# **SYLLABUS**

# For

# **B.A/B.SC.** *IN ECONOMICS*

# **Effective from the Academic Session 2017-2018**



# **Department of Economics**

# **Aliah University**

(New Town Campus)

## **3-YEAR B.A./B. Sc. COURSE IN ECONOMICS DEPARTMENT OF ECONOMICS ALIAH UNIVERSITY** New Town, Kolkata - 700 186

# 1<sup>st</sup> Year

# **Semester-I**

# **SYLLABUS**

#### **TITLE OF THE PAPER** PAPER L Т Ρ С REMARKS CODE PAPER EC 101 Microeconomics I 3 0 4 Theory 1 Theory Macroeconomics I 3 EC 103 1 0 4 Theory Mathematical Techniques in EC 105 3 1 0 First 4 Economics I Semester Subsidiary 1 3 Theory 1 0 4 Subsidiary 2 3 4 Theory 1 0 English Theory EN131 3 1 0 4 TOTAL 18 24 6 0

#### **First Year First Semester**

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week;

# 1<sup>st</sup> Year

# Semester-II

## **SYLLABUS**

## **First Year Second Semester**

PAPER	TITLE OF THE PAPER	PAPER CODE	L	Т	Р	С	REMARKS
Theory	Microeconomics II	EC 102	3	1	0	4	
Theory	Macroeconomics II	EC 104	3	1	0	4	
Theory	Statistical Methods in Economics	EC 106	3	1	0	4	Second
Theory	Subsidiary 1		3	1	0	4	Semester
Theory	Subsidiary 2		3	1	0	4	
Theory	Elementary Arabic and Islamic Studies	AI132	3	1	0	4	
	TOTAL			6	0	24	

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week;

# ALIAH UNIVERSITY DEPARTMENT OF ECONOMICS

# **SYLLABUS**

## COURSE NAME: 3-YEAR B.A./B.SC. IN ECONOMICS

#### Subject Name: Microeconomics I

Subject Code: EC 101

1<sup>st</sup> Year

**SEMESTER I** 

## **MICROECONOMICS I**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **UNIT-1: Theories of Demand and Supply**

- Introduction to Microeconomics: Nature and Scope of Microeconomics, Scarcity and Choice, Normative Economics and Positive Economics, Production Possibility Curve, Price System as an Economic Mechanism, Evolution of Market Economy, Factor Services and Division of Labour.
- Demand: Concept of Demand, Law of Demand, Demand Schedule, Demand Curve, Demand Function, Change in Demand and Movement along with the Demand Curve, Elasticity of Demand, Different Types of Elasticity of Demand, Cross Elasticity of Demand, Unitary Elasticity of Demand, Income elasticity of Demand.
- Supply: Definition, Stock and Supply, Law of Supply, Supply Schedule, Supply Curve, Supply Function, Change in Supply and Movement along with the Supply Curve, Market Equilibrium, Consumer's and Producer's surplus, Elasticity of Supply, Different Types of Elasticity of Supply.

#### **UNIT 2 : Theories of Consumer Behavior**

4. **Utility:** Definition, Total Utility and Marginal Utility, Cardinal Utility and Ordinal Utility, Law of Diminishing Marginal Utility with Criticism, Equilibrium.

- Indifference Curve Analysis: Assumption Indifference Curve and Indifference Map -Properties of Indifference Curve - Slope and Marginal Rate of Substitution - Shapes of Indifference Curve - Budget Constraints, Equilibrium; Price, Income and Substitution Effects

   Normal Goods, Giffen Goods and Inferior Goods. Concepts of Price – Consumption curves (PCC), Income Consumption Curves (ICC), Engel Curve
- Revealed Preference approach: Strong and weak axioms of revealed preference properties of demand function – Index numbers.

#### **Unit 3: Theories of Firm**

- 7. Theories of Production: Technology and technological efficiency General concept of Production function – Concepts of total product, average product and marginal product –Return to factor and returns to scale - Isoquants and diminishing rate of factor substitution – Elasticity of Substitution –Some examples of technology (fixed proportion, perfect substitute, Cobb – Douglas Production Function, CES Production Function), General concept of homogenous production function and its properties.
- 8. Theories of Costs Economic / Opportunity Cost and accounting cost, Concept of sunk cost Time dimension of cost –Long run cost function-Relation between expansion path and long run total cost curve Functional coefficient and shape of long run average cost. Cost in the short run total cost Fixed and variable cost Marginal cost Average cost Derivation of short run cost— Relation between short run and long run cost Multi-product firm and economies of scope Optimizing behavior of firm: constrained output maximization, Constrained Cost minimization Expansion path Input demand and input demand function.

#### **Unit 4. Market Morphology I**

9. Prefect Competitive Market : Assumptions and its implications – Market Demand – Demand curve for an individual firm Supply function: Time dimension of supply function – very short Period, short period and long period – concept of external economies and diseconomies – Commodity Market Equilibrium – Short period (run) equilibrium of firm and industry – Long run supply curve – Constant, increasing and decreasing cost industry – consumer's and producer's surplus – Efficiency of Competitive market – Effects of tax – subsidy and price

## **References:**

1.7	Ahuja, H.L.	: Advanced Economic Theory – Microeconomics
		Analysis, S. Chand and Co. Ltd., New Delhi.
2.	Gauld, J.P. and Edward P. L.	: Microeconomic Theory, Richard. Irwin, Homewood.
3.	Gravelle and Rees-	: Microeconomics; Pearson Education, 2nd Edition
4.	G.S. Maddala and E. Miller.	: Microeconomics. McGraw-Hill International Editions.
5.	Henderson J. and R.E. Quandt	: Microeconomic Theory: A Mathematical Approach,
		McGraw Hill, New Delhi.
1.	Heathfield and Wibe	: An Introduction to Cost and Production Functions,
		Macmillan,London.
2.	Koutsoyiannis, A.	: Modern Microeconomics, Macmillan.
8.	Lipsey, R.G. and K.A. Chrystal	: Principles of Economics, Oxford University Press,
		Oxford.
9.	Mansfield, E.	: Microeconomics (9th Edition), W.W. Norton and
		Company, New York.
10	. Ray, N.C.	: An Introduction to Microeconomics, Macmillan
		Company of India Ltd., Delhi.
11.	R S. Pindyck, D.L. Rubinfeld and Me	ehta: Microeconomics, 7 <sup>th</sup> Edition, Prentice Hall, India.
12	Samuelson, P.A. and W.D. Nordhaus	: Economics, Tata McGraw Hill, New Delhi.
13.	Stonier, A.W. and D.C. Hague	: A Textbook of Economic Theory, ELBS & Longman
		Group, London.
14.	Varian, H.R.	: Intermediate Microeconomics : A Modern Approach,
		East-West Press, New Delhi.

# **ALIAH UNIVERSITY**

# DEPARTMENT OF ECONOMICS

# **Syllabus**

## COURSE NAME: 5-YEAR INTEGRATED M.A./M.SC. IN ECONOMICS

## Subject Name: Macroeconomics I

Subject Code: EC 103

1<sup>st</sup> Year

**SEMESTER I** 

## MACROECONOMICS I

Total Marks: 50

Teacher Assessment: 10

Written Exam: 40

#### **Unit 1: Introduction to Macroeconomic Theory**

(a) Economy as a circular flow between firm sector and household sector – Firm, Household and Government

(b) Basic Macroeconomic Variables - Configurations of Aggregate Output, Employment, Interest and Price Level

(c) Fundamental Macroeconomic Problems – unemployment, inflation--Fluctuation of output – rate of growth – high unemployment, hyper -inflation, depression and stagflation

Text:

i) N.G. Mankiw- Macroeconomics, Worth Publishers, Chapters 1, 4, 9

ii) W. H. Branson - Macroeconomics - Theory and Policy (2nd ed), AITBS,

Chapter 1, 2

#### **Unit 2: Concepts of Income and Output**

Gross National Product (G.N.P), Gross Domestic Product (G.D.P), Net National Product (NNP), Personal Income (PI), Disposable Income, Relation between GNP, GDP, NNP and PI,Nominal and Real GNP,GNP Deflator, Methods of Measurement of GNP – Measuring Gross Value of GNP – Factor Share Method, Expenditure Method, Value Addition Method, Foreign or External Sector Text:

i) Mankiw- Macroeconomics, Chapter 3ii) W. H. Branson – Macroeconomics – Theory and Policy (2nd ed), AITBS

#### **Unit 3: Introduction to Income Determination**

Aggregate Demand– Components– Consumption, Investment, Government Expenditure and Net Exports- Consumption Function – Consumption and Savings. Aggregate Demand and Autonomous Spending- Equilibrium Output – Keynesian Cross Diagram- Multiplier- Stability of Equilibrium Output- Paradox of Thrift– Government Budget – The Balanced Budget Multiplier- Taxes as a function of income- Multiplier and changes in tax rate

Text:

i) Mankiw- Macroeconomics, Chapters 10, 11, 13, 14
ii) W. H. Branson – Macroeconomics – Theory and Policy (2nd ed), AITBS

#### **Unit 4: Money, Interest and Income**

The Goods Market – Consumption Demand – Investment Demand-Planned Investment and Interest Rate- Goods' Market Equilibrium – IS Curve-Derivation of IS Curve- Slope, position off of the IS Curve – Excess Supply and Excess Demand in Commodity and Asset Market-- Wealth Budget Constraint – Nominal and Real Form – The Demand For Real Balance.

Supply of Money and Money Market Equilibrium – LM Curve, Slope and Positions off the LM Curve, Equilibrium in goods and asset market, Changes in Equilibrium levels of income and interest rate, Adjustment towards equilibriums – Comparative Statics and Dynamics in a Formal Model- Monetary Policy – Transmission Mechanism-Liquidity Trap – Interest inelasticity. Fiscal Policy and Crowding Out

Text:

i) Mankiw- Macroeconomics, Chapters 10, 11

ii) W. H. Branson - Macroeconomics - Theory and Policy (2nd ed), AITBS

#### **Unit 5: Output, Price and Employment**

(a) Supply of Output – Aggregate Production Function

(b) Aggregate Demand for Labour – Keynes' Relative Wage Hypo thesis -Downward Inflexibility of Wage

(c) Aggregate Supply Function – Relation between Aggregate Supply and Price

(d) Aggregate Demand Function – Derivation of Aggregate Demand Curve

(e) Shifts in Aggregate Demand and Supply Curve- Monetary and Fiscal Policy

(f) Determination of Aggregate Output, Employment, Rate of Interest and Pr ice

(g) Comparison of Keynesian and Classical Position – Aggregate Supply and Demand in Classical Theory- Neutrality of Money – Classical Dichotomy – Effects of Monetary and Fiscal Policy in

Classical Framework

#### Text:

i) N. G. Mankiw- Macroeconomics, Worth Publishers, Chapters 4, 6, 10

ii) W. H. Branson - Macroeconomics - Theory and Policy (2nd ed), AITBS

#### **References:**

1.	Ackley, G	"Macroeconomics: Theory and Policy", Macmillan, New York.
2.	Andrew B. Abel and	: "Macroeconomics", Pearson Education, Inc.
	Ben S. Bernanke	
3.	Branson, W. A.	"Macroeconomic Theory and Policy", 3rd Ed., Harper & Row, New York.
4.	Dornbusch, R and F. St	anley: Macroeconomic, McGraw Hill, Inc., New York.
5.	Errol D'Souza :	Macroeconomics, Pearson Education, New Delhi.
6.	Hanson, A.H.	: A Guide to Keynes, McGraw Hill, New York.
7.	Heijdra, B.J. and	: Foundations of Modern Macroeconomics, Oxford University Press, Oxford.
	F.V. Ploeg	
8.	Keynes, J.M.	: The General Theory of Employment, Interest and Money, Macmillan, Lndn.
9.	Lipsey R.G. and	: "Principles of Economics", 9th Ed., Oxford UniversityPress.
	K.A. Chrystal	
10.	Mankiw N. Gregory	"Macroeconomics", Worth Publishers.
11.	Soumen Sikdar	: Principles of Macroeconomics. Oxford University Press.
12.	Shapiro, E	"Macroeconomic Analysis" Galgotia Publication, New Delhi.
13.	Stiglitz J. E. and Carl	: Principles of Macroeconomics, W.W. Norton & Company, New York.
	E. Walsh	
14.	Paul Samuelson and	: "Economics" (18th Ed.) Tata Hill Publishing Company, New Delhi.
	Nordhaus	

# **ALIAH UNIVERSITY**

# DEPARTMENT OF ECONOMICS

# **SYLLABUS**

#### COURSE NAME: 3-YEAR B.A./B.SC. IN ECONOMICS

Subject Name: Mathematical Techniques in Economics I

### Subject Code: EC 105

1<sup>ST</sup> YEAR SEMESTER I

Total Marks: 50 Teacher Assessment: 10

Written Exam: 40

#### Unit 1: Some Basic Mathematical Concepts with Economic illustrations

a) Role of Mathematics in Economics Analysis, Concepts of Variables, Constants, and Parameters. The real-number system, A.P. and G.P.

b) Types of function – Straight Line, rectangular hyperbola, parabolic, circular, exponential and logarithmic and their geometrical representations, Slope of the Line, Inverse function, Homogeneous function, Homothetic function, Equations and identities, inequalities, Systems of Equations.

Text:

i) Alpha C. Chiang & Kevin Wainwright: *Fundamental Methods of Mathematical Economics (4th ed.)*, 2005, McGraw-Hill, New York. Chapters 1-3.

