

## IMD Detail Syllabus in Economics – 2015

### **Semester – I**

#### **Paper – 1: Introduction to Economics**

**100 Marks**

Unit ó I: Basic Concept of Economics

Unit ó II: Theory of Consumer Behaviour

Unit ó III: Theory of Production, Cost and Revenue

Unit ó IV: National Income Accounting

### **Semester – II**

#### **Paper – 2: Microeconomic Theory**

**100 Marks**

Unit ó I: Perfect Competition and Analysis of Competitive Markets

Unit ó II: Market with Power ó Monopoly and Monopsony

Unit ó III: Market with Power ó Monopolistic Competition and Oligopoly

Unit ó IV: Factor Market Analysis and Welfare Economics

### **Semester – III**

#### **Paper – 3: Macroeconomic Theory**

**100 Marks**

Unit ó I: Theory of Employment

Unit ó II: Consumption Function and Investment Function

Unit ó III: Quantity Theory of Money

Unit ó IV: Inflation and Business Cycle

### **Semester – IV**

#### **Paper – 4: Public Finance and Basic Statistics**

**100 Marks**

#### **Group – A: Public Finance**

**50 Marks**

Unit ó I: Public Revenue and Expenditure

Unit ó II: Public Debt and Fiscal Policies

#### **Group – B: Basic Statistics**

**50 Marks**

Unit ó III: Descriptive Statistics ó I

Unit ó IV: Descriptive Statistics ó II

<b>Semester – V</b>	<b>200 Marks</b>
<b>Paper – 5: Development Economics</b>	<b>100 Marks</b>
Unit ó I: Measuring Development	
Unit ó II: Theories of Growth and Development	
Unit ó III: Dual Economy Models	
Unit ó IV: Development and Environment	
<b>Paper – 6: International Trade and Mathematical Applications in Economics</b>	<b>100 Marks</b>
<b>Group – A: International Trade</b>	<b>50 Marks</b>
Unit ó I: Pure Theories of International Trade	
Unit ó II: Trade Polices	
<b>Group – B: Mathematical Applications in Economics</b>	<b>50 Marks</b>
Unit ó III: Basic Mathematical Tools for Economics	
Unit ó IV: Mathematical Application in Economics	
<b>Semester – VI</b>	<b>200 Marks</b>
<b>Paper – 7: Issues in Indian Economy</b>	<b>100 Marks</b>
Unit ó I: Structure and Trends of Indian Economy	
Unit ó II: Indian Agriculture, Industry and Service Sectors	
Unit ó III: Financial System: Its Components and Operation	
Unit ó IV: Indian Planning and Economic Reforms	
<b>Paper – 8: Economic History of India and Basic Econometric Methods</b>	<b>100 Marks</b>
<b>Group – A: Economic History of India</b>	<b>50 Marks</b>
Unit ó I: Economic Structure and Change in Primary Sector	
Unit ó II: Changes in Secondary Sector and Infrastructure	
<b>Group – B: Basic Econometric Methods</b>	<b>50 Marks</b>
Unit ó III: Sampling and Introductory Econometric	
Unit ó IV: Sampling and Statistical Inference	

# **IMD Detail Syllabus in Economics – 2015**

## **Semester – I**

### **Paper – 1: Introduction to Economics**

**100 Marks**

#### **Unit – I: Basic Concept of Economics**

Nature and scope of economics, Concept of demand, supply, market equilibrium and elasticity

#### **Unit – II: Theory of Consumer Behaviour**

Marshallian Utility Analysis, Consumer equilibrium, Substitution effect and Income effect of price change, Ordinary and Compensated Demand curves, Price Consumption Curve and Giffen good, Income Consumption Curve, Revealed preference

#### **Unit – III: Theory of Production, Cost and Revenue**

Production function: Total, Average and Marginal product. Law of variable proportion and law of returns to scale; Iso-quant and least cost combination: Expansion path. Cost: Types of cost ó Fixed and Variable. Total, Average and Marginal cost and their interrelation; Short run and long run cost curves; Total, Average and Marginal Revenue and their relationships

