# WEST BENGAL STATE UNIVERSITY NEP SYLLABUS FOR ECONOMICS

# **PAPERS**

<b>Economics M</b>	Iajor:	
Semester 1 -	DSC1	Introductory Microeconomics
Semester 2 -	DSC2	Introductory Macroeconomics
Semester 3 -	DSC3	Mathematical Methods for Economics – I
Semester 4 -	DSC4	Intermediate Microeconomics – I
	DSC5	Intermediate Macroeconomics – I
	DSC6	Statistical Methods for Economics – I
	DSC7	<b>Development Economics</b>
Semester 5 -	DSC8	Intermediate Microeconomics – II
	DSC9	Intermediate Macroeconomics – II
	DSC10	Mathematical Methods for Economics – II
	DSC11	Indian Economy – I
Semester 6 -	DSC12	International Economics – I
	DSC13	Statistical Methods for Economics – II
	DSC14	<b>Introductory Econometrics</b>
	DSC15	Public Finance
Semester 7 -	DSC16	<b>Contemporary Development Economics</b>
	DSC17	Research Methodology with Application
Semester 8 -	DSC18	International Economics – II
	DSC19	Resource Economics
	DSC20	Indian Economy – II
	DSC21	History of Economic Thought

# **Economics Minor:**

Semester 1 - MIN/COR1 Introductory Microeconomics
Semester 2 - MIN/COR2 Introductory Macroeconomics
Semester 3 - MIN/COR3 Development Economics
Semester 4 - MIN/COR4 Indian Economy
Semester 5 - MIN/COR5 International Economics and Elementary Statistics
Semester 6 - MIN/COR6 Public Finance

# **Economics Skill Enhancement Course (SEC):**

Odd Semester – SEC1 Survey Methodology
Even Semester – SEC2 Indian Official Statistics

**Economics Multi Disciplinary Course (MDC): Understanding Economics** 

#### (DSC) DS-1: INTRODUCTORY MICROECONOMICS

ECODSC101T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# 1. Exploring the subject matter of Economics:

(6L+2T)

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; distinction between Microeconomics and Macroeconomics; the question of what to produce, how to produce and how to distribute output; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems.

# 2. Supply and Demand:

(16L+4T)

How Markets work, Markets and Welfare, Markets and Competition; determinants of individual demand/supply; demand/supply-schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

**3. The Households:** (18L+4T)

The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences within difference curves); properties of indifference curves; Consumer's optimum choice; income and substitution effects (Hicks & Slutsky); Ordinary and Compensated demand curves, Inferior goods and Giffen goods, Price consumption and Income consumption curves.

# 4. Production and Cost:

(12L+3T)

Production function, Total, Average and Marginal products, Isoquants and economic regions of production, Cost minimization and expansion path, Elasticity of substitution, Economies of scale, Cobb Douglas, Fixed coefficient and CES functions, short run and long run costs, Derivation of the cost function from production function.

# 5. Market Structure: (8L+2T)

Different types of market structures- Perfect competition, Monopoly, Monopolistic Competition and Oligopoly (concepts only)

# Suggested Readings:

1. Lipsey, R.G – An Introduction to Positive Economics. Widenfeld and Nicholson, London.

- 2. Maddala and Miller Microeconomics.
- $3.\ Koutsoyiannis-Modern\ Microeconomics$
- 4. Ryan and Pearce Price Theory
- 5. Henderson and Quandt Microeconomic Theory: A Mathematical Approach
- 6. Ferguson and Gould Microeconomic Theory

# (DSC) DS-2: INTRODUCTORY MACROECONOMICS

ECODSC202T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# **1. Introduction to Macroeconomics and National Income Accounting:** (16L+4T)

Basic issues studied in macroeconomics; measurement of gross domestic product; different methods of calculating National Income; NI- Where it comes from and where it goes —The circular flow of income; measurement of cost of living—CPI, GDP deflator; measuring joblessness— Unemployment rate, Unemployment and GDP— Okun's Law; national income accounting for an open economy; balance of payments: current and capital accounts; NI as a measure of economic welfare.

2. Money: (12L+3T)

Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy. Seigniorage- The revenue from printing money.

**3. Inflation:** (8L+2T)

Inflation and its social costs; Demand Pull and Cost Push inflation; hyperinflation; antiinflationary policies. Inflation and Interest Rates- Fisher Effect.

# 4. The Closed Economy in the Short Run:

(24L+6T)

Classical and Keynesian systems (difference in concepts); Simple Keynesian model of income determination, Multipliers; IS-LM model; Fiscal and Monetary Multipliers

- 1. Dornbusch, Fischer and Startz Macroeconomics, McGraw Hill, 11th edition, 2010.
- 2. N. Gregory Mankiw Macroeconomics, Worth Publishers, 7th edition, 2010.
- 3. Olivier Blanchard Macroeconomics, Pearson Education, Inc., 5 th edition, 2009.
- 4. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2 nd edition, 2005.
- 5. Errol D'Souza Macroeconomics, Pearson Education, 2009.
- 6. Branson Macroeconomics (2 n d) edition.