**Unit 2:** <u>Calculus and its applications in economics</u> [One and several (but emphasis should be on two) variable functions]

a) Differential Calculus: Concepts of first and second order derivatives, rules of derivatives-addition, subtraction, product and division, and derivatives of functions; Concepts of partial derivatives.
 Applications – Elasticity, utility, production- cost- revenue- profit functions.

**b) Maxima and Minima**: unconstrained optimization, necessary and sufficient conditions for local optima, notions of concavity and convexity of functions, points of inflexion. Constrained optimization (equality constraints) –the method of Lagrange multipliers, interpretation of the necessary conditions and of the Lagrange multiplier, sufficient conditions -the Bordered Hessian.

**Applications**- Equilibrium of a firm and consumer, Interrelationships among total, marginal and average costs and revenues.

c) Integral Calculus: Rules of Integration, Methods of Integration, Integration by parts and Definite integrals - area under curves.

**Economic examples** -measures of consumer surplus, present discounted values calculation and elements of investment analysis.

**d**) **Difference and Differential Equations:** Nature, Solution of First Order Equations-homogeneous and non-homogeneous. **Economic examples** – Cobweb and other simple Dynamic Models.

#### Text:

i) Chiang & Wainwright: Fundamental Methods of Mathematical Economics, Chapters 7, 8, 9, 12, 14, 16.

#### Unit 3: Linear Algebra & Input-Output System

a) Various types of Matrices and Matrix operations. Determinants. Inverse of a Matrix. Rank of Matrix, Crammer's Rule. Solution of simultaneous Equations (upto 3 variables).

b) Basic concepts of Linear Programming Problems (LPP) - Solutions –Graphical method, Duality.

c) Input-Output Analysis. (Static open models only)

Text:

i) Chiang & Wainwright: Fundamental Methods of Mathematical Economics, Chapters 4, 5.

#### **References:**

1. Knut Sydsaeter and Peter J. Hammond: *Mathematics for Economic Analysis* (Pearson Education) (2003).

2. Carl Simon and Lawrence Blume: Mathematics for Economics, Norton (1994).

3. H. Scott Bierman and Luis Fernandez: *Game Theory with Economic Applications* (2 nd edition) Pearson Education (2003).

4. R.G.D. Allen: Mathematical Analysis for Economists, Mc Millan, London (1980).

5. G. Archibald and R. Lipsey: An *Introduction to Mathematical Treatment of Economics*. AITBS (1987).

6. A. Henderson and R. Quandt - Microeconomic Theory, McGraw Hill, International Edition.

7. Taro Yamane: Mathematics for Economists, Prentice Hall of India, New Delhi (1975).

8. Badal Mukherji and V. Pandit – Mathematical Methods for Economic Analysis, Allied Publishers, Second edition (1989).

# First Year, Second Semester

#### Subject Name: Micro Economics II

## Subject Code: EC 102

1<sup>st</sup> Year

# **SEMESTER 2**

## MICROECONOMICS II

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### Unit – 1 Market Morphology II

1. Monopoly -- Sources of Monopoly power- Average Revenue and Marginal Revenue – Profit maximization –Effects of Tax – Price discrimination: First, Second and Third Degree – Two part tariff – Multiple plant monopolist –Concept of monopoly power – Mark up pricing — Social Costs of monopoly power and deadweight loss – Natural monopoly and its regulation - Monopoly equilibrium under sales maximization; comparison between profit maximization and sales maximization.

**2.** Monopolistic Competition: Assumptions – Product differentiation and Demand curve – Concept of Industry group – Equilibrium of the firm – Excess capacity and its interpretation —A simple location model of product differentiation (Hotelling's model).

3. Oligopoly: Simultaneous Quantity Setting: Cournot Equilibrium; Simultaneous Price Setting: Bertrand Equilibrium and Bertrand Paradox, Product differentiation in Bertrand model; Quantity Leadership: Stackelberg Equilibrium; Price Leadership; Collusion and Formation of Cartel; Cartel Instability, Punishment strategies and Cartel Stability; Price Rigidity: Kinked Demand Curve Model

Text:

1. Pindyck, Rubinfeld and Mehta: Microeconomics (Pearson Education Asia), 6th Edition, Chapters 7,8,9,10,11,12

2. Ferguson and Gould: Microeconomics, 6th Edition, Chapters 9,10,11,12

3. Varian H.R: Intermediate Microeconomics, East-West Press, 7th Edition, Chapters 22, 24, 25, 27

#### Unit – 2 <u>Factor Market</u>

1. Competitive Factor Markets – Demand for factor – One input case – Several Inputs – Market demand curves –Derivation of labour supply curve - Equilibrium in a Competitive factor market – Adding–up problem.

**2.** Factor demand in imperfect competition – Single input case – several inputs – exploitation and role of trade union – Rent and Quasi-rent.

Text

- 1. Pindyck, Rubinfeld and Mehta: Microeconomics (Pearson Education Asia), 6th Edition, Chapter 13
- 2. Ferguson and Gould: Microeconomics, 6th Edition, Chapters 14, 15
- 3. Maddala and Miller: Microeconomics, Edition2006, Chapters 15, 16, 17
- 4. Varian H.R: Intermediate Microeconomics, East-West Press,7th Edition, Chapters 9.8

#### Unit 3 : Choice under Uncertinity

Expected utility theorem and attitude towards risk Utility function and expected utility; Risk preference and risk aversion; Concept of risk premium and certainty equivalence.

Applications: Demand for risky assets: trade-off between risk and return; Reducing risk: Fair insurance; Insurance with asymmetric information: moral hazard, adverse selection (concepts only)

Text:

1. Pindyck Rubinfeld and Mehta: Microeconomics; Pearson Education, 5th Edition Chapter 5

2. Anindya Sen: Microeconomics (OUP),2nd Edition Chapter 15, Section 15.1-15.4

3. Varian: Intermediate Microeconomics East-West Press, 6th Edition, Chapter 12, chapter 13, section 13.1

#### Unit – 4 General Equilibrium, Welfare Economics and Market Failure

Pareto optimality and welfare, 2X2 Exchange: Pareto efficiency, Utility Possibility Frontier; 2X2 Production: Pareto efficiency, Production Possibility Frontier; Grand Utility Possibility Frontier; Competitive Equilibrium and Pareto efficiency.

Market failure and policies, Market Failure under externality: Coase Theorem, scope for government. Intervention: taxes and subsidies as instruments. Pareto optimality with public goods and market failure.

Text

1. Varian: Intermediate Microeconomics; East-West Press, 6th Edition Chapters 30, 31, 33

- 2. Anindya Sen: Microeconomics; OUP, 2nd Edition Chapter 14, Section 14.4-14.6
- 3. Pindyck Rubinfeld and Mehta: Microeconomics; Pearson Education, 5th Edition Chapters 16, 18.

# Subject Name: MACROECONOMICS II Subject Code: EC 104 1<sup>ST</sup> YEAR SEMESTER 2

# Macroeconomics II

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### Unit 1: Money and Inflation

**Money**: The Classical and Modern View- Definition and functions of Money. Origins of Money including Gresham's Law. Money Creation, Models of Banking – ratios approach and competitive banking system, money supply and competitive banking. Money and Relative Values – money as a veil, neutrality of money, money illusion, real and monetary effects and price level changes.

Text: Lipsey and Chrystal, Chapters 20 and 21 (462-464).

Reserve Bank of India, Targets and instruments of monetary policy. Text: Sikdar. Chapter 6 (79, 82-84), Samuelson and Nordhaus Chapter 29 (529- 532).

**Inflation:** Definition and measurement of Inflation rate – CPI and GNP Deflator. Index-number problems in measuring the cost of living. Types of Inflation – Moderate inflation, Galloping Inflation and hyperinflation. Impact of Inflation – Correcting economic variables from inflationary effects. Quantity theory approach to inflation

[Text : Samuelson and Nordhaus, Chapter 32. G, Mankiw, Chapter 5, 24.]

#### Unit 2 Supply Side of the Economy

- 1. Unemployment: measures-types of unemployment- Okun's Law, Economic Cost of Unemployment. Job loss, job finding and natural rate of unemployment; Job search and frictional unemployment Wage rigidity and structural unemployment: minimum wage, union and collective bargaining, efficiency wage.
- 2. Basic concept of aggregate supply curve- the long run as vertical aggregate supply curve and the short run as horizontal aggregate supply curve; full employment equilibrium and unemployment equilibrium in terms of the AD-AS model and adjustment process.
- 3. Alternative models of derivation of the aggregate supply curve; analysis of short run and long run effects of shocks under adaptive expectation.
- 4. Phillips curve as supply side relation, short run and long run tradeoff between inflation and unemployment and traditional concept of sacrifice ration, types of inflation. Basic concept of rational expectation and irrelevance of the traditional concept of sacrifice ratio.

Text:

- 1. Mankiw N.G: Macroeconomics (Worth Publishers), 5th Edition, ChapterS 6,9, 13
- 2. Dornbusch, Fisher and Startz: Macroeconomics (Tata McGraw-Hill),9th Edition, Chapters 5, 6,7
- 3. Blanchard Macroeconomics (Pearson Education), 4th Edition, Chapters 6,7,8
- 4. Bernanke and Abel: Macroeconomics, 4th Edition Chapters 8,9

#### Unit 3 : Theories of Economic Growth

Solow model, Golden Rule of capital, impact of changes in saving propensity, population growth and technological progress. Growth accounting and Solow residual, issue of absolute and relative convergence.

Endogenous Growth Theory- The AK model (introduction).

[Text : N.Gregory Mankiw Ch 7 Ch.8]

#### Unit 4 : <u>Theories of Consumption and Investment</u>

Consumption - Keynes and consumption function, inter-temporal choice, life cycle hypotheis, relative income hypothesis and permanent income hypothesis.

Investment—business fixed investment, neo-classical approach, Tobin's q, Residential investment and accelerator model of inventories.

G, Mankiw Chapters 16 and 17.

#### Unit 5: <u>Demand for Money</u>

Demand for money: Portfolio theory of money demand, Baumol-Tobin analysis of cash management. G, Mankiw Chapter 18.

#### Readings

Texts

1. N. Gregory Mankiw, (2000), Macro-Economics, 4th Edition or latest, Macmillan.

2. Soumen Sikdar. Principles of Macroeconomics. Oxford University Press.

#### References

3. R.E. Hall and D.H. Papell. Macroeconomics. WWW Norton. (6th edition).

4. Rudiger Dornbusch, Stanley Fischer and Richard Startz, Macroeconomics, 7th (or later) edition, McGraw Hill.

5. Richard Froyen. Macroeconomics. Pearson Education. (9th edition or latest).

## Subject Name: Statistics for Economics Subject Code: EC 106

1<sup>st</sup> Year

SEMESTER 2

# **Statistics for Economics**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1 : Data Presentation**

Data -Classification and presentation, Population and Sample, Collection of Data - Variable and Attribute.

Frequency distribution - Diagrammatic representation of frequency distribution. Ref: Goon,Gupta,Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 2: Central Tendency**

Arithmetic Mean, Median and Mode (for both grouped and ungrouped data), Comparison of Mean, Median and Mode, Geometric and Harmonic Mean, Composite Mean.

*Application:* Index Numbers: their concept as weighted averages, Problems in the Construction of Index Numbers, Chain Index, Cost of Living Index Number (different formulae)-- Wholesale Price Index and Cost of Living Index in India, Uses of Index Numbers.

Ref: Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 3 Dispersion**

Range, Mean Deviation Quartile Deviation and Standard Deviation, Measures of Relative Dispersion, Curve of Concentration.

Measurement of Economic Inequality: Gini Coefficient and Lorenz Curve. Goon,Gupta,Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 4 Skewness and Kurtosis**

Central and non central moments, different measures of skewness and kurtosis Ref: Goon,Gupta,Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 5 Probability Theory**

1. Elements of Probability Theory - Sample Space, Events Meaning of Probability, Classical Definition of Probability

2. The Addition Rule, The Multiplication Rule, Theorems of Total Probability, Conditional Probability and Statistical Independence

3. Limitations of the Classical definition, Frequency definition, Axiomatic Approach, Bayes' Rule

Mathai & Rathie – Probability and Statistics Goon,Gupta,Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 6 Random Variables and Probability Distributions**

1. Definition of random variable – discrete and continuous random variable, probability mass function and probability density functions, Expectation and Variance of random variables

2. Univariate Probability Distributions: Binomial, Poisson, Hypergeometric, Normal and Standard Normal Distribution –Mean Variance, Skewness and Kurtosis.

3. Moment Generating Functions, Limiting form of Binomial distribution (with proof), Limiting form of Poisson distribution (no proof), Importance of Normal Distribution in Statistics, Central Limit Theorem

Mathai & Rathie – Probability and Statistics

Goon,Gupta,Dasgupta - Fundamentals of Statistics, Vol I

#### **Unit 7 Bivariate Analysis**

1. Definition of bivariate data, scatter diagram, covariance - measure of association - Coefficient of Simple Correlation - Properties and the method of calculation.

2. Concept of rank correlation -Spearman's Rank Correlation

3. Measure of influence - Simple Linear Regression - Least Squares and Normal Equations and determination of regression coefficient

Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 8 Population Statistics**

1. Measurements of mortality: Crude Death Rate, Specific death Rate, Standardised death rate, Mortality index, Infant mortality rate.

2. Measurements of fertility: Crude birth rate, general fertility rate, age specific fertility rate, total fertility rate, Gross Reproduction Rate, Net Reproduction Rate.

3. Life Table: its uses.

Goon, Gupta, Dasgupta – Basic Statistics.