#### **Unit – IV: National Income Accounting**

National income and related aggregates: GNP, NNP (at market price and factor cost), GDP, Personal Income, Disposable Income. Methods of Measuring National Income; National Income as an indicator of Economic Welfare

#### **Reading List:**

1. H. L. Ahuja ó Advanced Economic Theory, S. Chand & Company Ltd.
2. Koutsoyiannis ó Modern Micro Economics, Macmillan, London
3. Maddala and Miller ó Microeconomic Theory, McGraw-Hill International
4. Pindyk and Rubinfeld ó Microeconomics, Chapter 18, Prentice Hall
5. Salvator ó Microeconomics
6. Rana and Verma ó Macroeconomics Analysis, Vishal Publication
7. Suraj B. Gupta ó Monetary Economic, S. Chand & Company Ltd.

## Semester – II

### Paper – 2: Microeconomic Theory

100 Marks

#### Unit – I: Perfect Competition and Analysis of Competitive Markets

Profit maximisation under perfect competition in Short run and Long run; Short run supply curve of the firm and Long run supply curve of the industry; Constant, Increasing and Decreasing cost industry; The Effect of Tax

#### Unit – II: Market with Power – Monopoly and Monopsony

Market Power and Capturing Consumer Surplus: Price Discrimination-first, second and third degree price discrimination.

Monopoly: Sources of monopoly power; Average Revenue, Marginal Revenue and Monopolist Equilibrium; the Multiplant Monopolist; Social cost of monopoly, rent seeking.

Monopsony: Monopoly and Monopsony comparison, sources of Monopsony power, Social cost of Monopsony Power, Bilateral Monopoly.

#### Unit – III: Market with Power – Monopolistic Competition and Oligopoly

Monopolistic Competition: Equilibrium in the short run and long run; Economic Efficiency and Monopolistic Competition

Oligopoly: Equilibrium ó Cournot and Bertrand Model, Competition vs. Collusion

#### Unit – IV: Factor Market Analysis and Welfare Economics

Price and Employment of Factor Inputs in Competitive Factor Market.

Pareto Optimality of Competitive Markets, Aggregation of Preferences and Social Welfare Function.

#### Reading List:

1. H. L. Ahuja ó Advanced Economic Theory, S. Chand & Company Ltd.
2. Koutsoyiannis ó Modern Micro Economics, Macmillan, London
3. Maddala and Miller ó Microeconomic Theory, McGraw-Hill International
4. Pindyk and Rubinfeld ó Microeconomics, Chapter 18, Prentice Hall
5. Salvator ó Microeconomics
6. Hal R. Varian, Intermediate Microeconomics: A Modern Approach, East-West Press, New Delhi

## Semester – III

### Paper – 3: Macroeconomic Theory

100 Marks

#### Unit – I: Theory of Employment

Classical Theory of Employment, its criticism and Keynesian Revolution. The Theory of Effective Demand; Determination of Simple Keynesian Equilibrium; The IS-LM Framework and Complete Keynesian Model.

#### Unit – II: Consumption Function and Investment Function

Keynesian psychological law of consumption, factor effecting law of consumption, Relative Income Hypothesis, Permanent Income Hypothesis, Lifecycle Hypothesis. Investment Function - MEC and MEI; Keynesian multiplier, Accelerator and the Super Multiplier.

#### Unit – III: Quantity Theory of Money

Fisher's Cash Transaction Approach, Cash Balance Approach, Keynesian Reformulation of Quantity Theory of Money; Modern Theories of Money of Friedman

#### Unit – IV: Inflation and Business Cycle

Inflation: Demand Pull and Cost Push Theories, Effects of Inflation on Production and Distribution, Anti-Inflationary Policy.