# (DSC) DS-3: MATHEMATICAL METHODS FOR ECONOMICS - i

ECODSC303T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

1. Preliminaries: (10L+2T)

Concept: Sets and set operations; relations; functions and their properties; number systems. Set Theory: Definition of a set and discussion of related concepts; Set types; Operations on sets; Nested sets; Cartesian product; Concept of Euclidean Space Functions and Relations: Definitions; Concepts of 2 'range', 'domain' and 'mapping'; Explicit and implicit functions; Types of polynomial functions and correspondences.

# 2. Brief Review of Differential and Integral Calculus:

(12L+3T)

Concepts of 'limits and continuity', 'derivative', 'partial derivative', 'total differential' and 'integral' (stress on both intuitive and mathematical understanding); differentiable functions: Applications of differential and integral calculus to the study of functions: level curves; slope and curvature of functions, area under a curve etc. second order derivatives. Applications: Slutsky equation and decomposition of price effect; Properties of demand functions.; savings function, Total average and marginal Cost & Production, Consumption function, saving & investment function.

# 3. Simultaneous Linear Systems and related applications of Matrix Algebra: (10L+2T)

Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations and their solution sets; determinants: characterization, properties and applications (ExampleMultipliers in IS-LM model).

# 4. Single-variable optimization:

(12L+3T)

Geometric properties of functions: convex functions, distinction between concave and convex functions; their characterizations and applications; local and global optima (maxima and minima). Applications: Equilibrium under cardinal utility theory; Maximization of Revenue and Profit, Minimization of cost of production in short run.

# 5. Multi-variable optimization:

(12L+3T)

Free and constrained optimization; Static optimization problems; applications Applications: Equilibrium under cardinal and ordinal utility theory; Maximization of Profit in perfect market form, Minimization of cost of production in long run.

- 1. K. Sydsaeter and P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002.
- 2. Blume, Lawrence and Carl Simon (1994), Mathematics for Economists, Norton.
- 3. Chiang, Alpha and Kevin Wainwright (2005), Fundamental Methods of Mathematical Economics, Fourth Edition, McGraw-Hill
- 4. Baldani, Bradfield and Turner, An Introduction to Mathematical Economic, C engage Leaening: 2007.
- 5. James M. Henderson and Richard E. Quandt,, Microeconomic Theory A Mathematical Approach, ED 3rd, Mcgraw Hill Book Company.
- 6. E.Silberberg, The Structure of Economics: A Mathematical Analysis," 2nd Edition, McGraw Hill, Boston, 1990

#### (DSC) DS-4: INTERMEDIATE MICROECONOMICS - i

ECODSC404T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# 1. Consumer Theory Revisited:

(20L+5T)

(i) Application of indifference curve approach: Derivation of labour supply and inter temporal choice- Saving and borrowing (ii) Choice under risk: Describing Risk, Preferences towards risk, Reducing risk, the demand for Risky assets-the trade-off between Risk & Return (iii) Revealed Preference – the weak axiom and substitution effect. 4

# 2. Market Structure: Perfect Competition

(12L+3T)

Features, Short run and long run equilibrium of the firm, Short run supply function, Industry equilibrium; Long run industry supply with or without external economies or diseconomies.

# 3. Imperfect Market Structure: Monopoly

(20L+5T)

(i) Monopoly and anti-trust policy; government policies towards competition; Sources of monopoly power, Index of monopoly power. (ii) Equilibrium with single plant, multiple plants, Constrained revenue maximisation, Natural monopoly; Dead-weight loss of Monopoly (iii) Price discrimination; peak-load pricing; bundling; two-part tariff. (iv) Monopsony.

# 4. Imperfect Market Structure: Monopolistic Competition

(8L+2T)

Concept: Product diversification; Short-run & Long-run equilibrium; Excess Capacity.

- 1. Hal R. Varian, Intermediate Microeconomics, a Modern Approach,
- 2. Pindyck & Rubinfeld Microeconomics
- 3. Koutsoyiannis Modern Microeconomics
- 4. Henderson & Quandt Microeconomic Theory- A Mathematical Approach

#### (DSC) DS-5: INTERMEDIATE MACROECONOMICS - i

ECODSC405T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

#### 1. The Classical System:

(12L+3T)

The Classical view of macroeconomics in respect of the determination of employment, output and prices. Say's law and Walras' law – The dichotomy between the real sector and monetary sector – neutrality of money.

# 2. The Complete Keynesian Model:

(16L+4T)

Derivation of aggregate demand and aggregate supply curve – Keynesian labour supply function – determination of equilibrium – wage rigidity – involuntary unemployment – Underemployment equilibrium – effects of change in money supply and other factors on complete Keynesian model – money illusion. o Comparison with the Classical system – price flexibility – Real balance effect.

# 3. Inflation, Unemployment and Expectations:

(16L+4T)

(i) Phillips curve; adaptive and rational expectations; policy ineffectiveness debate (ii) Aggregate supply and Phillips curve; Inflation, unemployment and Phillips curve Shift of Phillips curve, Phillips curve, Expectations and Inflation Inertia, Disinflation and sacrifice ratio. Rational expectations and Painless Disinflation, Natural Rate Hypothesis, Hysteresis.