#### Readings

#### Texts

1. Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I, World Press Private limited

2. Mathai & Rathie – Probability and Statistics, The Macmillan company of India Limited

3. Giri and Banerjee -Introduction to Statistics, Academic Publishers

#### References

4. Earl.K. Bowen and Martin K. Starr. Basic Statistics for Business and Economics. McGraw Hill International Student Edition

5. Kenney and Keeping. Mathematics of Statistics, Vol.1 (Chapters, 1, 2 and 5). Affiliated East West Press.

6. Allen Webster. Applied Statistics for Business and Economics, 3rd Edition. McGraw Hill International Edition.

7. P H Karnel and M Polasek. Applied Statistics for Economists, 4th Edition. Pitman: Australia

8. M R Spiegel and L.J. Stephen. Statistics, Schaum Series

## 3-YEAR B.A./B. Sc. COURSE IN ECONOMICS DEPARTMENT OF ECONOMICS ALIAH UNIVERSITY New Town, Kolkata - 700 186

# 2<sup>nd</sup> Year

# **Semester-3**

## SYLLABUS

## **Second Year Third Semester**

PAPER	TITLE OF THE PAPER	PAPER CODE	L	Т	Р	С	REMARKS	
Theory	Development Economics –I	EC 201	3	1	0	4		
Theory	Intermediate Statistics with Econometrics	EC 203	3	1	0	4	Third	
Theory	SUBSIDIARY		3	1	0	4	Semester	
Theory	SUBSIDIARY		3	1	0	4		
Theory	SUBSIDIARY		3	1	0	4		
Theory	SUBSIDIARY		3	1	0	4		
	TOTAL 18 6 0 24							
L = Lecture / week: $T = Tutorial / week$ : $P = Practical / week$ : $C = Credit / week$ :								

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week;

# 2<sup>nd</sup> Year

# **Semester-4**

## **SYLLABUS**

# Second Year fourth Semester

PAPER	TITLE OF THE PAPER	PAPER CODE	L	Т	Р	С	REMARKS
Theory	International Economics	EC 202	3	1	0	4	
Theory	Public Finance	EC 204	3	1	0	4	
Theory	SUBSIDIARY		3	1	0	4	Second
Theory	SUBSIDIARY		3	1	0	4	Semester
Theory	SUBSIDIARY		3	1	0	4	
Theory	SUBSIDIARY		3	1	0	4	
TOTAL 18 6 0 24							

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week;

# Subject Name: Development Economics -I Subject Code: EC 201

2<sup>ND</sup> YEAR

**SEMESTER 3** 

**Development Economics -I** 

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1: Basic concept and measures of Development**

- 1. Nature, Questions and Values of Development, Meanings of development –economic growth, redistribution from growth and capabilities approach to development, Objectives of development.
- Ref: Todaro and Smith Chapter 1.
- 2. Measures of development Purchasing power parity and Per capita income as an index of development, difference between growth and development, human development index.
- Ref: Thirlwall Chapter 2 (page 30-36, 47). Meier and Rausch Chapter 1 (5-14)
- 3. Definition of developing economy. Characteristics of a developing economy.
- Ref: Todaro and Smith Chapter 2. Thirlwall, Chapter 3.

#### **Unit 2: Process of Development**

1. Theories of transition – Clark and Fisher on change in sectoral share; Rostow's stages of growth; Kuznets's characteristics of Growth; Industrialization, Growth and Kaldor's growth laws; The neo-classical approach of market and growth.

Ref: Todaro and Smith Chapter 3 . Thirlwall, Chapter 3

#### **Unit 3 Factors in economic development**

1.Land: Ownership and tenancy system – fixed rent contract and share cropping,role of agriculture in development, barriers to agricultural development and land reforms.

Ref: Thirlwall Chapter 5 (167-178). Debraj Ray Chapter 12 (415-420, 457-458)

2. Labour – Population and Labor force growth, casual and long term labor, permanent labor market.

Ref: Todaro and Smith 3 (114-116). Debraj Ray 13 (484-86, 504-506).

3.Capital: Role of capital accumulation in economic development. Significance of capital-output ratio, role of technology and technological progress, learning, human capital.

Ref: Todaro and Smith 3 (113-114). Thirlwall Chapter 6 (210-226)

#### **Unit 4 Population Growth and Economic Development**

1. Population growth and the quality of life - Facts about World population - Effects of population growth on the process of development.

2. Demographic transition theories - the causes of high fertility in developing countries: the Malthusian and household models - the concept of 'optimum' population.

Ref: Todaro and Smith chapter 7, Ray Debraj chapter 9

#### <u>Unit – 5 Inequality and Poverty</u>

**1.** Definition of economic inequality – measures of inequality; Inequality, income and growth: the inverted- U hypothesis and its empiricism.

**2.** Poverty – the conceptual issues: overall expenditure or item-by-item consumption, absolute or relative, temporary or chronic, households or individuals;

Ref Todaro and Smith Chapter 6, Sen (Inequality Examinined), Debraj Ray (chap 6,7,8.2)

#### Unit 6 Analytical Core, Development Index And Basic Strategies of Economic Development

 Rostow's stages of growth; Structuralist approach: the Lewis model and the Harris-Todaro model
 Underdevelopment as a coordination failure: multiple equilibria and low-income equilibrium trapthe theory of 'big-push'.

3. Strategies of economic development: balanced versus unbalanced growth- choice of technique.

Ref Todaro and Smith Chapter 2. Thirwall (chapter 2,3,9,12), Ray (chapter 2.2,2.3,10.3)

#### Texts

1. A.P. Thirlwall. Growth and Development. Palgrave McMillan. (8th edition orlatest)

2. M.P. Todaro and S.C. Smith, "Economic Development". Pearson Education.

3. Debraj Ray. Development Economics. Oxford University Press.

Refrences:

4. K. Basu. Analytical Development Economics: The Less Developed Economy Revisited. Oxford University Press.

5. G.M. Meier and J.E. Rauch. Leading Issues in Economic Development. Oxford University Press. (8th edition or latest)

6. Y. Hayami, "Development Economics", (Oxford University Press)

7. S. Fukuda-Parr and A.K. Shiva Kumar. Readings in Human Development. Oxford University Press.

8. Amartya Sen: "Development as Freedom", Oxford University Press

9. Sen Amartya : "Inequality Reexamined" (Oxford University Press)

10. Human Development Report 1995,1999

# Subject Name: Intermediate Statistics with Econometrics Subject Code: EC 203

2<sup>nd</sup> Year

## **SEMESTER 3**

#### **Intermediate** Statistics with Econometrics

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1 : Joint Probability Distribution**

Joint Probability Distribution – Idea of Independence, Marginal and Conditional Distribution. Expectation of the product of two variates.

Ref : Goon, Gupta, DasguptaVol 1

#### **Unit 2 Sampling Theory**

2.1 Population and Sample, Parameter and Statistic, Random Sampling -Methods of Drawing Random samples –with replacement and without replacement, Random sampling Numbers.

2.2 Sampling Distribution, Standard Error.

Ref: Mathai & Rathie - Probability and Statistics

Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 3 Sampling Distribution**

3.1 Sampling Distributions associated with Normal Population, Expectation and Standard Error of Sample Mean for with replacement and without replacement random samples,

3.2 Chi-Square Distribution, Student t Distribution, F-Distribution (definition and important properties only-Idea of degrees of freedom

Ref: Mathai & Rathie – Probability and Statistics

Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 4: Classical Statistical Inference**

4.1 Estimators-Desirable properties of estimators -Unbiasedness, Minimum Variance, Consistency and Sufficiency

4.2 Point Estimation - Maximum Likelihood Estimators and their properties -

4.3 Maximum Likelihood estimation of the parameters of Binomial, Poisson and Normal Distributions.

4.4 Confidence Intervals -Testing of Hypothesis -p-Values -Type-I and Type –II Errors

4.5 Simple applications of tests for the Mean and Variance of a Univariate Normal Population.

Ref: Mathai & Rathie – Probability and Statistics

Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I

#### **Unit 5 Elementary Econometrics**

5.1 Classical Linear Regression Model (CLRM): Specification of the Model- Assumptions- Linearity in variables and parameters, Estimation of the Error Variance

5.2. Gauss Markov Theorem, Goodness of fit: R square -Coefficient of Determination

5.3 Inference in the Linear Regression Model- Confidence interval for the parameters and the Testing of Hypotheses -Prediction with the Simple Regression model.

5.4 Concepts of Heteroscadasticity and Autocorrelation problems.

Ref: G.S. Maddala – Introduction to Econometrics

D. Gujarati – Basic Econometrics.

#### Unit 6: Time Series Data

6.1 Time Series: Introduction, Components, Measurements: Secular Trend (Free hand curve fitting, Moving averages, fitting mathematical curves), Seasonal fluctuation (monthly averages, ratio to moving averages, ratio to trend)

Ref : Goon, Gupta, Dasgupta - Fundamentals of Statistics, Vol I

#### Readings

#### Text

1. Goon, Gupta, Dasgupta – Fundamentals of Statistics, Vol I & II, World Press Private Limited

2. Mathai & Rathie – Probability and Statistics, The Macmillan Company of India Limited

3. G.S. Maddala – Introduction to Econometrics. Wiley Publishers (Indian edition).

4. D. Gujarati – Basic Econometrics, Tata McGraw-Hill Publishing Company Limited

5. J.M Woolridge – Introductory Econometrics – A Modern Approach- 6<sup>th</sup> edition-Cengage Learning **Peferonees** 

#### References

6.Earl K. Bowen & Martin K. Starr, Basic Statistics for Business and Economics, McGraw Hill International Student Edition.

# Subject Name:Semester 4Subject Name:International Economics<br/>Subject Code: EC 202

2<sup>ND</sup> YEAR

# SEMESTER 4

## **International Economics**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1: Basic Models of Trade**

1.1 Adam Smith's theory oh Absolute advantage . Ricardian Model: Comparative advantage.

1.2 One factor economy: production possibility frontier, relative demand and relative supply and autarkic terms of trade.

1.2 Trade in Ricardian world: determination of international terms of trade, complete specialization, gains from trade.

**Texts:** International Economics: Paul R. Krugman, Maurice Obstfeld, (8th Ed.)Chapter 2, Pearson Education

#### References

- 1. World Trades and Payments: Caves, Frankel, Jones (9th Ed.)Chapter 3, Pearson Education
- 2. International Economics: Dominick Salvatore (8th Ed.) Chapter 2, Wiley India.

#### Unit 2 Resources, Comparative Advantage, and Income Distribution

2.1 Model of two factor economy: Assumptions, Factor prices and commodity prices (Stolper-Samuelson effect)-correspondence, Resources & output, Rybzynski effect.

2.2 Effects of International Trade between two factor economies, Relative prices and the pattern of Trade, Trade and distribution of Income, Factor Price Equalization.

2.3 Empirical studies - Leontief Paradox.

#### Texts

International Economics: Paul R. Krugman, Maurice Obstfeld, Chapter 4(8th Ed.), Pearson Education **References** 

- 1. International Economics: Dominick Salvatore (8th Ed.) Chapter 5, Wiley India
- 2. World Trades and Payments: Caves, Frankel, Jones (9thEd.)Chapter 6,

#### **Unit 3: The Standard Trade Model**

3.1 Production Possibilities and relative supply, relative prices and demand, welfare effects of changes in terms of trade, determining relative prices.

3.2 Economic growth: shift of RS curve, growth and production possibility frontier, RS and terms of trade, International effects of growth, International transfers of income: shifting RD curve, Transfer problem, effects of transfer on terms of trade, Tariffs and export subsidies.

3.3 Offer curves: Derivation, International Equilibrium.

## Texts

International Economics: Paul R. Krugman, Maurice Obstfeld, Chapter 5 (8 th Ed.), Pearson Education **References** 

International Economics: Dominick Salvatore (8th Ed.) Chapter 3, Wiley India.

#### **Unit 4: Trade Policy**

4.1 Partial equilibrium analysis: Tariff- cost and benefit, effective rate of protection and intermediate goods, quota, tariff- quota equivalence and nonequivalence, export subsidy, voluntary export restraint.4.2 General Equilibrium Analysis: Distinction between small and large open economy, welfare effects of tariff in a small country, optimum tariff for large open economy, Metzler's paradox.4.3 Tariff & Import Quotas in presence of monopoly.

#### Texts

International Economics: Paul R. Krugman, Maurice Obstfeld, Chapter 8 (8th Ed.), Pearson Education **References** 

International Economics: Dominick Salvatore (8th Ed.) Chapter 8, Wiley India

World Trades and Payments: Caves, Frankel, Jones (9th Ed.) Chapter 10, Pearson Education.

# Subject Name: Public Finance

# Subject Code: EC 204

2<sup>nd</sup> Year

SEMESTER 4

**Public Finance** 

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1 Introduction to public economics**

1.1 The nature, scope and significance of public economics Musgrave and Musgrave Page 3-6. Bhatia Page 17-25

#### **Unit 2. Forms and Functions of Government**

2.1 Different forms of government – unitary and federal. Tiers of government in the federal form-Central, State, Local (Introductory discussion with examples).

2.2 Functions of Government - Economic functions -allocation, distribution and stabilization.

2.3 Regulatory functions of the Government and its economic significance

Musgrave and Musgrave Chapter 29, Chapter 1 Page 6-14. Stiglitz in Bagchi (ed.) Chapter 9, page 170-171.

#### **Unit 3 Federal Finance**

3.1 Federal Finance: Different layers of the government, Inter governmental transfer—horizontal vs. vertical equity.

Musgrave and Musgrave Chapter 28, Page 457-461, Misra and Puri Chapter 53, page 694-698, 700-701.

