# University of Mumbai



# Revised Syllabus for Sem I and Sem II

Program: M.A.

**Course: Economics** 

(Choice Based Credit System with effect from the Academic year 2016-2017)

#### M.A. ECONOMICS SEM – II

### Group I i) Microeconomics - I

#### **UNIT – I: Consumer Behaviour:**

Axioms of Rational Choice, Utility function and its existence, revealed preference approach to consumer choice, consumer's optimization problem, income and substitution effects, indirect utility function and its properties, Roy's identity, Shepherd's lemma and the Slushy equation.

#### **UNIT – 2: Production, Cost and Supply**

Production: Returns to Scale and varying proportions production function (Cobb-Douglas, CES and Tran slog), variations in scale, variations in input proportions, problem of Profit maximization for a firm, Cost: Long run and short run cost curves, cost minimization, profit function, duality.

# **UNIT – 3: Price and Output determination under Perfect Competition**

Features of perfect competitions, price and output determination in the long and short run, Equilibrium of the firm, and the industry, existence and stability of General Equilibrium in a pure consumption economy, First and Second Fundamental Theorems of Welfare Economics, welfare effects of price changes, Market failures and the theory of the Second best.

# **UNIT – 4: Monopoly:**

Monopoly: Its features, Measures market power, price and output determination in a monopoly, the welfare effects of monopoly, first, second and third degree price determination under monopoly, natural monopoly, regulation of monopolies.

#### Group I ii) Macroeconomics -

**Module1.** Macroeconomic Accounting Stocks and Flows; Output and Income; and Expenditure; Saving and Investment; Real and Nominal Income; The open economics.

**Module2.** Determination of National Income and the Price Level (12 Sessions) Keynesian Model: IS-LM Analysis, Fiscal and Monetary Policy, The role of expectation The AS-AD Model; Inflation and Unemployment.

**Module3.** The Open Economy Definition and Concepts: The trade balance, Balance Payment, Capital Mobility, Automatic adjustment, the classical approach Fix Exchange Rates: The Is-LM-BP model, Monetary and Fiscal Policy Flexible Exchange Rates: The IS-LM-BP model, Monetary and Fiscal Policy.

**Module4.** Micro foundations of Macroeconomics Consumption: Consumption smoothing, temporary and permanent shocks, Investment: The optimal capital stock irreversibility and investment, The demand for money: Money, bonds, and private wealth financial assets Seignior age: The optimal level of seignior age.

#### **Texts**

- 1. Carlin, Wendy and David Soskice, 2007, Macroeconomics, Oxford University press.
- 2. D'Souza, Errol, Macroeconomics, 2012, Dorling Kindersley (India) Pvt. Ltd.
- 3. Michel, Thomas, 2009, Macroeconomic Theory, PHI Learning.

#### **Group I iii) Statistical Methods in Economics**

**UNIT 1:** Random variables 'mean and variance of a random variable, basic laws of probability, Discreet random variables (Geometric, Binomial and Poisson), Continuous distributions (The Normal Distribution), Covariance and Correlation (Pearson's and Spearman's coefficients), the Law of Large numbers (without proof).

**UNIT 2:** Tests of Hypothesis: Tests of hypothesis, null and alternative hypothesis, one tailed and two tailed tests, the standard normal distribution and its applications, the Chi-square distribution and its applications, the Central Limit Theorem (without proof).

**UNIT 3:** Simple linear regression: Estimation and hypothesis testing, properties of estimators, R square and adjusted R square, the test in regression, interpreting regression coefficients.

**UNIT 4:** Problems in simple Linear Regression model: Heteroskedasticity and its consequences, autocorrelation and its consequences, multicollinearity and its consequences.

#### **Group I iv) Economics of Development - I**

**UNIT 1:** Concepts and measures of Growth and Developments in economics though – History, expectations and development – Economic growth and structural change – Capabilities, entitlements and deprivation – Inequality and growth – Measurement of Inequality and poverty – Measurement of development – HDI, GDI, etc.- Role of market and state.

**UNIT 2:** Modern theories of Growth and Distribution Harrod – Domar Model of growth – Solow model of growth- Approaches to technical change –

Convergence – Endogenous growth models of Roomer and Lucas-Human capital.

**UNIT 3:** Microeconomics of Development Segmentation of rural land, labour, capital and credit markets – microfinance – Market inter-linkages – land markets-labour markets and households – The household model of fertility decisions-Institutions and development.