# 4. Open Economy Models

(16L+4T)

Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity; asset market approach; Dornbusch's overshooting model; monetary approach to balance of payments; international financial markets.

- 1. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
- 2. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
- 3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
- 4. Errol D'Souza, Macroeconomics, Pearson Education, 2009
- 5. Branson, Macroeconomics (2nd) edition
- 6. Soumyen Sikdar Principles of Macroeconomics (OUP)
  - 7. R.T.Froyen. Macroeconomics-Theories and Policies, Prentice Hall; 9th Edition, 2008.

#### (DSC) DS-6: STATISTICAL METHODS FOR ECONOMICS - i

ECODSC406T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

1. Basic concepts: (4L+1T)

Population and sample, parameter and statistic; Data Collection: primary and secondary data, methods of collection of primary data; Presentation of Data: Univariate frequency distribution; cumulative frequency; graphic and diagrammatic representation of data

#### 2. Measures of Central Tendency:

(12L+3T)

Measures of Central Tendency: mean, median, mode and other quartile measures; geometric mean, harmonic mean, their relative merits and demerits

# 3. Measures of Dispersion:

(8L+2T)

Measures of Dispersion: absolute and relative - range, mean deviation, standard deviation, coefficient of variation, quartile deviation, their merits and demerits

# 4. Measures of Skewness and Kurtosis; Interpolation:

(8L+2T)

Moments- Central moments & Non-central moments-skewness=kurtosis

# **5. Bivariate Frequency Distribution:**

(12L+3T)

Simple Correlation: scatter diagram, simple correlation coefficient - Karl Pearson's correlation coefficient and its properties, probable error of correlation coefficient, Spearman's rank correlation coefficient, partial and multiple correlation, Regression Analysis: Properties of linear regression, explained and unexplained variation regression in bivariate frequency distribution.

**6. Time Series:** (8L+2T)

Meaning, Components of time series and their measurement, measurement of trend and statistical fluctuations; Two variable linear curve fitting analysis

7. Index Numbers: (8L+2T)

Meaning, Methods of construction (Price and quantity Index Numbers): Problems in the Construction of Index Numbers, Tests for index Numbers, Chain based Index, Cost of Living Index Number, Wholesale Price Index, Uses of Index Numbers (Example- Index numbers as indices of wellbeing, Stock market indices).

- 1. Kenny and Keeping: Mathematical Statistics, Part 1 & Part II
- 2. Giri and Banergee: Statistical Methods
- 3. Das, N.G., Statistical Methods, The World Press Pvt. Ltd., Calcutta.
- 4. Fundamentals of Statistics: Goon, Gupta, Dasgupta, The World Press, 1996

#### (DSC) DS-7: DEVELOPMENT ECONOMICS

ECODSC407T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

#### 1. Basic concepts of Development

(12L+3T)

Different concepts of development –Sustainable development, Participatory development, Inclusive development, Human development, Growth and Development– Broad Indicators of Economic Development–Per capita Income–Human Development Index, construction and interpretation of HDI; –Gender Development Index–Gender Empowerment Measure

# 2. Persistence of Underdevelopment and Strategies of Development: (24L+6T)

Characteristics of underdevelopment – Stages of growth - Obstacles to development – Trap Models – Vicious circle of poverty – Critical minimum effort thesis – Low level equilibrium trap – Process of cumulative causation – Big push argument targeting the big push-balanced vs. unbalanced growth; Hirschman model, Choice of technique and investment criteria, Concept of surplus labour – Surplus labour as potential saving – Economic development with unlimited supplies of labour (Lewis Model). Harris-Todaro model.

# 3. Poverty and Inequality:

(20L+5T)

Meaning of inequality, Inequality measures: Lorenz Curve, Range, Coefficient of variation, Gini-coefficient, Poverty, relative and absolute deprivation with respect to income, Poverty line, Poverty measures – Head count ratio, Poverty gap ratio, Income gap ratio, Sen's Index, Human Poverty Index, Hunger index, Multidimentional poverty index etc. Tackling Poverty – The World Bank Approach

4. Globalization: (4L+1T)

Globalization in historical perspective- Brettonwoods and its after math, the economics and politics of multilateral agreements;

- 1. Thirlwall: Growth and Development
- 2. Debraj Roy: Development Economics
- 3. G.M. Meier and J.E. Rauch.Leading Issues in Economic Development. Oxford University Press. (8th edition or latest)
- 4. K. Basu: Analytical Development Economics, OUP
- 5. Debesh Bhattacharya: Political Economy of Development
- 6. Todaro and Smith: Economic Development, Pearson Education, 2009

- 7. Y. Hayami, "Development Economics", (Oxford University Press)
- 8. Soumyen Sikdar (2013): Contemporary Issues in Globalization: An Introduction to Theory and Policy in India, OUP

#### (DSC) DS-8: INTERMEDIATE MICROECONOMICS - II

ECODSC508T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# 1. Market Structure: Oligopoly and Strategic Behaviour of Firms

(20L+5T)

Conjectural Variation & Reaction functions, Analysis of Cournot & Stackelberg; Collusive Oligopoly & Prisoners' dilemma in cartel stability, Nash equilibrium of game.