3.2 Grants—merits and demerits of various types of grants—unconditional vs conditional grants, tied grants, matching grants.

Musgrave and Musgrave, Chapter 28 Page 461—469, Misra and Puri Chapter 53 page 703-705.

#### **Unit 4 Public Goods and Public Sector**

4.1 Concept of public goods—characteristics of public goods, national vs. local public goods, determination of provision of public good

4.2 Externality, concept of social versus private costs and benefits, merit goods, club goods.

Musgrave and Musgrave, Chapter 4. McGuire in Bagchi (ed.) Chapter 5.

4.3 Provision versus production of public goods. Market failure and public provision. Pricing of public goods—vertical summation

Musgrave and Musgrave, Chapter 5

#### **Unit 5. Government Budget and Policy**

5.1 Government budget and its structure – Receipts and expenditure – concepts of current and capital account, balanced, surplus, and deficit budgets, concept of budget deficit vs. fiscal deficit, functional classification of budget. Concept of Revenue Deficit.

Bhatia Chapter 4 page 37-39, Chapter 13, page 248-253, Chapter 20 page 460- 462; Musgrave and Musgrave Chapter 31, page 534-537, Chapter 12, page 211- 216, Chapter 30, page 499-505

5.2 Budget, government policy and its impact. Budget multipliers.

Stiglitz, Blinder and Solow, Fisher and Easterly in Bagchi (ed), Chapters 9, 16, 17.

#### Unit 6. Revenue Resources

6.1 Concept of tax, types of tax – direct tax and indirect tax, canons of taxation, subsidy, transfer policy.

H.L.Bhatia Chapter 4 page 39-49, Chapter 20 page 467-470.

6.2 Principles of taxation -Ability to Pay principle (brief discussion), Benefit Approach (Actual Examples)

Musgrave and Musgrave, Chapter 13, page 218-231

6.3 Tax Design - introduction – truth seeking mechanism.

#### Unit 7. Tax Structure

7.1 Effects of income tax on work effort, saving and risk bearing (just brief ideas).

Musgrave and Musgrave Chapter 17, page 297-308, 311-312.

7.2 Excess burden of indirect taxes

Musgrave and Musgrave Chapter 16, page 293-295.

7.3 VAT, Goods and Services Tax (pros and cons).

Misra and Puri, 26th edition, page 662-663, Chelliah, Agarwal, Purohit and Rao in Bagchi (ed) Chapter 15.

7.4 Non-tax revenue resources-earnings from public undertakings, interest on loans.

#### **Unit 8. Distribution and Stabilization**

8.1 Instruments for stabilization
Musgrave and Musgrave, Chapter 30
8.2 Public Debt---internal and external.
Musgrave and Musgrave Chapter 32, Misra and Puri, Chapter 51.
8.3 Public Finance and Public Choice: The Role of State.
Bagchi (ed), Chapter 24.

#### Readings

- 1. Musgrave and Musgrave: Public Finance in Theory and Practice (Fifth Edition).
- 2. H.L. Bhatia. Public Finance. (Fifteenth Revised Edition).
- 3. Amaresh Bagchi (ed.). Readings in Public Finance. Oxford University Press.
- 4. Misra and Puri. Indian Economy.

## 3-YEAR B.A./B. Sc. COURSE IN ECONOMICS DEPARTMENT OF ECONOMICS ALIAH UNIVERSITY New Town, Kolkata - 700 186

# 3<sup>rd</sup> Year

# **Semester-5**

# SYLLABUS

### Third Year Fifth Semester

TITLE OF THE PAPER	PAPER CODE	L	Т	Р	С	REMARKS
Development Economics –II	EC 301	3	1	0	4	
Open Economy Macro Economics	EC 303	3	1	0	4	
Indian Economics Issues I	EC 305	3	1	0	4	Fifth
Intermediate Econometrics with Computer Applications	EC 307	2	1	1	4	Semester
Optional Papers	EC 309	3	1	0	4	
Environmental Studies*		3	1	0	4	
TOTAL 17 6 1 24						
	Development Economics –II Open Economy Macro Economics Indian Economics Issues I Intermediate Econometrics with Computer Applications Optional Papers Environmental Studies* TOTAL	TITLE OF THE PAPERCODEDevelopment Economics –IIEC 301Open Economy Macro EconomicsEC 303Indian Economics Issues IEC 305Intermediate Econometrics with Computer ApplicationsEC 307Optional PapersEC 309Environmental Studies* TOTALTOTAL	TITLE OF THE PAPERCODELDevelopment Economics –IIEC 3013Open Economy Macro EconomicsEC 3033Indian Economics Issues IEC 3053Intermediate Econometrics with Computer ApplicationsEC 3072Optional PapersEC 3093Environmental Studies*3TOTAL17	TITLE OF THE PAPERCODELTDevelopment Economics –IIEC 30131Open Economy Macro EconomicsEC 30331Indian Economics Issues IEC 30531Intermediate Econometrics with Computer ApplicationsEC 30721Optional PapersEC 30931Environmental Studies*31TOTAL176	TITLE OF THE PAPERCODELTPDevelopment Economics –IIEC 301310Open Economy MacroEC 303310EconomicsEC 303310Indian Economics Issues IEC 305310Intermediate EconometricsEC 307211Optional PapersEC 309310Environmental Studies*310TOTAL1761	TITLE OF THE PAPERCODELTPCDevelopment Economics –IIEC 3013104Open Economy MacroEC 3033104EconomicsEC 3033104Indian Economics Issues IEC 3053104Intermediate EconometricsEC 3072114Optional PapersEC 3093104

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week; \*compulsory paper

SYLLABUS Third Year Sixth Semester

# 3<sup>rd</sup> Year

# Semester-6

PAPER	TITLE OF THE PAPER	PAPER CODE	L	Т	Р	С	REMARKS
Theory	Applied Mathematical Economics II	EC 302	3	1	0	4	
Theory	Economic History of India	EC 304	3	1	0	4	
Theory	Optional Paper II	EC 306	3	1	0	4	Sixth Semester
Theory	Indian Economics Issue and the Economy of West Bengal	EC 308	3	1	0	4	
Theory	Project/ Term paper	EC 310	0	1	3	4	
TOTAL				5	3	20	

L = Lecture / week; T = Tutorial / week; P = Practical / week; C = Credit / week;

# Subject Name: Semester 5 Subject Name: Development Economics -II Subject Code: EC 301

**3<sup>RD</sup> YEAR** 

## SEMESTER 5

# **DEVELOPMENT ECONOMICS II**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1 Development strategies**

1.1 Complementarity and Coordination

Todaro and Smith Chapter 5 (184-187). Debraj Ray Chapter 5 (131-136).

1.2 Poverty Trap of Nurkse and Big Push theory of Rosenstein-Rodan 4.3 Linkages – backward and forward; linkages, policy and big push.

Debraj Ray, Chapter 5 (136-143). Todaro and Smith Chapter 5 (184-193)

1.3 Choice of technology and choice of scale (large vs small) and criteria for investment.

Thirlwall Chapter 12

1.4 Gains from Trade – static, dynamic and vent for surplus, tariffs versus subsidies. Prebisch doctrine, Prebisch-Singer thesis and Terms of Trade.

Thirlwall 16. Todaro and Smith Chapters 12

#### Unit 2 Development in a Labour surplus economy

2.1 The concept of economic dualism.

Kausik Basu Chapter 7 (151-153). Thirlwall Chapter 7 (234-236)

2.2 Lewis' model of economic development with unlimited supply of labour, Disguised Unemployment: Types and Measurement.

Todaro and Smith Chapter 4 (150-155). Thirlwall Chapter (198-206).

2.3 The Informal Sector.

Todaro and Smith Chapter 8 (358-366).

2.4 Rural-urban migration of labour – Harris-Todaro model

Todaro and Smith Chapter 8 (368-381).

#### **Unit 3 Development, Inequality and poverty**

3.1 Meaning of inequality, inequality measures, Lorenz Curve, Range, Coefficient of variation, Ginicoefficient, Kuznet's Inverted U hypothesis.

3.2 Poverty, relative and absolute deprivation with respect to income, Poverty line Poverty measures – Head count ratio, Poverty gap ratio, Income gap ratio, Human Poverty Index.

3.3 Social dimensions of poverty – rural poverty, women and ethnic minorities and indigenous populations.

Todaro and Smith Chapter 6. Debraj Ray Chapters 6, 7 (199-200), 8 (249-256). Thirlwall Chapter 2 (47-54).

3.4 Tackling Poverty – The World Bank Approach Thirlwall Chapter 2 (41-44).

#### **Unit 4 Environment and development**

4.1 Development and Environmental – an overview.

Meier and Rauch Chapter 10 (588-89)

4.2 Basic Issues of development and environment - Sustainable development and environment accounting, population and resources, poverty, rural development, urban development, global environment - rain forest destruction and greenhouse gases.

Todaro and Smith Chapter 11 (497-507)

4.3 Policies for Environmental Regulation.

Lipsey and Chrystal, Chapter 13 (286-89).

#### **Unit 5: Gender and Development**

a) Gender issues and development

b) Women's education in developing countries – an overview

c) Women in the labour force

d) Women, poverty and development in the Third World

e) Women in developing countries – missing women

f) Grameen Bank – performance and sustainability

g) Empowerment of women

#### Readings

#### Texts

1. A.P. Thirlwall. Growth and Development. Palgrave McMillan. (8th edition or latest)

- 2. M.P. Todaro and S.C. Smith, "Economic Development". Pearson Education.
- 3. Debraj Ray. Development Economics. Oxford University Press.

#### References

4. Lipsey and Chrystal. 2007. Economics. Oxford University Press.

5. K. Basu. Analytical Development Economics: The Less Developed Economy Revisited. Oxford University Press.

6. G.M. Meier and J.E. Rauch. Leading Issues in Economic Development. Oxford University Press. (8th edition or latest)

7. Y. Hayami, "Development Economics", (Oxford University Press)

8. S. Fukuda-Parr and A.K. Shiva Kumar. Readings in Human Development. Oxford University Press.

# Subject Name: Open Economy Macro Economics Subject Code: EC 303

**3<sup>RD</sup> YEAR** 

## **SEMESTER 5**

# **Open Economy Macro Economics**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### <u>Unit – 1 Accounting Structure, Income Determination and Trade Balance</u>

1.1 Balance of payment accounts; national income accounting in an open economy; monetary account-Determination of national income, multiplier analysis, the transfer problem, introduction of foreign country and repercussion effect.

1.2 Determination of national Income, multiplier analysis, the transfer problem, introduction of foreign country and repercussion effect.

#### <u>Unit – 2: Exchange Rate</u>

Fixed and Flexible Exchange rates: Adjustments, Demand & Supply of foreign exchange, Effects of exchange rate changes on domestic prices and terms of trade, Marshall-Lerner condition, J-curve effect., tariff and export subsidy on output and trade balance; Internal and external balance and assignment problem with fiscal policy and exchange rate.

References:

1. Paul R. Krugman & Maurice Obstfeld: International Economics (Pearson Education): Chapter 12

2. Dornbusch: Open Economy Macro Economy (Basic Books, New York): Chapters 2-5

3. Caves Frankel & Jones: World Trade & Payments: An Introduction (Pearson Education): Chapters 15-17.

#### **Unit – 3 Foreign Exchange Market and Asset Approach**

3.1 Working of foreign exchange market, forward rate and spot rate, interest rate parity and risk premium.

3.2 Mundell- Fleming model under fixed and flexible exchange rate (with perfect and imperfect capital mobility).

3.3 Assignment problem with fiscal and monetary policy.

References:

1. Caves, Frankel and Jones: World Trade & Payments: An Introduction (Pearson Education): Chapter 18 and 22.

2. Paul R. Krugman and Maurice Obstfeld: International Economics (Pearson Education), Chapters 12, 16 and 17. Appendix1.

3. Laurence Copeland: Exchange Rates and International Finance (Pearson Education): Chapter 6.

#### <u>Unit –4 Monetary Approach and Balance of Payments Crisis</u>

4.1 Concept of purchasing power parity, effect of monetary expansion and devaluation.

4. 2 Speculative attack, currency crisis and credibility: alternative approaches.

References:

1. Paul R. Krugman and Maurice Obstfeld: International Economics (Pearson Education): Chapter 17, Appendix 2 and 3.

# Subject Name: <u>Semester 5</u> Subject Name: <u>Indian Economics Issues I</u> Subject Code: EC 305 3<sup>RD</sup> YEAR SEMESTER 5

# **Indian Economics Issue I**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### **Unit 1- Indian Economy at the time of Independence**

Features of Indian Economy around 1947-1950 and characteristics of economic underdevelopment of India (with reference to colonial rule of India).

Ref: Bipan Chandra in Jalan (ed). Uma Kapila, Chapter 1.

#### Unit 2. Planning: Evolution of India's Development Goal and Strategy

2.1 The background and Structure of Indian Planning.

(Uma Kapila, Chapters 1 and 2. Chakravarty, Chapter 1.)

2.2 Structural Constraints and India's development strategy – Choice of industrialization strategies – public vs. private sector, capital goods versus consumer goods – Mahalanobis Plan Model (basic argument), import substitution vs. export promotion strategy.

(Uma Kapila, Chapter 3. Chakravarty Chapters 2 and 5 (page 69-75).)

2.3 Agriculture-industry relationship – demand side and supply side linkages–agriculture-industry terms of trade - food crisis of the 1960s and imperatives for agricultural growth, genesis of green revolution – fourth plan (basic argument).

(Chakravarty Chapter 3 and 5 (59-64); Uma Kapila Chapter 11.)

