SEMESTER\_ I (Compulsory)

Macroeconomics\_I

Course code: Eco. 211

## Unit 1 National Income and Social Accounting

Social accounting— concept and importance; net economic welfare (NEW); measures of economic welfare (MEW); GNP and welfare measures; Main features and types of social accounts; national income and product accounts, input-output accounting, flow of funds accounts, Balance of payment accounting and national balance sheets; matrix presentation of social accounting; environmental accounting.

#### Unit 2 Sectoral Demand Functions

Income-consumption relationship; life cycle-permanent income theory of consumption and saving; consumption under uncertainty—the modern approach. Consumption and stock markets—the Barrow-Ricardo problem. Investment demand—Neoclassical and Keynesian versions (MEC approach); acceleration principle; Keynesian dynamic multiplier.

## Unit 3 Economic Fluctuations and Stabilization

Multiplier-accelerator interaction; Theories of trade cycle—Keynes, Hicks, Samuelson and Kaldor. Control of business cycles; Relative efficacy of monetary and fiscal policies. SEMESTER- I (Compulsory)

Mathematical Economics

Course code: Eco-212

### Unit 1 Differentiation and Economic Application

Derivatives—definition and evaluation; Rules of differentiation; Partial derivatives; Higher order differentiation; Euler's theorem; Uses of differentiation in economics; constrained optimization; Lagrangian multiplier, Marginal Concepts—Relationship between average, marginal and total elasticities; Logarithm and exponents.

## Unit 2 Integration

Indefinite integral; rules of integration; definite integral; Fundamental theorem of integral; properties of definite integral; Economic application of integrals; Consumer's surplus; Producer's surplus.

## Unit 3 Matrices, Input Out Analysis and Linear Programming

Some basic operations—adjoint and inverse; Cramer's rule; the Jacobean rule; The Hessian rule; Input-output analysis; Linear programming—graphical method.

# Unit 4 First Order Differential And Difference Equation

First Order differential Equations—definition and concept, general formula for first order linear differential equations; Exact differential equations and partial integration; Rules for integrating functions; Fist-order difference equations—definition and concept; general formula for first order difference linear equations; lagged income determination modal; Coloweb theorem.

SEMESTER- I (Compulsory) Economics of Development Course code: Eco-213

## Unit 1 Poverty, Inequality, and Development

Development gap—concept and measurement. Absolute and relative poverty, Measurement of inequality and poverty—Lorenz curve, poverty gap, Foster-Greer Thorbecke index, Human poverty index, Chennery- Ahluwalia development index.

## Unit 2 Theories of Development

The process of cumulative causation—Myrdal. Unlimited supply of labour— Lewis model; Ranis-Fei model; Critical minimum effort thesis; Low level equilibrium trap; Kremer's O-ring theory of economic development.

## Unit 3 Sectoral Aspects of Development

Importance of agriculture and industry in economic development—the model of complementarities between agriculture and industry, structure of labour markets in developing countries, Theory of rural urban migration—Harris – Todaro model; Choice of techniques and appropriate technology.

## Unit 4 Role of Institutions and Resource Allocation

Role of market and market failure; role of state and state failure; role of community and community failure; supply of local public goods; Good SEMESTER- I (Compulsory) International Trade Course code: Eco-214

## Unit 1 Theories of International Trade

Factor endowments and Heckscher-Ohlin theorem; Factor price equalization theorem; Empirical verifications of Heckscher-Ohlin theory - Leontief paradox; Factor intensity reversal; Stolper-Samuelson theorem; Technological gap model; Product cycle model; Economies of scale and international trade.

### Unit 2 Alternative Theories and Gains from Trade

International trade under imperfect competitions—concepts and measurement of intra industry trade; Neo Hotelling model; Neo Chamberlinian models; Strategic trade theory, Measurement of gains from trade and their distribution; Concepts of terms of trade; Offer curves and equilibrium terms of trade; Terms of trade and economic growth.

### Unit 3 Growth Effects and Theories of Protection

Effects of growth on trade; Rybczynski Theorem; Immiserising growth; Technical progress and economic growth; Tariff—partial and general equilibrium effects analysis; Optimum tariff, Tariff and terms of trade; Non-Tariff Barriers; Theory of dumping; Anti-dumping measures.

### Unit 4 Problems of Developing Countries and Economic Integration

Trade problems of developing country—unstable export market, Worsening terms of trade; Hypothesis of secular deterioration of terms of trade, Outward SEMESTER\_ I (Compulsory)

Microeconomics\_I

Course Code: Eco-210

### Unit 1 Choice under Certainty

Preferences and utility, Indifference curve and MRS; Utility functions; Utility maximization and choice; Indirect utility function; Dual of utility function; Homogeneity of demand functions; Income and substitution effects; Individual demand curve and compensated demand curve; Revealed preference hypothesis; Market demand functions; Relationship among elasticities; Linear and constant elasticity demand functions.

### Unit 2 Choice under Uncertainty

Expected utility, Von Newman-Morgenstern utility index, Expected utility maximization; Risk aversion and insurance premium; Asymmetric information-implications; Market signaling; Moral hazard; Principal-agent problems and solutions.

### Unit 3 Theory of Production and Costs

Production function; Law of variable proportions; Isoquant; Returns to scale; Elasticity of substitution; Some common production functions; Technical progress; Cost minimizing input choices; Expansion path; Cost functions, short-run and long-run distinctions.

### Unit 4 Pricing and Output under Different Forms of Market Structure

Perfect competition—short run and long-run equilibrium of the firm and industry; Constant, increasing and decreasing cost industries; Analysi