2. Market Failure: (12L+3T)

Externalizes; public goods and markets with asymmetric information-Moral hazard and adverse selection (concepts only)-Market for Lemons

**3. Input Markets:** (16L+4T)

Derived demand for a single input & multiple input in competitive & imperfectly competitive markets, Firm demand & industry demand, Adding up problem, Collective bargaining & exploitation, Rent & Quasi-rent.

# 4. General Equilibrium, Efficiency and Welfare

(12L+3T)

Equilibrium and efficiency under pure exchange and production; Conditions of Pareto optimality; overall efficiency and welfare economics.

- 1. Robert Gibbons. A Primer in Game Theory, Princeton University Press, 1992.
- 2. Gravelle & Ress, Microeconomics (3rd Edition)
- 3. Pindyck & Rubinfeld Microeconomics 4. Koutsoyiannis Modern Microeconomics 5. Maddala & Miller Microeconomics 10

#### (DSC) DS-9: INTERMEDIATE MACROECOMICS - II

#### ECODSC509T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

1. Economic Growth (20L+5T)

Harrod-Domar model; Solow model; golden rule; technological progress and elements of endogenous growth.

#### 2. Microeconomic Foundations

(32L+8T)

a) Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle, Duesenberry's relative income hypothesis and permanent income hypotheses; rational expectations and random-walk of consumption expenditure. b) Investment: determinants of business fixed investment; residential investment and inventory investment. Tobin's q, Accelerator model of investment. c) Demand for money: Transaction demand for money, Precautionary demand for money, d) Speculative demand for money, The Regressive Expectations Model, The portfolio balance approach, The Baumol-Tobin models of Cash Management, Money as a consumer's and producer's good.

# 3. Schools of Macroeconomic Thoughts (concept only)

(8L+2T)

Mercantilism, Physiocracy, Classicals; Keynesians; New-Classicals and New-Keynesians.

- 1. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
- 2. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
- 3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
- 4. Charles I. Jones, Introduction to Economic Growth, W.W. Norton & Company, 2nd edition, 2002.
- 5. Errol. D'Souza, Macroeconomics, Pearson Education, 2009. 11
- 6. Robert J. Gordon, Macroeconomics, Prentice-Hall India Limited, 2011.
- 7. Branson, Macroeconomics (2nd edition) 8. R. T. Froyen. Macroeconomics-Theories and Policies, Prentice Hall; 9th Edition, 2008

#### (DSC) DS-10: MATHEMATICAL METHODS FOR ECONOMICS - II

ECODSC510T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# 1. Multi-variable function: some concept

(10L+2T)

Convex sets; properties and applications; quasi convex functions and applications; the implicit function; homogeneous and homothetic functions: characterizations and application to comparative statics problems: Envelope theorem and applications.

# 2. Classical Optimization

(10L+2T)

First Order condition for optimum; Second Order Condition and sufficiency requirement; Local and Global Optima and Local-Global Theorem; Constraint qualification and Kuhn Tucker condition; Lagrangean Technique for optimization and its interpretation.

# 3. Linear Programming and Duality

(8L+2T)

Basic concepts and solution methods (graphical and simplex); Duality theorem. Applications: Duality in Consumer Theory: Producer's Theory.

# 4. Simultaneous Equation Systems:

(12L+3T)

Systems of linear equations: properties of their solution sets, Eigen Values, Eigenvectors. Applications: Simple Linear Input-Output models with fixed coefficients and their Solutions (Leontief Static open and closed model). Two good general equilibrium systems: existence of equilibrium, and comparative statics.

#### 5. Dynamical Methods: algebraic and geometric exposition

(12L+3T)

Single Equation linear Difference and Differential equations systems: Monotonic and oscillatory convergence, divergence and stability. Applications: Cobweb models, Samuelson Multiplier-acceleration model and their existence of equilibrium and comparative statics

# **6.** Game Theory and its Applications:

(9L+2T)

Constant and non-constant sum game, two-person zero sum game, concept of pure strategy and mixed strategy, Nash equilibrium method and method of dominance. Application: Cournot model, problem of prisoner's dilemma.

- 1. Intrilligator, Mathematical Optimization and Economic Theory, (1971).
- 2. A. Dixit, Optimization in Economic Theory, OUP, (1995).
- 3. Dorfman, Samuelson and Solow, Linear Programming and Economic Analysis.

- 4. Simon and Blume, Mathematics for Economists, Norton and Company, 1994.
- 5. K. Sydsaeter, P Hammond, Mathematics for economic analysis, Pearson Education, (2002).
- 6. A.C. Chiang, Mathematical Economics, McGraw Hill, 1995.