2.4 Poverty Eradication, foreign aid and self-reliance – Fifth Five Year Plan Model (basic argument) (Chakravarty, Chapter 3. Wadhwa Chapters 5 and 7)

2.5 Regional inequality in India – causes; policies for balanced regional development. Chakravarty Chapter 4 (45-52).

2.6 Planning deficiencies and its abandonment– 7th five year plan and Indian economic crisis. Chakravarty Chapter 4 (39-44). Bardhan in Jalan (ed).

2.7 New Economic Policy – liberalisation, market and state (introduction)

Rangarajan in Uma Kapila, Chapter 5. Uma Kapila, Chapter 20. Bardhan in Jalan (ed).

## **Unit 3 Land and Agriculture**

3.1 Land and tenancy system- sharecropping- Different dimensions of Land Reform – Productivity Debate – Marketable Surplus.

S.K. Ray in Uma Kapila, Chapter 12. Wadhwa Chapters 19, 20, 21, 22, 23 and 31.

3.2 Green Revolution – features of green revolution – positive and negative impacts of green revolution. Performance of Indian agriculture.

Vaidyanathan. 1994. Chakravarty Chapter 3 (24-27). Wadhwa Chapters 29 and 30.

3.3 Agricultural Policies and Pricing – Agricultural Price commission – support price vs. procurement price – Public investment in agriculture - agricultural subsidies and tax.

Hanumantha Rao in Jalan (ed). Uma Kapila Chapter 11. Wadhwa Chapters 24, 25, 26 and 27.

#### **Unit 4 Industrial Development: Evolution, Trade and Policy**

4.1. Structure and composition of Industry – issues of concentration, large vs small industry – industrial location. Small scale reservation policy. Trends and patterns of industrial growth. Uma Kapila, Chapter 18. Rakesh Mohan in Jalan (ed).

4.2 Foreign trade regime, protection and foreign competition, Productivity; import substitution versus export Competitiveness, effect on export competitiveness.

Uma Kapila, Chapter 18. T.N. Srinivasan in Uma Kapila, Chapter 25. Rangarajan in Uma Kapila, Chapter 26.

4.3 Industrial Policies – Industrial licensing system.

Uma Kapila, Chapter 18. Rakesh Mohan in Jalan (ed). Wadhwa Chapter 16.

#### Unit 5. Employment, Wages and Inflation

5.1 The trends and pattern of employment and wages in India – informalisation and tertiarisation of employment - problems of unemployment and under-employment

5.2 Government policies on employment and wages and employment – employment guarantee scheme – minimum wage.

Movement of prices in India – -trends and patterns – causes, consequences and policies adopted. Papola in Jalan (ed.), Visaria in Jalan (ed). Zagha in Sachs, Varshney and Bajpai (ed.).

#### Readings

#### Texts

1. Uma Kapila (ed). India's Economic Development Since 1947 (3rd Ed. or latest version). Academic.

2. Chakraborty.S 1987. Development Planning: The Indian Experience. Clarendon Press.

3. Vaidyanathan A.1994. Performance of Indian Agriculture since Independence in Kaushik Basu (ed.) Agrarian Question, Oxford University Press.

4. Bimal Jalan (ed.) The Indian Economy: Problems and Prospects Penguin.

#### References

5. C D. Wadhwa. Some problems of India's Economic Policy, Tata McGraw Hill.

6. J. Sachs, A Varshney and N Bajpai (ed). India in the Era of Economic Reforms. Oxford University Press.

7. I, Judge Ahluwalia. 1985. Industrial Growth in India since the Mid-sixties. Oxford University Press.

8. PC Joshi. 1975. Land Reforms in India: Trends and Perspectives. Allied Publishers: New Delhi.

9. Pramit Chaudhuri. 1979. Indian Economy: Poverty and Development.George Allen and Unwin, London.

# Subject Name: <u>Econometrics II and Computer Application</u> Subject Code: EC 307

**3<sup>rd</sup> YEAR** 

SEMESTER 5

#### **Econometrics II and Computer Application**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 35 Practical: 05

#### **Group A: Econometrics ( 25 Marks)**

#### **Unit I: Multivariate CLRM**

- 1. A Few Useful Operations in Matrix Algebra (Transpose, Inverse, Rank, Differentiation of Linear and Quadratic Form);
- 2. k-variable CLRM- model specification- properties of Ordinary Least Squares (OLS) estimators- Simple, Partial and Multiple
- 3. Correlations- Degrees of Freedom and Adjusted R2- Prediction- Analysis of Variance and Tests of Hypotheses- Omission of Relevant
- 4. Variables and Inclusion of Irrelevant Variables- Tests for Stability;

#### **References**:

Johnston (1984): Econometric Methods (3rd Edition), Chapter on K-variable CLRM and the Appendix on Matrix Algebra;

Maddala/ Maddala-Lahiri: Introductio., Chapters 4;

#### **Unit II: Relaxing the Assumptions of CLRM**

- 1. Heteroskedasticity- Detection (Goldfeld-Quandt test, Ramsey test, Glejser test and White test)-Consequences- Possible Ways Out (Weighted Least Squares, log-transformation);
- 2. Autocorrelation- Autoregressive (AR) and Moving Average (MA) Processes- Detection (Durbin-Watson test)- Estimation in Levels Versus First differences- Estimation Procedure for AR(1) error (differencing) Durbin's h-test for models with lagged dependent variables;
- 3. Multicollinearlty- Exact and Near-exact Multicollinearity- Consequences- Detection (Klien's Rule of Thumb)- Coping with Multicollinearity (dropping variable, adding more observations);

#### **References**:

Maddala/ Maddala-Lahiri: Chapters 5, 6, 7; Ramanathan (2002): Introductory. Chapters 5, 8, 9; Gujrati, D. (2009): Basic Econometrics (for problems);

#### Group B : Computer Application (15 marks) ( 10 written+ 05 practical)

#### **Unit I General Introduction**:

[The students shall make themselves aware of the meaning of the term and obtain only working knowledge on the following]

a) Disk Operating Computer System Configuration: the CPU and its ROM and RAM, Input-Output Devices, Information Storage Devices, and the Motherboard assembling these components – communication ports Com and USB

b) Information System: the binary numbers – data measurement in bits and bytes; Data type – numeric, alpha numeric, and string variables, ASCII and hexadecimal codes.

c) File Management System: Files Folders (Directory), and Structure of File Management – File name and File extension – path and pathname. Usual types of file – com, exe, bat, bin, dll, txt, nt, and other application specific files.

d) Basic of Computer Operation – creation, saving and deletion of files and folders; taking softcopy and hard copy.

e) Types of Programming Language and Computer Programs: DOS Programs,Utility Programs, Standardized Application Programs. Operating System Configuration with the application programs – the System Registry and initialization.

f) System Maintenance: Disk Clean up, Disk De -fragmentation, Registry Clean-up, Disk Formatting and taking Back -up, System Recovery Tools.

g) Use of Internet- Search - Email.

#### **Unit II Working with Application Programs for Standard Office Procedures :**

Text Editor, Data Processing Spreadsheets, Database management, and Presentation (The student shall learn the operations through hands –on training followed by practical tests)

#### Unit III Working with Statistical Analysis Software :

Graphical Analysis – plotting bar diagram, pie-chart, time-series, various statistical estimation and testing of correlations, regressions (The student shall learn the operations through hands -on training followed by practical tests)

## **Optional papers**

## Semester 5 Subject Name: Optional Course Subject Code: EC 309

**3<sup>RD</sup> YEAR** 

# **SEMESTER 5**

#### (The candidate needs to choose any one from the following optional courses)

#### **3A: Managerial Economics**

Managerial Economics Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

#### Unit 1. Meaning and Scope of Managerial Economics

Organisational Goals – Profit maximization hypothesis, Critique of profit maximization hypothesisalternative goals of the firm – Managerial theories- Baumol, Williamson, Behavioural Theory of the Firm.

#### **Unit 2. Demand Analysis**

Demand forecasting, Methods of demand forecasting: Survey Method, Statistical Methods – Trend Projection method, Regression Method, Leading Indicator Method. (Simple numerical problems)

# Unit 3. Price determination under different structures

Methods of price determination in practice – Mark up pricing, Limit pricing, Average cost pricing, Peak load pricing, Multiple product pricing, Transfer pricing.( Simple numerical problems).

#### **Unit 4. Financial Investment decisions:**

Distinction between real and financial assets, Needs of financial investment, Alternative financial instruments and investments.

#### **Unit 5 Pricing Policies and Practices**

Factors Governing Prices, Objectives of Pricing Policy, Price Leadership, Full –Cost Pricing, Mark-up Pricing, Limit Pricing, Marginal Cost Pricing or Variable Cost Pricing, Rate of Return Pricing, Going-Rate Pricing, Peak-Load Pricing, Cyclical Pricing, Pricing over the life-cycle of a product (a)

Skimming Price (b) Penetration Price (c) Pricing in Maturity; Product-line pricing, Price Discounts and Differentials, Price Forecasting.

Ref: P.L. Mehta

#### **Unit 6 Capital Budgeting**

What is Capital Budgeting? Need for Capital Budgeting; Different Steps in the Capital Budgeting Process; Nature of Capital Budgeting Problem; Capital Budgeting Appraisal Methods (a) Payback

Method (b) Accounting Rate of Return Method (c) Net Present Value Method (d) Internal Rate of Return

Method (e) Benefit-Cost Ratio Method; Comparison between NPV and IRR Methods; Capital Rationing; Alternative Methods of Financing Investments. Ref: P.L. Mehta Ch-21 (451-484).

#### **Unit 7 Cost of Capital**

Cost of Debt Capital, Cost of Preference Share Capital, Cost of Equity Capital, Cost of Retained Earnings, Average Cost of Capital, The Opportunity Cost Concept – Borrowing Rate vs. Lending Rate. Ref: Varshney and Maheshwari Ch-29 (358-368) or P.L. Mehta Ch-22 (485-491).

#### **Unit 8 Inventory Management**

Inventory Costs, Concept of Average Inventory; Various Inventory Models: (a) Economic Order Quantity (EOQ) (b) Optimum number of Orders per year (c) Optimum no. of Days' Supply per Order; Quantity Discounts – Cost Comparison Approach; EOQ Concept and Production Processes. Ref: Varshney and Maheshwari Ch-41 (473-481) or P.L. Mehta Ch-12 (254-269).

#### Readings

#### Texts

- 1. Varshney, R.L and Maheshwari, K.L Managerial Economics, Sultan Chand, New Delhi
- 2. Keat, Paul G and Young, Philip K.Y Managerial Economics, Pearson Education, New Delhi
- 3. Mehta, P.L Managerial Economics, Sultan Chand, New Delhi
- 4. William F. Samuelson and Stephen G. Marks Managerial Economics. Wiley Student Edition.
- 5. Thomas Clarke International Corporate Governance Routledge, 2007.
- 6. Anindya Sen Microeconomics, Oxford University Press.

#### **References**:

- 1. Koutsoyiannis .A: Modern Microeconomics, MacMillan.
- 2. Hague: Managerial Economics, ELBS.
- 3. Cyert and March: A Behavioural Theory of the Firm, Prentice Hall.
- 4. Henderson and Quandt: Microeconomic Theory. McGraw Hill
- 5. Stonier and Hague: A Text Book of Economic Theory, ELBS.
- 6. Baumol : Economic Theory and Operation Analysis, Prentice Hall.
- 7. Thomas. C.R., Maurice, S.C., Sarkar, S : Managerial Economics, Tata McGraw Hills.
- 8. Peterson, C.H., Lews, W.C, Jain, S.K : Managerial Economics , Peason Edition.
- 9. Mithani, D.M : Managerial Economics- Theory and Applications, Himalya Publishing House.
- 10. Damodaran, S.: Managerial Economics, Oxford University Press., New Delhi.
- 11. Lipsey: An Introduction to Positive Economics, ELBS.

### **<u>3B: Economics of Social Sector</u>**

### **Economics of Social Sector**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

### **Unit 1 Introduction**

1.1 Components of Social Economics, Pareto Optimality and competitive equilibrium, Fundamental theorem of welfare economics; Externalities and market inefficiency – externality as missing markets; property right. Merit good, public good vs private good. Role of government in the market as well as a provider of public good.

1.2 Evolution of the concept of Human Development, Role of Health and Education in Human Development, Poverty alleviation, health and education outcomes and their relationship with economic development, Human Development Index.

### **Unit 2. Microeconomic Foundations of Health Economics**

2.1 Concept of Health- Public Health and Medical Care-Preventive and Externalities- Curative Health-Health as a Commodity.

2.2 Demand for health; uncertainty and health insurance market; market failure and rationale for public intervention;

2.3 Measures of Health-Anthropometric Measures and Body-Mass-Index (BMI) - epidemiologic transition theory and Global Burden of Disease (GBD)-different mortality rates (IMR, CMR, MMR etc) – Quality Adjusted Life Years (QALY) and Disability Adjusted Life Years (DALY).

### **Unit 3. Evaluation of Health Programs**

Costing, cost effectiveness and cost-benefit analysis; burden of disease. Health outcomes; health systems; health financing, Gender gap in health issues

### **Unit 4. Education: Investment in Human Capital and Indian experience**

Rate of return to education: private and social; quality of education; signalling or human capital; literacy and drop- out rate. Gender differential in educational achievement

### Unit 5. Meaning of gender inequality and major gender gap

Key definition, key pattern of gender gaps, Endangering development theories -- Gender development index and gender empowerment index , Mainstreaming gender into development policies, gender differential in intra-household resource allocation.