**UNIT 4:** Macroeconomics of Development Environment and development-Development and the constraint of natural resources – Environmental problems in Economic Trade and foreign exchange – Role of international financial and trade institutions – Structural adjustment and stabilization.

#### **Semester II i) Public Economics**

# **Module 1: Government in a Market Economy:**

Theorems of Welfare Economics: Implications, Lump Sum Taxes and Trans Rationale for State Intervention: Market Failures and Externalities, Tax and Regulation Distribution, Social Choice, Voting Rules, Arrow Impossibility Theorem.

#### **Module 2: Public Expenditures: Rationale and Evaluation: (12 Hours)**

Public Goods: Pure and Local, Optimal provision, Lindale's Voluntary Exchange Approach, Preference Revelation mechanism, Private provision of Public Goods, Material goods, Club Goods, Evaluation of Government Expenditure: Elements of Cost-Benefit analysis.

#### **Module 3: Taxation: (14 Hours)**

Basic Concepts of Tax Theory: Direct vs. Indirect Taxes, Ability of Pay Horizontal and Vertical Equity. Commodity Taxation: Tax Rules, Optimal Commodity Taxation, Public Sector Pricing Income Taxation: Equity and Efficiency, Taxation and Labour Supply, Optimal Income Taxation (linear and non-linear). Tax Evasion: Basic Model, Auditing and Punishment.

# **Module 4: Reforms and Government: (10 Hours)**

Fiscal Rules: Rationale, International and Indian Experience.

Decentralization: Decentralization Theorem. India's Federal Structure: Taxation powers, Expenditure responsibilities, Intergovernmental transfers, VAT,GST.

# Semester II ii) Mathematical Techniques for Economists

**UNIT 1:** A set and its elements, basic set theoretic operations, De Morgan's Laws, slope and intercept of a straight line, higher order functions, logarithmic and exponential functions, rules of logarithms and exponentiation, limits of sequences.

**UNIT 2:** Derivative of a function, addition, multiplication and Chain rule, application of derivatives in Economics, Unconstrained optimization, in Economics, partial derivatives and their applications in Economics, introduction to integration and its applications in Economics.

**UNIT 3:** Constrained optimization in Economics, Lagrange multipliers and equality constraints, constrained optimization with inequality constraints, applications in Economics.

**UNIT 4:** Introduction to Matrices, adding and multiplying matrices, transpose and inverse of a matrix, solving simultaneous equations with matrices.

#### Semester II iii) Microeconomics – II

**UNIT 1:** Introduction to Game Theory, normal form games and extensive form games, dominant strategy equilibrium, Prisoner's dilemma, Nash Equilibrium in Pure and Mixed strategies, sub game perfection, Uncertainty and Choice under uncertainty, Certainty Equivalence. Measures of Risk Aversion.

**UNIT 2:** Oligopoly and its features, Cournot Model, Bertrand Model, back ward induction and Stackelberg model, comparison with monopoly, oligopoly in repeated games and tacit collusion, limit pricing and entry deterrence in monopoly.

**UNIT 3:** Moral hazard and adverse selection, market for lemons, Principle – agent models, optimal contracts under symmetric information, contracts under asymmetric information, screening and signaling, applications.

**UNIT 4:** Alternative Theories of the Firm:, Morris model of managerial enterprise, Williamson's model of managerial discretion, behavioural theories of the firm, Full cost pricing principle, existence, purpose and boundaries of firms, transactions costs, resource based, knowledge based and transaction based theories of the firm.

# Semester II iv) Macro Economics – II

**UNIT 1:** Imperfectly flexible prices, Price – setting under imperfect, competition, Menu costs, real rigidity and neutrality, Quadratic price adjustments.

**UNIT 2:** New Classical Economics, the (DSGE model), wealth Effects and the Government Budget Constraint; money/bond finance, The government budge deficit; Riparian Equivalence.

**UNIT 3:** New Keynesian Economics, Disequilibrium, multiple equilibrium, hysteresis Reconstructing the Keynesian multiplier, The NK model of inflation.

**UNIT 4:** Macroeconomic Policy, Rules versus Discretion, Credibility & Reputation, Dynamic Inconsistency Banks, Financial Intermediaries and Unconventional monetary Policy Inflation Targeting and Exchange Rates.