# (DSC) DS-11: INDIAN ECONOMY - I

ECODSC511T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

#### 1. Structure of Indian Economy

(12L+3T)

Introduction (a brief overview of Indian Economics History 1857-1947); Major features of the economy at independence, Structural constraints; Changes in the pattern of intersectoral distribution of National Income since Independence; Changes in the pattern of occupational structure; A brief overview of Indian Planning: achievements and failures, Niti Aayog; Background of Indian Economic Reforms - New Economic Policy, Redefining India's development strategy, changing role of state and market, Pattern of growth in post-liberalisation era, growth of the service sector

# 2. Population and Human Development

(8L+2T)

Size and growth rate of population in India, Changes in sex composition since inception of planning, Population policy and population projections for India, Demographic Dividend; Trends in poverty, inequality and unemployment, different estimates of poverty nature and types of unemployment in India, Policies undertaken for poverty eradication and employment generation

3. Agriculture (8L+2T)

Causes for low productivity in Indian agriculture, Problems of institutional credit in agriculture; Green revolution and its appraisal; Land reforms and its appraisal; Targeted public distribution system; Impact of Globalisation on Indian Agriculture, Post-reform Agricultural performance and its crisis

**4. Industry** (8L+2T)

Review of Industrial growth under planning regime; Industrial sickness in India; Role of small scale industries, in economics development; Government schemes for small scale industries, SMEs, MSMEs and Entrepreneurship development schemes; Role of trade union and social security measures in India; Post reform Industrial policy, Disinvestment policy and Privatisation.

5. Financial Sector (8L+2T)

An overview of the Indian Financial System; Reserve Bank of India, role of RBI and Monetary Policy; Role of commercial banks in India, Bank Nationalisation and associated problems, Profitability of commercial banks in India; Role of Development Banks in India.

6. External Sector (8T+2T)

Volume, composition and trends in India's foreign trade in the pre and post-Liberalisation period; Issues related to Foreign Exchange market, Balance of Payment, Rupee Convertibility, Foreign Direct investment, Export-Import policies

### 7. Indian Public Finance

(8T+2T)

Sources of Revenue of Union and State Governments; Introduction of GST and its implication; Union-State Financial Relation; Centre-State conflict on Finances; Central Finance Commission; Public expenditure and Public debt

- 1. Uma Kapila, Indian Economy: Performance and Policies (latest Ed.)
- 2. Uma Kapila, Indian Economy Since Independence (latest Ed.)
- 3. Jean Dreze and Amartya Sen, 2013. An Uncertain Glory: India and its Contradictions Princeton University Press.
- 4. Jean Dreze and Amartya Sen, Economic Development and Social Opportunity, OUP
- 5. Datt & Sundaram, Indian Economy (latest Ed.)
- 6. Mishra & Puri, Indian Economy (latest Ed.)
- 7. Desai V., 'The Indian Financial System and Development', Himalaya Publishing House, 5th

#### ECONOMICS MINOR – SEM I

### (MIN/COR) MA-1: INTRODUCTORY MICROECONOMICS

#### ECOMIN101T/ECOCOR101T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

1. Basic Concepts: (8L+2T)

What is economics? Scope and method of economics; The economic problem: scarcity and choice; Distinction between Microeconomics and Macroeconomics; Concept of Market, Demand &Supply – Market Equilibrium; Elasticity of Demand: Price Elasticity of Demand, Factors affecting the Price Elasticity of Demand- Measurement of Point Price Elasticity of Demand - Income Elasticity of Demand.

# 2. Consumers' Behaviour:

(14L+4T)

Marginal Utility- Law of Diminishing Marginal Utility- Derivation of Demand Curve from Marginal Utility Curve - Consumers' Surplus; Indifference Curve: Definition and Characteristics –Budget Line –Consumers' Equilibrium; Price effect, Income effect and Substitution effect- Inferior goods and Giffen goods (definitions only).

#### 3. Producers' Behaviour:

(14L+4T)

Concept of Production- Factors of Production- Production Function: Concepts of Total Product, Average Product and Marginal Product; Derivation of AP and MP curve from TP curve graphically - Law of Variable Proportions; Isoquants and its propertiesExpansion Path-Laws of Returns to Scale; Concepts of Revenue- Total Revenue, Average Revenue, Marginal Revenue; Derivation of AR and MR curve from TR curve – Relation between AR, MR and Price Elasticity of Demand; Cost of Produ

#### 4. Market Structure: Perfect Competition

(8L+2T)

Characteristics of Perfectly Competitive Market; Short-run and Long-run equilibrium of Perfectly Competitive firm and industry.

# 5. Market Structure: Imperfect Competition

(4L+1T)

Concepts and Characteristics of Monopoly and Oligopoly Markets.

# 6. Theory of Factor Prices: Rent and Wages

(10L+4T)

Rent: Ricardian Theory, Modern Theory, Quasi-Rent; Wage: Marginal Productivity Theory of Wages – Role of Trade Union in Wage Determination under competitive set up.