### Unit 6. Women as decision making unit

Factors affecting decision making by women, property right, access to and control over resources

### References

1. William, Jack, Principles of Health Economics for Developing Countries, World Bank Institute Development Studies, 1999.

2. World Development Report, Investing in Health, The World Bank, 1993.

3. Ronald G., Ehrenberg and Robert S., Smith, Modern Labour Economics: Theory and Public Policy, Addison Wesley, 2005.

4. Phelps . C.E "Health Economics" Routledge Publication

5. Krishnaraj M, .R.M Sudarshan and A Sheriff, Gender, Population and Development.

6.. Hanushek, Eric A., 2005, Economic Outcomes and School Quality, International Academy of Education and International Institute for Educational Planning\

7. <u>G. S. Maddala, Ellen M. Miller</u> "Microeconomics: Theory and Applications". Tata Mcgraw Hill 2008

8. Pindyck And Rubinfeld "Microeconomics" Pearson Education

9. Human Development Reports: various issues.

10. Selected Research papers to be provided

### 3<sup>rd</sup> Year Semester-6 Subject Name: <u>Applied Mathematical Economics</u> Subject Code: EC 302

### **Applied Mathematical Economics**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

### **Unit 1 Theory of the Consumer**

Utility maximization, Lagrangian multiplier, Indirect Utility function, Roy's Identity, Derivation of Slutsky's equation, Slutsky's Equation in elasticity form, Compensated demand curve. Different forms of Utility Function—Separable, quasi-linear, homogeneous and homothetic Labour-leisure choice.

Ref: Simon & Blum, Chapter 22 Section 22.1, Chiang & Wainwright, Chapter 12, Silberberg & Suen, Chapter 10

### **Unit 2 Theory of the Firm**

2.1 Output maximization, Cost minimization, Homogeneous and homothetic production functions, Elasticity of substitution, CES production function, Relationship between average cost and marginal cost

2.2 Factor demand curves, output elasticity, Analysis of firms in competitive equilibrium and monopoly, imposition of taxes

2.3 Analysis of factor demands in the long run

2.4 Fixed coefficient production functions, Leontief Input-Output system.

Ref: Simon & Blum, Chapter22 Section 22.2, Chiang .& Wainwright, Chapter 12, Silberberg & Suen, Chapter 4

### **Unit 3 Games and Decisions**

Two person matrix games, solving matrix games with mixed strategies Sequential Games and Decisions

Ref: Aliprantis & Chakrabarti, Chapter 2,3,4

### **Unit 4 Inter-temporal Choice Theory**

4.1 n-period utility maximization, Time preference, Stocks and flows Ref: Silberberg & Suen, Chapter 12

### Unit 5 Behaviour under uncertainty

5.1 Uncertainty and Probability, State preference approach for preferences5.2 Expected Utility Hypothesis, Risk aversion and its measures.Ref: Silberberg & Suen, Chapter 13

### **Unit 6 Comparative Statics**

6.1 Generalisation to n variables: First and Second order conditions
6.2 Profit maximisation: n factors and Utility Maximisation
6.3 National Income Model, IS-LM Model
6.2 Simple Trade Models
Ref: Silberberg & Suen, Chapter 6 , Chiang & Wainwright, Chapter 8.

### **Unit 7 Application of Difference and Differential Equations**

7.1 Cobweb Model7.2 Multiplier-Accelerator Interaction Model

7.3 Linear Systems via Eigen values

7.4 Solution of linear systems by substitution

7.5 Phase diagrams of linear systems

7.6 Solow model.

Ref: Chiang & Wainwright, Chapter 17, 18

### **Readings:**

1. Aliprantis, D C. and S. K. Chakrabarti (1999) Games and Decision Making, Oxford University Press.

2.Chiang, A. C. and Wainwright(2005)(Fourth Edition): Fundamental Methods of Mathematical Economics, McGraw-Hill.

3.Silberberg, E and W. Suen (2001)(Third Edition): The Structure of Economics, A Mathematical Approach, McGraw-Hill.

4.Simon, C.P and L. Blume (1994): Mathematics for Economists, Norton & Company

5.Schaum's Easy Outline of Introduction to Mathematical Economics (2005)

### 3<sup>rd</sup> Year Semester-6 Subject Name: <u>Economic History of India</u> Subject Code: EC 304

**Economic History of India** 

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

### <u>Unit 1 Economic condition in India on the eve of British rule</u> Unit 2 Aspects of Economic Policies under in British India

2.1 Land policy

- 2.2 Policy of Discriminating Protection
- 2.3 Early Industrial Development and Managing Agency System
- 2.4 Currency and monetary policy
- 2.5 Infrastructure and Transport

### Unit 3 Impact of British rule on India

3.1 Deindustrialisation

- 3.2 Commercialisation of agriculture
- 3.4 Economic Drain

### Unit 4 Early Economic planning initiatives during British rule

### Readings

- 1. Dharma Kumar (ed). Cambridge Economic History, Vol II.
- 2. V B Singh (ed.). Economic History of India (1857-1956).
- 3. Dhires Bhattacharyya. Concise Economic History of India.
- 4. D R Gadgil. Industrial Evolution of India in Recent Times.
- 5. A K Bagchi. Private Investment in India (1900-1939).
- 6. Bipan Chandra. Rise of Economic Nationalism.

7. Rothermund, Dietmar. 1988. An Economic History of India, From Pre-colonial times to 1986, Croom Helm, London.

8. Tirthankar Roy. The Economic History of India 1857-1947. Oxford University Press. (2<sup>nd</sup> edition).

## 3<sup>rd</sup> Year

## Semester-6

### Subject Name:Optional Paper Subject Code: EC 306

### 3C: Environmental Economics

### **Environmental Economics**

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

### **1. Introduction**

• Interaction between man and nature, Key environmental issues and problems, Link between economy and environment: basic ideas,

### 2. Externalities

• Pareto optimality and market failure in the presence of externalities; types of externalities – effects - local, national and global, Environmental Assessment -Measurement issues of externalities, Cost-Benefit analysis (Concept), internalization of externalities

### 3. Property Right

Concept of property rights, the Coase theorem. Distinction among public, private, open access and common property resources

### 4. Environmental Policy

• Overview, Pigouvian taxes and effluent fees, tradable permits, choice between taxes and quotas, optimum pollution control model

### 5. International Environmental Problems

• Trans-boundary environmental problems; economics of climate change; trade and environment.

### **6.** Institutions

• Pollution Control Institutions/Organizations, - local-national-International level, UNEP, IPCC, CPCB, Green Bench,

### 7. Sustainable Development

• Concepts, rules and measurement.

### **References:**

1. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2nd edition, 2010

2. Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W. W. Norton, 5th edition, 2005.

3. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003

4. Pearce and Turner: Economics of natural resource and environment, Prentice Hall

5. Rabindranath Bhattacharyya: Environmental Economics, Oxford.

### **3D : Economics of Finance**

### Economic of Finance

Total Marks: 50 Teacher Assessment: 10 Written Exam: 40

Unit 1: a) Introduction to various forms of business organization – economic advantages and disadvantages of the different forms

Text:

i) L.M. Bhole – Financial Institutions and Markets – Structure, Growth, and Innovations, Tata McGraw Hill, Chapter – 1

ii) Ross, Westerfeld and Jaffe - Corporate Finance, Tata McGraw Hill, Chapter - 1

Unit 2: a) Introduction to first generation financial commodities (negotiable instruments) – bill of exchange, promissory notes, securities and bonds and debentures, shares, and the nature, function and creation of them in course of the economic activities in the real sector.

### Text:

i) L.M. Bhole – Financial Institutions and Markets – Structure, Growth, and Innovations, Tata McGraw Hill, Chapter – 16, 17, 18, 19, 20, 21

Unit 3: a) Transaction price of a negotiable instruments bearing future sum – discounting technique to obtain the present value.

b) Role of the risk factor and the market rate of the interest in determining the rate of discount.

Text:

i) Ross, Westerfeld and Jaffe – Corporate Finance, Tata McGraw Hill, Chapter – 4 ii) Brealey and Myers – Principles of Corporate Finance, Tata McGraw Hill, Chapter – 2, 3, 5, 6 Unit 4: a) Pricing of securities in capital markets – estimating risk and return of individual shares and risk and return of a portfolio of securities

b) The capital market risk-return relation and capital asset pricing.

Text:

i) Prasanna Chandra – Fundamentals of Financial Management, Tata McGraw Hill, Chapter – 4, 5
ii) Brealey and Myers – Principles of Corporate Finance, Tata McGraw Hill, Chapter – 4, 7, 8
iii) William F. Sharpe, Gordon J. Alexander and Jeffery V. Bailey – Investments, Prentice Hall India (Eastern Economy Edition), Chapter – 5, 6, 7, 8, 9, 10

Unit 5: a) Corporate Financial Statements – the basic structure of balance sheet and profit & loss accounts

b) Ratio analysis of financial statements.

- c) Capital Structure and leverage
- d) Short-term and Long-term corporate financing alternatives
- e) Working capital Management

Text:

i) Ross, Westerfeld and Jaffe – Corporate Finance, Tata McGraw Hill, Chapter – 2 (including Appendix 2A and 2B), 14, 15, 16 (including Appendix 16A and 16B), 26
ii) Prasanna Chandra – Fundamentals of Financial Management, Tata McGraw Hill, Chapter – 18, 19, 20, 21, 22, 23, 24

**Unit 6:** a) Evolution of the second generation financial commodities – introduction to major types of derivatives and mechanism of derivative trading, types of traders

Text:

i) Ross, Westerfeld and Jaffe – Corporate Finance, Tata McGraw Hill, Chapter –
22, 23, 24, 25
ii) L.M. Bhole – Financial Institutions and Markets – Structure, Growth, and Innovations, Tata McGraw Hill, Chapter – 24

Unit 7: a) Introduction to financial investment funds and investment processb) Various types of investment funds and institutional investors (Private Equity Fund, Mutual Fund, Hedge Fund, Pension Fund etc.) and securitization process.

Text:

i) L.M. Bhole – Financial Institutions and Markets – Structure, Growth, and Innovations, Tata McGraw Hill, Chapter – 1, 10, 12, 13, 14

ii) Brealey and Myers – Principles of Corporate Finance, Tata McGraw Hill, Chapter – 14

iii) Ross, Westerfeld and Jaffe - Corporate Finance, Tata McGraw Hill, Chapter - 28

References:

1. Financial Institutions And Markets - Meir Kohn, Oxford

2. Financial Management – M.Y. Khan

3. Corporate Finance - A Focused Approach – Michael C. Ehrhardt and Eugene F.Brigham, Thomson South Western

### 3<sup>rd</sup> Year Semester-6 Subject Name: Indian Economics Issue and the Economy of West Bengal Subject code: EC 308

### **Indian Economic Issue (30 marks)**

### **Unit 1 Economic Reform in India Since 1991**

1.1. Background of Indian Economic Reforms – New Economic Policy. Redefining India's development strategy. Changing Role of State and Market.

Rangarajan in Uma Kapila, Chapter 5. Economic Survey 2009-10, Chapter 2 (21-24). Uma Kapila, Chapter 20.

1.2 Industrial Policy, Disinvestment policy and Privatization.

Basu and Maertens (page 141-146,350-354,366-371). Rangarajan in Uma Kapila, Chapter 21. Ahluwalia in Sachs, Varshney and Bajpai.

1.3 Financial sector reforms including banking reform. Monetary Policy of RBI.

Basu and Maertens (246-251, 219-225, 255-261). Joshi and Little, Chapter 4. Ahluwalia in Sachs, Varshney and Bajpai.

1.4 Fiscal Policy Reform – tax reform, debt management, FRBM act and subsidies.

Basu and Maertens (357-366, 141-146), Vijay Joshi in Ahluwalia and Little (ed). Ahluwalia in Sachs, Varshney and Bajpai.

1.5 External sector reforms: Foreign Exchange market, balance of payments, reform, convertibility, export-import policy, foreign directinvestment.

Basu and Maertens (280-299, 305-307).

### **Unit 2Agriculture, Poverty and Social Security**

2.1 Post-reform Agricultural Performance and its Crisis.

Basu and Maertens (59-65, 83-86). Mahendra Dev, Chapter 2. Rao and Jeromi in Uma Kapila, Chapter 13. Vaidyanathan in Uma Kapila, Chapter 14.

2.2 Poverty and exclusion, NREGA, social security for unorganized workers and forest policy.

Basu and Maertens (543-555, 110-113, 428-431, 86-89). Mahendra Dev Chapters 4 and 8. Vaidyanathan in Uma Kapila, Chapter 33.

### **Unit 3 Post-reform performance of Indian Economy**

3.1 Appraisal of Indian Economic Reform. India's Growth Experience.

Uma Kapila Chapter 29. Basu and Maertens (24-32). Ahluwalia 2002. Ahluwalia in Sachs, Varshney and Bajpai.

### **Unit 4. Indian economy: Some Current and Future Issues**

4.1 Inclusive development

Mahendra Dev, Introduction. Economic Survey 2009-10, Chapter 2 (21-24).

4.2 Growth of the Service Sector.

Basu and Maertens (205-215). M Rakshit 2007.

4.3 Food security, Food Procurement and Public Distribution System.

Basu and Maertens (484-489, 561-565). Mahendra Dev Chapter 3 (43-46, 62- 66), Chapter 5. Hanumantha Rao in Uma Kapila, Chapter15. Economic Survey 2009-10, Chapter 8 (198-204) (or latest issues).

4.4 Migration and Urbanization.

Basu and Maertens (443-447). Agarwal, Chapter 7 (86-101)

4.5 Land acquisition, SEZ and Industrialisation.

Basu and Maertens (103-109, 164-68), Aradhana Agarwal 2006, Swapna Banerjee-Guha 2008.

