

Total Marks: 100

PART I

1. **What is Macroeconomics?** Major macroeconomic issues. Economic models. Stocks and flows, National income accounting, circular flow of income, real versus nominal GDP, the GDP deflator, the consumer price index, economic growth, actual versus potential output, business cycles and their phases, definition of full employment, unemployment, GDP gap, Inflation.
2. **Classical Macroeconomics:** The classical revolution, production, employment, labour demand and labour supply. Equilibrium output and employment. The quantity theory of money. The Cambridge approach to the Quantity theory. Aggregate Demand and Aggregate Supply in the classical system. The classical theory of rate of interest. Complete classical model and classical dichotomy.
3. **The Keynesian Macroeconomics:** Aggregate expenditure and its components. Consumption function and Savings function. Investment and the real rate of interest. The equilibrium GDP in a closed economy simple multipliers. Government spending and taxes. Tax multiplier. GDP in an open economy. The net export function and the foreign trade multiplier. The augmented saving-investment approach. Fiscal and monetary policies.
4. **Investment and its determinants:** Marginal efficiency of capital and optimal capital stock, the marginal efficiency of investment. The stock market and Tobin's q-theory. Inventory investment and the accelerator model. The interaction of multiplier and accelerator. The derivation of IS- curve and its slope. Factors that shift the IS- curve.
5. **The money market and LM-curve.** Keynes Theory of Liquidity preference. Supply of money. Monetary equilibrium and the rate of interest. Derivation of LM-curve and its slope. Factors that shift the LM-curve. Keynes liquidity trap. Interaction of IS-LM curves. Adjustment to equilibrium in the IS-LM curve model. The algebra of the IS-LM model.
6. **Aggregate Demand and Aggregate Supply:** Macroeconomic equilibrium in the short run. The effect of aggregate demand and aggregate supply shocks on the price level and GDP. Long run consequences of aggregate demand shocks. Long run aggregate supply curve. Inflationary and recessionary gaps. The theory of fiscal stabilization and its effectiveness. Transmission mechanism. Comparison of the Classical and Keynesian models and policy conclusions.
7. **Inflation and unemployment:** Types of inflation, Supply shock and demand Shock. Inflation as a monetary phenomena. Stagflation. The theory of Philip's Curve.

The short run and the long run Philips curve. The expectations augmented Philip's curve. Adaptive expectations. Unemployment. Frictional, structural and cyclical unemployment. Okun's law. Hysteresis and the natural rate hypotheses.

8. **Consumption theories and their implications:** Keynesian absolute income hypothesis, Simon Kuznets findings, Duesenbury's hypothesis, Permanent income hypothesis, life cycle hypothesis, Robert Hall and the Random-walk hypothesis.

RECOMMENDED BOOKS

1. *Lipsey & Chrystal, Economics, Oxford University Press.*
2. *Mankiw, G.N., Macroeconomics, Worth Publishers, New York.*
3. *Froyen, R.T., Macroeconomics, Theories and Policies, Pearson education.*
4. *Glahe, F.R., Macroeconomics, Theory and Policy, Harcourt Brace Jovanovich Inc.*

PART II ECONOMICS OF PAKISTAN

1. Economic Development

Economic Development versus Economic Growth. Measurement of economic development. Characteristics of a developing economy. Obstacles to economic development. Determinants or Pre-requisites of economic development. The state of Pakistan's economy and its comparison with other economies of the world.

2. Strategic Sectors.

Importance and problems of the agricultural, industrial and foreign trade sectors of the economy. WTO and its implications. Foreign direct investment, foreign debt burden and debt servicing problems of Pakistan.

3. Monetary and Fiscal policies.

The role of monetary and fiscal policies in promoting economic growth and tackling the problems of inflation and unemployment in Pakistan. Deficit financing and the annual budget.

RECOMMENDED BOOKS

1. *Nasir, M.S. and Kamal S. Hyder, Economy of Pakistan.*
2. *Zaidi, S. Akbar, Issues of Pakistan's Economy. Oxford Univ. Press.*
3. *Pakistan Economic Survey, Published by the Government of Pakistan.*
4. *Todaro. M.P., Economic Development in the third world. Latest edition. Heinemann. London.*