- $1.\ Lipsey,\ R.G-An\ Introduction\ to\ Positive\ Economics\ .\ Widenfeld\ and\ Nicholson,\ London.$
- 2. Ahuja, H.L Advanced Economic Theory.
- 3. Stonier Hague Economics
- 4. Mukherjee, Debes Essentials of Micro and Macroeconomics New Central Book Agency (P) Ltd.
- 5. Dewett , K.K –Modern Economic Theory 6. Joydev Sarkhel Adhunik Orthonitir Bhumika (Bengali version)

#### **ECONOMICS MINOR – SEM II**

# (MIN/COR) MA-2: INTRODUCTORY MACROECONOMICS

#### ECOMIN202T/ECOCOR202T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

**1. National Income**: (16L+4T)

National Income and its measurement-different methods and their drawbacks; GDP and GNP; Difference between Nominal and real GNP/GDP; The circular flow of income and expenditure.GNP/GDP as a true index of Nation's welfare; Concept of HDI.

#### 2. Macroeconomic Theories:

(16L+4T)

Classical Macroeconomic Theory and Keynesian Theory (concepts and historical background how they are different); Simple Keynesian Model (SKM) of Income Determination-Consumption Function–Relation between Average and Marginal Propensity to Consume-Multiplier Theory

# 3. Money and Banking:

(16L+4T)

Functions of Money–Value of Money Different Concepts of Money: M1, M2, M3 and M4; Concepts of Bank and Non-bank Financial Intermediaries–Functions of and Credit Creation by Commercial Banks–Central Bank-Functions and Credit Control Measures.

**4. Inflation**: (12L+3T)

Concepts of Inflation, Deflation and Stagflation–Inflationary Gap – Distinction between Demand Pull and Cost Push Inflation-Effects of Inflation; Anti-inflationary Fiscal and Monetary Policies.

- 1. Gupta, S.B Monetary Economics, S.Chand & Co., New Delhi
- 2. Ahuja, H.L Macroeconomics
- 3.Mukherjee, Debes Essentials of Micro and Macroeconomics, New Central Book Agency (P) Ltd.
- 4. Joydev Sarkhel Adhunik Orthonitir Bhumika (Bengali version)

#### ECONOMICS MINOR – SEM III

#### (MIN/COR) MA-3: DEVELOPMENT ECONOMICS

#### ECOMIN303T/ECOCOR303T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

# 1. Basic Concepts of Development:

(12L+3T)

Meaning of growth and development, Distinction between Economic Growth and Economic Development-Growth indicators-NNI and PCI, Concept and formulation of HDI.

# 2. Development Planning and its necessity

(12L+3T)

Balanced vs. Unbalanced growth.Complementary Roles of Agriculture and Industry -Role of Technology in Agriculture and Industry.

# 3. Population and Economic Development:

(8L+2T)

The Two Way Relation.

# 4. Capital Formation in an Underdeveloped Country:

(8L+2T)

Concept, stages of capital formation, role in underdeveloped economy, sources, problems of domestic capital formation in underdeveloped economy; Problems -Incentives for Savings and Investment.

# **5. Foreign Investment:**

(12L+3T)

Different forms -Their roles in Economic Development.

#### 6. Gender Related Issues:

(8L+2T)

Concept of GDI & instances of Gender Discrimination in the society

- 1. Todaro, M.P.: Economic Development in the Third World, Longman, New York.
- 2. Salvatore, D. and E. Dowling: Development Economics, Schaum's, Outline Series in Economics, McGraw Hill, New York.
- 3. Agarwala, A.N. and S.P. Singh: Economics of Underdevelopment, (eds.) Oxford University Press, London.
- 4. Meier, G.M. (ed.): Leading Issues in Economic Development, Oxford University Press, New York.
- 5. United Nations Development Programme, Human Development Report (Recent Years)

#### **ECONOMICS MINOR – SEM IV**

#### (MIN/COR) MA-4: INDIAN ECONOMY

#### ECOMIN202T/ECOCOR202T

5 Credits (4L+1T)

Total Number of Lecture Hours = 75

Syllabus:

#### 1. Structure of Indian Economy

(12L+3T)

Sectoral distribution of National Income and its change since inception of Planning; Occupational pattern in India- A trend analysis since Independence; Inequalities in India – income, consumption and wealth; Poverty in India; Poverty eradication programmes and their effectiveness; Nature and trend of unemployment in India

# 2. Human resources and economic development

(8L+2T)

Size and growth rate of population in India; Changes in sex composition since inception of planning; Population policy and population projections for India; Demographic dividend; Issues in labour migration

3. Agriculture (8L+2T)

Causes for low productivity in Indian agriculture; Green revolution and its appraisal; Land reforms and its appraisal; Targeted public distribution system.

**4. Industry** (8L+2T)

Review of Industrial growth under planning regime; Industrial sickness in India; Role of small scale industries, SMEs and MSMEs in economics development; Government schemes for small scale industries and entrepreneurship development; Role of trade union and social security measures in India.