4.6 Demographic dividend.

Basu and Maertens (415-421). Chandrasekhar, Ghosh and Roy Choudhury (2006). Uma Kapila, Chapter 9.

### Unit 5 Public Finance in India

Centre-State Financial Relations-Central and State Government Finances-Parallel Economy-Fiscal Sector Reforms

### **Economy of West Bengal (Marks 20)**

### Unit 6 West Bengal Economy: An Overview

6.1 West Bengal Economy Structure and Growth – based on state domestic product (SDP) data and employment data from National Sample Survey and Census of India.

6.2 West Bengal Economy in relation to India and major states in recent decades: in terms of indicators on - per capita SDP, per capita consumption (rural and urban), income growth, human development.

### **Unit 7 Growth and Development of West Bengal Economy**

7.1 Land Reforms, agricultural growth and related current problems- growth of non-farm rural sector 7.2 Industrial development – problems and prospects; Tertiary sector growth – Informalisation in manufacturing and tertiary sectors.

7.3 Poverty alleviation, Employment generation, self-help-group and social security: Problems and policies

### Readings

For India:

### Texts

1. K. Basu and A. Maertens. The Concise Oxford Companion to Economics in India. Oxford University

Press.

2. Uma Kapila (ed). India's Economic Development Since 1947 (3rd Ed. or latest version). Academic.

3. S. Mahendra Dev. 2007. Inclusive Growth in India. Oxford University Press.

4. Agarwal, A.N. 2003, Indian Economy: Problems of Development and Planning (29th Edition) Wishwa

### Prakashani

### References

4. M.S. Ahluwalia. 2002. "Economic Reforms in India since 1991: Has Gradualism Worked?" The Journal of Economic Perspectives, Vol. 16, No. 3.

5. I.J. Ahluwalia & I.M.D. Little (ed.). 1999. India's Economic Reforms and Development, Essays in honour of Manmohan Singh, Oxford University Press, New Delhi.

6. V. Joshi and I.M.D. Little. India' Economic Reforms 1991-2001. Oxford University Press.

7. M Rakshit. 2007. "Services-led growth: The Indian Experience" in Money and Finance, February.

8. C.P. Chandrasekhar, J. Ghosh and A Roy Choudhury. 2006. "The Demographic Dividend and Young

India's Economic Future," in Economic and Political Weekly, 9 December.

9. G S Bhalla. 2004. Globalisation and Indian Agriculture: State of the Indian Farmer. Academic Publishers: New Delhi.

10. Government of India (annual) Economic Survey of India (Current years), also see Economic Survey

2009-10, Chapter 2.

11. Aradharna Agarwal. 2006. Special Economic Zones: Revisiting the Policy Debates. Economic and Political Weekly. November 4.

12. Swapna Banerjee-Guha. 2008. Space Relations of Capital and Significance of New Economic Enclaves: SEZs in India. Economic and Political Weekly. November 22.

13. J. Bhagwati. India in Transition. Clarendon Press.

14. J. Sachs, A Varshney and N Bajpai (ed). India in the Era of Economic Reforms. Oxford University Press.

For West Bengal:

1.Montek Singh Ahluwalia, 2006, "Economic Performance of States in Post Reform Period", Economic and Political Weekly (May 6).

2.B B Bhatacharyya & S Sakthivel, 2004, "Regional Growth and disparity in India – Comparison of Pre

and Post Reform Decades", Economic and Political Weekly (March 6)

3.Ratan Khasnabis, 2008,"The Economy of West Bengal", Economic and Political Weekly (December 27)

4. A. Raychaudhuri & Tuhin Das (ed.).2005. West Bengal Economy: Some Contemporary issues, Allied

Publishers

5. Economic and Political Weekly, 1998, 33 (47-48) articles on West Bengal Economy

6. West Bengal Human Development Report, 2004, Oxford University Press

7. B Rogaly, B Barbara Hariss-White and S Bose. 1999. Sonar Bangla? Agricultural Growth and Agrarian

Change in West Bengal and Bangladesh. Sage Publications.

3<sup>rd</sup> Year

## Semester-6

### Subject Name:<u>Project/ Term Paper</u> Subject code: EC 310 Third Year Sixth Semester

Internal 20 External 20 Viva-voce 10

The students are to be made acquainted with the tools are technique for preparing their term paper on a choice broadly related to the field of economics learnt over the course period.

# Aliah University Department of Economics

## Course Structure: 2-YEAR SUBSIDIARY COURSE IN ECONOMICS (Total No. of Semester- 4)

## **Distribution of Marks**

Semester	Subject	Subject Code	Written Examination	Teachers' Assessment	Total
1 <sup>ST</sup>	ECONOMICS I	EC 131	40	10	50
$2^{\text{ND}}$	ECONOMICS II	EC 132	40	10	50
3 <sup>RD</sup>	ECONOMICS III	EC 231	40	10	50
	ECONOMICS IV	EC 233	40	10	50
4 <sup>TH</sup>	ECONOMICS V	EC 232	40	10	50
4	ECONOMICS VI	EC 234	40	10	50
	TOTAL		240	60	300

## Total Marks - 300 (for Six Papers)

# **Every Paper Carries 50 Marks**

Written Examination – 40 marks

Teachers' Assessment - 10 marks

# **Aliah University**

# **Department of Economics**

# 1<sup>st</sup> Year

# Semester-I

SYLLAI	BUS				
Subject: ECONOMICS I Subject Code	<b>EC 11</b>	<b>l</b> 1	Perioo	ls/We	ek
SUBJECT	Paper Code	L	Т	Р	Credit
<b>Microeconomics I:</b> (20 Marks) Introduction to Microeconomics, Utility, Indifference Curve Analysis, Demand, Supply.	EC 131	4	1	0	04
<b>Macroeconomics I:</b> (20 Marks) Introduction to Macroeconomics, National Income Accounting, Say's Law of Market - Classical Theory of Output and Employment. Simple Keynesian Model - Income Determination, Keynesian Multiplier and Its Effects.					
Teacher Assessment: (10 Marks)					

# 1<sup>st</sup> Year

# Semester-II

SYLLABUS

Subject: ECONOMICS II Subject Code		2	Perio	eek	
SUBJECT	Paper Code	L	Т	Р	Credit
<b>Microeconomics II:</b> (20 Marks) Theory of Production, Theory of Costs, Revenue, Market Morphology, Theory of Distribution.	EC 132	4	1	0	04
<b>Indian Economics I:</b> (20 Marks) Structure of Indian Economy, Characteristics of Indian Economy as an under developed Economy. National Income of India, Trend, Estimation and Distribution, Population, Recent Population Policy of the Government, Agriculture, Industry.					
Teacher Assessment: (10 Marks)					

### **Aliah University Department of Economics**

2<sup>nd</sup> Year

## **Semester-III**

**SYLLABUS** 

Subject: ECONOMICS III Subject Code: E	C 211	<b>Periods/Week</b>			
SUBJECT	Paper Code	L	Т	Р	Credit
<b>Macroeconomics II:</b> (20 Marks) Money- Function of Money, Different Forms of Money and its Measurement, Quantity Theory of Money (Fisher's and Cambridge Version), Banking- Central Bank, Commercial Bank, Inflation, Deflation and Stagflation.	EC 231	4	1	0	04
<b>Statistics I:</b> (20 Marks) Meaning of Statistics, Primary and Secondary Data, Population and Sample, Charts and Diagrams, Frequency Distribution, Measures of Central Tendency, Measures of Dispersion.					
Teacher Assessment: (10 Marks)					

# 2<sup>nd</sup> Year

# Semester-III

**SYLLABUS** 

Paper Code EC 233	L 4	T 1	P 0	Credit 04
EC 233	4	1	0	04

## Aliah University Department of Economics Sen

2<sup>nd</sup> Year

# **Semester-IV**

SYLLABUS

Subject: ECONOMICS V Subject Code: EC	C 212	Peri			
SUBJECT	Paper Code	L	Т	Р	Credit
<b>Statistics II:</b> (20 Marks) Correlation and Regression, Index Numbers, Vital Statistics, Sampling Theory and Sampling Distribution, Analysis of Time Series.	EC 232	4	1	0	04
Development Economics : (20 Marks) Introduction, Growth or Development Indicators, Capital Formation, Population and Economic development, Balanced and Unbalanced Growth, IMF and World Bank. Teacher Assessment : (10 Marks)					

# 2<sup>nd</sup> Year

# **Semester-IV**

ubject: ECONOMICS VI Subject Code: I	EC 214 Periods/Week				ζ.
SUBJECT	Paper Code	L	Т	Р	Credi
Indian Economics II: (20 Marks)	EC 234	4	1	0	04
Structural Changes in the Indian Economy, Economic					
Reforms, Economic Planning, The Unemployment					
Problems, Indian Public Finance-Central and State Budgets,					
Centre-State Financial Relation, Financial Markets in India,					
Indian Commercial Banks, Reserve Bank of India (RBI),					
Project Paper: (20 Marks)					
Preparing a Project Paper Regarding Different Topics of					
Current Indian Economy.					
-					
<b>Feacher Assessment :</b> (10 Marks)					

### ALIAH UNIVERSITY DEPARTMENT OF ECONOMICS SYLLABUS Subject Name: ECONOMICS I Subject Code: EC 131 1<sup>ST</sup> YEAR SEMESTER I

### MICROECONOMICS I: (20 Marks)

- 10. Introduction to Microeconomics: Nature and Scope, Scarcity and Choice, Differences between Microeconomics and Macroeconomics, Normative Economics and Positive Economics, Production Possibility Curve, Price System as an Economic Mechanism, Evolution of Market Economy, Factor Services and Division of labour, Adam Smith and division of labour.
- 11. **Utility:** Definition, Total Utility and Marginal Utility, Can Utility be Measured? Law of Diminishing Marginal Utility with Criticism.
- 12. Indifference Curve Analysis: Assumption Indifference Curve and Indifference Map -Properties of Indifference Curve - Slope and Marginal Rate of Substitution - Shapes of Indifference Curve - Budget Constraints – Price, Income and Substitution Effects – Normal Goods, Giffen Goods and Inferior Goods.
- 13. Demand: Concept of Demand, Law of Demand, Demand Schedule, Demand Curve, Demand Function, Change in Demand and Movement along with the Demand Curve, Elasticity of Demand, Different Types of Elasticity of Demand, Cross Elasticity of Demand, Unitary Elasticity of Demand, Income elasticity of Demand
- 14. **Supply:** Definition, Stock and Supply, Law of Supply, Supply Schedule, Supply Curve, Supply Function, Change in Supply and Movement along with the Supply Curve, Market Equilibrium, Consumer's, and Producer's surplus, Elasticity of Supply, Different Types of Elasticity of Supply.

#### **References:**

1. Lipsey, R.G. and Christal, K.A.: An Introduction of Positive Economics, Oxford University Press, Oxford, London.

- 2. Samuelson, P.A. and William D. Nordhaus: Economics, Tata Mc Graw Hill, New Delhi.
- 3. Ahuja, H.L.: Modern Economics, S. Chand and Co. Ltd., New Delhi.
- 4. Pindyck, R.S., Rubinfeld, D.L. and Mehta, P.L.: Microeconomics, Pearson Publication, New Delhi.

### MACROECONOMICS I: (20 Marks)

- 1. **Introduction to Macroeconomics:** Macroeconomic Variables, Aggregate Demand and Supply, Circular Flow of Income.
- 2. **National Income Accounting:** Definition and Different Methods of Calculating National Income, Distinction between Gross and Net National Income.
- 3. Say's Law of Market: Classical Theory of Output and Employment.
- 4. Simple Keynesian Model: Income Determination, Keynesian Multiplier and its Effects.

### **References:**

- 1. Dornbusch, Fisher and Startz: Macroeconomics, TataMcGraw-hill Edition, New Delhi.
- 2. Ahuja, H.L.: Modern Economics, S. Chand and Co. Ltd., New Delhi.
- 3. Lipsey, R.G. and Christal, K.A.: An Introduction of Positive Economics, Oxford University Press, Oxford, London.
- 4. Mankiw, N. Gregory: Macroeconomics, Worth Publishers, New Delhi.
- 5. Froyen, R.T: Macroeconomics Theories and Policies, Pearson Publication, New Delhi.

Teacher Assessment: (10 Marks)

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# ALIAH UNIVERSITY

### DEPARTMENT OF **ECONOMICS**

**SYLLABUS** 

Subject Name: ECONOMICS II 1<sup>ST</sup> YEAR Subject Code: EC 132 SEMESTER II

MICROECONOMICS II: (20 Marks)

- Theory of Production: Definition, Short-run and Long-run Total, Average and Marginal Product Law of Diminishing Returns and Variable Proportion – Isoquants and their Properties – Returns to Scale – Constant, Increasing and Decreasing Returns to Scale – Producer's Equilibrium.
- 2. **Theory of Costs:** Different type of costs imputed and opportunity costs short-run and long-run costs, Total Cost, Average Cost and Marginal Cost.
- 3. **Revenue:** Definition, Total Revenue, Marginal Revenue, Average Revenue and Relation among them, Nature of AR and MR Curves under Different types of Markets, Relationship among AR, MR and Elasticity of Demand.
- 4. Market Morphology: Different types of Markets and their Characteristics.
- 5. The Theory of Distribution: Definition, Demand for Factors of Production, Supply of Factors of Production, Marginal Physical Product (MPP), Marginal Revenue Product (MRP), Value of Marginal Product (VMP), Marginal Productivity Theory, Modern Theory of Distribution, Modern Theory of Wages, Ricardian Theory of Rent, Modern Theory of Rent-Economic Rent, Quasi-Rent.

### **References:**

- 1. Lipsey, R.G. and Christal, K.A.: An Introduction of Positive Economics, Oxford University Press, Oxford, London.
- 2. Samuelson, P.A. and William D. Nordhaus: Economics, Tata Mc Graw Hill, New Delhi.
- 3. Ahuja, H.L.: Modern Economics, S. Chand and Co. Ltd., New Delhi.
- 4. Pindyck, R.S., Rubinfeld, D.L. and Mehta, P.L.: Microeconomics, Pearson Publication, New Delhi.
- 5. Henderson, J.M. and Quandt, R.E: Microeconomic Theory, Tata Mc Graw Hill, New Delhi.

### **INDIAN ECONOMICS I:** (20 Marks)

- Meaning of Underdeveloped Economy and Characteristics of Indian Economy: Meaning of Underdeveloped Economy, Characteristics of Indian Economy as an Underdeveloped Economy, Causes of Underdevelopment in India, and Major Issues of Development.
- 2. National Income of India: Trend, Estimation and Distribution.
- 3. Population: Trend of Population Growth Recent Population Policy of the Government.
- Agriculture: Causes of Low Productivity Land Reforms: Meanings, Importance, Progress and Prospects – New Technology and Green Revolution and its Effects – Agricultural Finance and Marketing.

5. **Industry:** Role of Cottage and Small-Scale Industries in Indian Economic Development – Problems and Solutions, Industrial Labour, Industrial Disputes and Social Securities in India.

### **References:**

- 1. Jalan, B.: India's Economic Policy, Viking, New Delhi.
- 2. Datt, R. and Sundaram, K.P.M.: Indian Economy (Latest Edition), S. Chand and Co. Ltd., New Delhi.
- 3. Agarwal, A.N.: Indian Economy (Latest Edition), Vikas Publishing Co. Delhi.
- Misra, S.K. and V.K. Puri: *Indian Economy (latest edition)*, Himalayan Publishing Co., Mumbai.
- 5. Roy, Tirthankar: The Economic History of India, Oxford Publishing, New Delhi.

Teacher Assessment: (10 Marks)

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## ALIAH UNIVERSITY DEPARTMENT OF ECONOMICS SYLLABUS Subject Name: ECONOMICS III Subject Code: EC 231 2<sup>ND</sup> YEAR SEMESTER III

### MACROECONOMICS II: (20 Marks)

- Money: Definition of Money; Evaluation of Money-Barter System; Different Forms of Money and its Measurement - Coinage, Paper Money; Nature of Money; Classification of Money-Legal Tender Money, Bank Money, Token Money, Paper Money, Fiat Money; Functions of Money, Gresham's Law, Demand for Money, Supply of Money, the Concept of Money Supply in India, The Quantity Theory of Money- Fisher's Equation, Cambridge Equation.
- Banking: Definition of Banking, Functions of Banks, Money Market, Essentials of a Sound Banking System, Functions of Central Bank, Functions of Commercial Banks.
- **3.** Inflation, Deflation and Stagflation: Meaning of Inflation, Types of Inflation, Demand-Pull Inflation, Cost-Push Inflation, Causes of Inflation, Effects of Inflation, Inflationary Gap; Deflation, Control of Deflation, Stagflation, Effects of Stagflation.

### **References:**

1. Dornbusch, Fisher and Startz: Macroeconomics, TataMcGraw-hill Edition, New Delhi.

- Ahuja, H.L.: Advanced Economic Theory Microeconomics Analysis, S. Chand and Co. Ltd., New Delhi.
- 3. Lipsey, R.G. and Christal, K.A.: An Introduction of Positive Economics, Oxford University Press, Oxford, London.
- 4. Mankiw, N. Gregory: Macroeconomics, Worth Publishers, New Delhi.
- 5. Froyen, R.T: Macroeconomics Theories and Policies, Pearson Publication, New Delhi.

### **STATISTICS - I:** (20 Marks)

- Meaning of Statistics: Variable and Attribute, Primary and Secondary Data, Population and Sample, Complete Enumeration (or Census) and Sample Survey, Classification, Tabulation.
- 2. **Charts and Diagrams:** Objectives of Diagrammatic Representation Types of Charts and Diagrams, Line Diagram, Bar Diagram, Pie Diagram, and Pictogram.
- Frequency Distribution: Observation and Frequency Ungrouped Frequency Distribution –Construction of Frequency Distribution – Cumulative Frequency Distributions – Diagrammatic Representation of Frequency Distribution, Histogram, Frequency Polygon and Ogive.
- 4. **Measures of Central Tendency:** Arithmetic Mean (AM), Geometric Mean (GM), Harmonic Mean (HM), Median, and Mode with examples.
- 5. **Measures of Dispersion:** Meaning and Necessity, Range, Quartile Deviation, Mean Deviation (MD) and Standard Deviation (SD) with examples.

### **References:**

- Goon, A.M., M.K. Gupta and B. Dasgupta: <u>Basic Statistics</u> The World Press Pvt. Ltd. Kolkata.
- 2. Gupta, S.P.: Statistical Methods, Sultan Chand & Sons, New Delhi.
- 3. Das, N.G.: Statistical Methods, Vol.I&II, M. Das & Co.
- 4. Nagar, A.L. and Das, R.K.: Basic Statistics, Oxford Publication, New Delhi.

Teacher Assessment: (10 Marks)

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### ALIAH UNIVERSITY DEPARTMENT OF ECONOMICS SYLLABUS Subject Name: ECONOMICS IV Subject Code: EC 233 2<sup>ND</sup> YEAR SEMESTER III

### **<u>PUBLIC FINANCE I:</u>** (20 Marks)

- 1. **Nature and Scope of Public Finance:** Definition, Scope, and Instruments Distinguish between Private and Public Finance.
- 2. **The Theory of Public Goods:** Definition Distinguish between Private and Public Goods.
- 3. **Principle of Taxation:** Benefit Theory, Ability to Pay Theory, the Principle of Maximum Social Advantage.
- Classification of Taxes: Definition, Classification of Tax (Direct and Indirect Tax), their Merits and Demerits, Tax Burden, Impact and Incidence.
   P.T.O.
- Public Expenditure and Public Debt (Indian Public Finance): Meaning, Classification, Principle, and Effects of Public Expenditure. Sources of Public Borrowing, Effects of Public Debts, Growth of India's Public Debt, The Public Budget, Classification.

### **References:**

- 1. Musgrave, Richard A: The Theory of Public Finance, Mc Graw Hill, Kogakhusha Ltd., Tokyo.
- Due, John F. and Ann F. Friedlaender: Govern Finance Economics of Public Sector, AITBS Publishers and Distributors, Delhi.
- 3. Datt & Sundaram: *Indian Economy (latest edition)*, S. Chand & Co., New Delhi.
- Misra, S.K. and V.K. Puri: *Indian Economy (latest edition)*, Himalayan Publishing Co., Mumbai.

### **INTERNATIONAL ECONOMICS I:** (20 Marks)

- 1. Introduction: Definition of International Trade, Differences between Internal and International Trade, Factors Affecting International Trade, Advantages and Disadvantages of International Trade.
- 2. Absolute Differences in Cost: Absolute Differences in Cost –Adam Smith's Theory.

- **3. Comparative Differences in Cost:** Comparative Differences in Cost- David Ricardo's Theory.
- 4. Terms of Trade: Terms of Trade and its effects.
- 5. Tariff and Quotas: Economic Cost of Tariff, Free Trade and Protection.
- Balance of Payments: Balance of Payments on Current Account and Capital Account, Exchange Rates and Balance of Payments.

### **References:**

- 1. Krugman, P.R. and Obstfeld, M.: International Economics Theory and Policy, Pearson Publication, New Delhi.
- 2. Samuelson, P.A. and William D. Nordhaus: Economics, Tata Mc Graw Hill, New Delhi.
- 3. Salvatore, Dominick: International Economics, Wiley India.

**Teacher Assessment :** (10 Marks)

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### ALIAH UNIVERSITY DEPARTMENT OF ECONOMICS SYLLABUS Subject Name: ECONOMICS V Subject Code: EC 232 2<sup>ND</sup> YEAR SEMESTER IV

### **<u>STATISTICS II</u>:** (20 Marks)

**1. Correlation and Regression:** Concepts of correlation and regression; Bivariate data, Bivariate frequency distribution; Scatter Diagram; Covariance; Correlation coefficient (r), Properties of Correlation coefficient (r), Calculation, Interpretation and uses of Correlation coefficient (r); Variance of sum of two series; Rank correlation; Multiple correlation and Partial correlation; Regression;

Properties of linear regression; Explained variation and Unexplained variation; Regression curve in bivariate frequency distribution.

- 2. Index Numbers: Meaning of 'Index Number'; Problems in construction of index numbers; Method of construction of index numbers; Quantity of index number; Tests of index numbers; Cost of living index numbers (CLI); Laspeyres and Paasche's formulae for CLI; Errors in index numbers.
- **3.** Vital Statistics: Introduction; Crude Death Rate (CDR); Specific Death Rate (SDR); Standardised Death Rate; Life Table; Crude Birth Rate (CBR); General Fertility Rate (GFR); Age-specific Fertility Rate(ASFR); Total Fertility Rate (TFR); Vital Index; Gross Reproduction Rate (GRR); Net Reproduction Rate.
- 4. Sampling Theory Sampling Distribution: Meaning and objects of 'Sampling'; Sampling error and Bias; Types of Sampling; Random Sampling, Purposive Sampling, Stratified Sampling, Systematic Sampling, Multistage Sampling; Method of drawing Random Sampling; Sampling Distribution; Types of Sampling Distribution; Standard Error (S.E.); Probable Error (P.E.); Distributions used in Sampling Theory: Standard Normal Distribution, Chi-square Distribution, Student's t Distribution, Snedecor's F Distribution.
- 5. Analysis of Time Series: Meaning and necessity of Time Series analysis; Component of Time Series; Adjustments to time series data; Secular trend, Measurement of trend; Seasonal Variation, Cyclical Fluctuation; Business forecasting; Exponential smoothing.

#### **References:**

- Goon, A.M., M.K. Gupta and B. Dasgupta: <u>Basic Statistics</u> The World Press Pvt. Ltd. Kolkata.
- 2. Gupta, S.P.: Statistical Methods, Sultan Chand & Sons, New Delhi.
- 3. Das, N.G.: Statistical Methods, Vol.I&II, M. Das & Co.
- 4. Nagar, A.L. and Das, R.K.: Basic Statistics, Oxford Publication, New Delhi.

### **DEVELOPMENT ECONOMICS I:** (20 Marks)

- 1. **Introduction:** Meaning of Development: Meaning of Economic Development, Broad Indicators of Economic Development, Distinction between Growth and Development, Economics as a Part of Social Development.
- 2. Growth or Development Indicators: Net National Income and Per Capita Income as Growth Indicators Concepts of HDI, GDI, GEM and HPI as Development Indicators.
- 3. Capital Formation: Role of Capital Formation in LCDs and its problems.
- 4. **Population and Economic development**: Population and Economic Development: The Two Way Relation.

- 5. **Balanced and Unbalanced Growth**: Balanced Versus Unbalanced Growth with their Merits and Demerits.
- 6. IMF and World Bank: Role of IMF and World Bank in Economic Development of the LCDs.

### **References:**

- Todaro, M.P. and Stephen C. Smith: *Economic Development*, Pearson Education (Singapore) Pvt. Ltd. Indian Branch, Delhi
- 2. Salvatore, D. and F. Dowling: *Development Economics*, *Sachaum's Outline Series in Economics*, McGraw Hill, New York.
- 3. Thirwall, A.P.: Economics of Development, Palgrave Macmillan, New Delhi.

Teacher Assessment: (10 Marks)

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### Aliah University Department of Economics 2<sup>nd</sup> Year Semester-IV SYLLABUS Subject: ECONOMICS VI Subject Code: EC 234 <u>INDIAN ECONOMICS II:</u> (20 Marks)

- Structural Changes in the Indian Economy: Economic Development and Occupational Distribution; Changes in Occupational Distribution; Work Force Participation Rates in India; Occupational Pattern in India;
- **2.** Economic Reforms: Introduction; Main features of economic reforms; The New Economic Policy; Liberalisation, Privatisation, Globalisation.
- **3. Economic Planning:** Introduction, Objectives and Strategy of Economic Planning; India's 5-Year Plans, Economic Development during the plans.
- **4. The Unemployment Problems:** Nature of unemployment in India, Estimates of unemployment in India, Various Employment Programmes of Indian Government.
- **5. Indian Public Finance:** Central Government Budgets; Revenue of the Central Government, Expenditure of the Central Government; Deficit Financing in India.
- 6. Reserve Bank of India (RBI): Functions of the Reserve Bank of India; Monetary Policy of the Reserve Bank of India.

### **References:**

- 1. Jalan, B.: India's Economic Policy, Viking, New Delhi.
- 2. Datt, R. and Sundaram, K.P.M.: Indian Economy (Latest Edition), S. Chand and Co. Ltd., New Delhi.
- 3. Agarwal, A.N.: Indian Economy (Latest Edition), Vikas Publishing Co. Delhi.
- 4. Misra, S.K. and V.K. Puri: *Indian Economy (latest edition)*, Himalayan Publishing Co., Mumbai.

### **Project Paper:** (20 Marks) PREPARING A PROJECT PAPER REGARDING DIFFERENT TOPICS OF CURRENT INDIAN ECONOMY

Teacher Assessment: (10 Marks)

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