**5. Banking** (8L+2T)

Structure of the Indian Financial System; Role of commercial Banks in India; Bank Nationalisation; profitability of banks in India; Role of Reserve Bank of India and Monetary Policy

### 6. Indian Public Finance

(8L+2T)

Sources of Revenue of Union and State Governments; Introduction of GST and its implication; Union-State Financial Relation; Centre-State conflict on Finances; Central Finance Commission; Public expenditure and Public debt

7. Foreign Trade: (8L+2T)

Economic Liberalisation and Economic Reforms of 1991; Volume and direction of India's foreign trade in the post-Liberalization period

- 1. Dutta R. and K.P.M. Sundaram: Indian Economy, S. Chand and Co. New Delhi
- 2. Misra S.K.and V. K. Puri: Indian Economy, Himalayas Publishing Co. Mumbai.
- 3. Agarwal A.N: Indian Economy, Vikash Publishing Co. Delhi
- 4. Gupta, S.B.: Monetary Planning in India, Oxford University Press, Delhi.
- 5. Mukherjee, Ghosse and Dutta, ACompendium of Indian Economy. Asian Humanities Press
- 6. Sarkhel J. and S. Seikh Salim: Bharatiya Arthaniti, Book Syndicate Pvt.Ltd, Kolkata

# (MIN/COR) MA-5: INTERNATIONAL ECONOMICS AND ELEMENTARY STATISTICS

ECOMIN505T/ECOCOR505T

Group-A, International Economics
Total Number of Lecture Hours = 50 (40L + 10T)

Syllabus:

# 1. Trade theory and development: Traditional arguments:

(16L+4T)

Why trade occurs between nations, Distinction between internal trade & international trade, Concept of Terms of Trade; Gains from Trade: Exchange gain & Specialization gain (concept only), Static gains from trade; Absolute Advantage & Comparative Advantage theory of International trade (concept only).

2. Trade Policy: (8L+2T)

Arguments for protection, Tariff and non-tariff trade barriers (Quota), Partial equilibrium effect of imposition of Tariff and Quota on importable; Export promotions Import Substitution industrialization strategy Regional Trading Blocks (concept only with its different types and examples)

# 3. Balance of Payment:

(10L+2T)

BOP Accounting - current & capital account balance, Why BOP balances itself? Autonomous & Accommodating transactions – BOP equilibrium; Concept of Exchange Rate – Nominal and Real exchange rate, Concept of Depreciation / Devaluation of currency

#### 4. International Institutions:

(6L+2T)

Salient features and functions of IMF & World bank.

- 1. International Economics: Trade & Finance, Dominick Salvatore, 11th Edn Wiley Publication
- 2. International Economics: Theory and policy, Krugman and Obstfeld, 8th Edn Pearson
- 3. International Economics: Rajat Acharyya, - Oxford University Press
- 4. World Trade and Payments: Caves, Frandel and Jones
- 5. Principles of Macroeconomics: Soumyen Sikdar

# Group-B: Elementary Statistics

Total Number of Lecture hours: 25 (18L + 7T)

Syllabus

# 1. Meaning and scope of statistics:

(4L+2T)

Variable and Attribute, Primary and secondary data. Population and Sample, Complete enumeration (census) and Sample Survey, Classification, Tabulation.

# 2. Charts and Diagrams:

(3L+1T)

Objectives of Diagrammatic Representation-Types of Chart and Diagram, Line diagram, Bar diagrams, Pie diagram.

# 3. Frequency Distribution:

(4L+2T)

Construction of Frequency Distribution-Cumulative Frequency Distributions. Diagrammatic representation of frequency distribution. Histogram, Frequency polygon and ogive.

# 4. Measure of central tendency:

(4L+1T)

Mean (A.M.) Median, and Mode.

# 5. Measures of Dispersion:

(3L+1T)

Range, and Standard Deviation. Relative measures of Dispersion: Coefficient of Variation.

- 1. Goon, A.M., Gupta, M.K. & Dasgupta B.: Basic Statistics, The World Press Pvt. Limited.
- 2. Das, N.G.: Statistical Methods, M. Das & Co.

#### ECONOMICS SKILL ENHANCEMENT COURSE

# ODD SEMESTERS (SEC) SE-1: SURVEY METHODOLOGY

ECOHSE101M
3 Credits (36L+9T)
Total Number of Lecture Hours = 45

Syllabus:

# 1. Introduction, Inference and Error in Surveys:

(8L+2T)

Introduction to survey methodology; Steps of the process of a survey, Examples of LargeScale Survey Instruments, Introducing the Concepts of Validity and Reliability, Sources of Error: Sampling and Measurement, Different Theories of Measurement Readings: Groves, et al. (2009), Chapters 1 and 2

# 2. Sampling in Survey Research:

(10L+3T)

Being Clear about the Population of Interest, Developing a Sampling Frame, Probability sampling; Simple Random and Systematic sampling; Stratification, Cluster and multistage sampling; Other probability designs, Sampling frames; Selection weights; Computing sampling errors, Examples of sample designs Readings: Groves, et al. (2009), Chapters 3 and 4

#### 3. Mode of Data Collection:

(10L+5T)

Face-to-face, Telephone, Self-administered, and Administrative records, Methods of computer assisted data collection; Impact on survey errors, Web surveys, Overview of response behavior; Comprehension; Memory search, Estimation and judgment; Delivery of response Pretesting: Focus groups; Cognitive interviews; Expert review; Pre-tests; Pilot tests Readings: Groves, et al. (2009), Chapter 5, 7 & 8

4. Nonresponse: (4L+2T)

Contacting sample units; Gaining the cooperation of sample units, Monitoring the progress of data collection; Response rates Readings: Groves, et al. (2009), Chapter 6

# 5. Post-Survey Processing; Estimation (Lepkowski):

(4L+3T)

Lecture: Editing data; Coding; Imputation; Construction of unit weights, Variance estimation; Analysis of survey data Readings: Groves, et al. (2009), Chapter 10 (Preferably students should be given an exposure of field survey to understand the process of survey methodology in a better way)

#### Reference Materials:

1. Groves, Robert et al. (2009): Survey Methodology, 2nd Edition. New York: Wiley The textbook will be available online.

- 2. Converse, J., & Presser, S. (1986). Survey Questions: Handcrafting the Standardized Questionnaire. Newbury Park: Sage Publications. (available online: http://mirlyn.lib.umich.edu/Record/012841736)
- 3. Kalton, G. (1983). An Introduction to Survey Sampling, Beverly Hills: Sage Publications. (available online: http://mirlyn.lib.umich.edu/Record/012841441)
- 4. Fowler, F., &Mangione, T. (1990). Standardized Survey Interviewing, Newbury Park: Sage Publications. (available online: http://mirlyn.lib.umich.edu/Record/012841712)

# EVEN SEMESTERS (SEC) SE-2: INDIAN OFFICIAL STATISTICS

ECOHSE202M

3 Credits (36L+9T)
Total Number of Lecture Hours = 45

Syllabus:

1. Introduction: (8L+2T)

What is Official Statistics? Methods of Collecting Official Statistics, Aims and Objectives, Indian Statistical System: Main functions of Statistical System in Indian, Institutional Framework; Official organizations for collecting/compiling/ publishing national/state level data on different variables

2. Economic Census: (14L+6T)

Economic Statistics, Population Statistics, Employment Statistics, Agriculture Statistics, Financial Statistics - Main Publications, Who collects - Periodicity and Features

# 3. Sources of demographic data:

(8L+4T)

Registration of Vital events. Rates and ratios. Measures of mortality. Measures of fertility and Reproduction. Use of demographic data for policy formulation.

# 4. International Statistical System:

(6L+3T)

Comparison of major macro variables - National Income/GDP. Selected topics from: Purchasing power parity; Indicators relating to Energy, environment, Gender, Industry, National accounts, Social Statistics and Trade.

# Reference Materials:

- 1. M. R. Saluja: Indian Official Statistical Systems.
- 2. CSO (MOSPI) Publication: Statistical System in India.
- 3. United Nations publications

- 4. RBI: Handbook of Statistics for the Indian Economy (various years)
- 5. Economic Survey, Govt. of India, Ministry of Finance (various years)
- 6. R. Ramkumar: Technical Demography.
- 7. K. Srinivasan: Demographic Techniques and Applications.
- 8. B. D. Mishra: An Introduction to the Study of Population.
- 9. H. S. Shryock: The Methods and Materials in Demography

# **ECONOMICS MULTI-DISCIPLINARY COURSE**

#### (MDC) MD-1: UNDERSTANDING ECONOMICS

#### ECOMDC101M

3 Credits (36L+9T)

Total Number of Lecture Hours = 45

Syllabus:

# 1. Exploring the subject matter of Economics

(2L+0T)

Why should one study Economics; Scope and methods of Economics; Distinction between Microeconomics and Macroeconomics; Problem of Scarcity and Choice – what to produce, how to produce and how to distribute the output; Economic systems (Capitalism, Socialism, Mixed Economy)

# 2. Supply and Demand: How Markets Work

(8L+2T)

Laws of Demand and Supply; Determinants of Individual Demand and Supply; Concept of Equilibrium; Process of trial and error and Determination of Equilibrium Price and Quantity; Shifts in the Demand and Supply curves; Markets and Competition; Types of Markets - Perfect Competition, Monopoly, Oligopoly (concepts only)

#### 3. Macroeconomics: An Overview

(10L+3T)

Concepts of Gross National Product, Gross Domestic Product, National Income; Circular Flow of National Income; Real and Nominal National Income; • Problem of Inflation – causes and its remedies; • Difference between Growth and Development; Concept of Human Development Index

4. Indian Economy (16L+4T)

Characteristic features of Indian Economy as a Developing Country; Sectoral Composition of National Income of India; Problem of Poverty, Unemployment and Underemployment in India (overview only); Introduction to Indian Financial System; Reserve Bank of India, Commercial Banks, Development Banks; Financial Instruments – Bank Deposits, Equity Market, Mutual Funds (concepts only)

- 1. Mukherjee, Debesh Essentials of Micro and Macro Economics, New Central Book Agency (P) Ltd.
- 2. Ahuja, H.L. Macroeconomics
- 3. Gupta, S.. B Monetary Economics, S. Chand& Co., New Delhi
- 4. Majumder, Siddhartha Indian Financial System and Financial Market Operations
- 5. Mishra and Puri Indian Economy (latest edition)
- 6. Datt and Sundaram Indian Economy (latest edition)
- 7. Sarkhel Joydeb Byastigato o Samastigato Arthaniti