Business Cycle: Meaning and Characteristics; Hawtrey's Theory of Trade Cycle

#### Reading List:

1. Mankiw's Macroeconomics, Worth Publishers
2. Froyen's Macro Economics Theories and Policies, Prentice Hall
3. Branson's Macroeconomics, W. W. Norton & Company
4. Barro's Macroeconomics, The MIT Press
5. Sampat Mukharjee's Analytical Macroeconomics New Central Book agency(P) Ltd.
6. Rana and Verma's Macroeconomics Analysis, Vishal Publication
7. R. D. Gupta & A. S. Rana's Keynes Post-Keynesian Economics, Kalyani Publishers

## Semester – IV

### Paper – 4: Public Finance and Basic Statistics

100 Marks

#### Group – A: Public Finance

50 Marks

##### Unit – I: Public Revenue and Expenditure

Nature and Scope of Public Finance; Private and Public Goods; Principle of Maximum Social Advantage; Market Failure and Role of Governments; Externalities; Sources and Classification of Public Revenue; Tax and Non-tax Revenue; Public Expenditure ó Importance and Objects; Canons of Public Expenditure; Causes of Growth of Public Expenditure (Inclusive of Wangerø Law); Effects on Production, Consumption and Distribution

##### Unit – II: Public Debt and Fiscal Policies

Sources and necessity, Internal and External Debt, Burden of Public Debt, Redemption of Debt; Taxation ó Canons, Principles ó Benefit and Ability to Pay; Different types of Taxation, Impact and Incidence of Taxation, Effect of Taxation; Fiscal Policy ó Meaning and Objectives, Components; Role in Developing Economies

#### Group – B: Basic Statistics

50 Marks

##### Unit – III: Descriptive Statistics – I

Variable and Attribute; Discrete and Continuous Variable; Primary and Secondary data; Collection of Primary data, formation of Table and Charts and Diagram - line diagram, bar diagram, histogram, pie-chart  
Frequency distribution ó different concepts, problem of missing frequencies  
Measures of Central Tendency- Arithmetic mean and Harmonic mean, Median and Mode

##### Unit – IV: Descriptive Statistics – II

Measures of Dispersion ó Range, Mean Deviation, Quartile deviation, Standard deviation, Coefficient of Variance,  
Correlation and Regression, Scatter Diagram, Pearson and correlation coefficient, Rank Correlation coefficient, Regression and its properties.  
Moments ó Central order moments, Skewness and Kurtosis, basic concepts only

#### Reading List:

1. Musgrave ó The Theory of Public Finance, McGraw-Hill Inc., US
2. Browning & Browning ó Public Finance
3. R.K. Choudhary ó Public Finance and Fiscal Policy, Kalyani H.L.
4. H.L. Bhatia ó Public Finance, Vikas Publishing House Pvt. Ltd.
5. Subrata Ganguly ó Public Finance, World Press
6. Ambar Ghosh & C Ghosh ó Public Finance, PHI Learning Private Ltd, New Delhi
7. S.P. Gupta ó Statistical Method, S. Chand
8. Gupta & Kapoor ó Fundamentals of Applied Statistics, S. Chand
9. N.G. Das ó Statistical Methods
10. Goon, Gupta and Gasgupta ó Fundamental of Statistics, The World Press
11. Salvator, D. ó Mathematics and Statistics, Schaum Series, Tata-McGraw-Hill

## Semester – V (200 Marks)

### Paper – 5: Development Economics

100 Marks

#### Unit – I: Measuring Development

Economic Growth and Development; The Evolution of Measures of Development ó Per Capita Income ó Basic Needs Approach ó Physical Quality of Life Index ó Human Development Index ó Gender Development Index ó Gender Empowerment Measures

#### Unit – II: Theories of Growth and Development

Stages of Growth: Rostow, Mark.; Vicious Circle of Poverty; Critical minimum effort hypothesis; Big push theory; Balanced vs. Unbalanced Growth

#### Unit – III: Dual Economy Models

Structural approach of Development, Rural and urban interaction; Formal and informal sectors; Lewis model and its extension by Ranis and Fei; Issues in migration: Harris and Todaro Model

#### Unit – IV: Development and Environment

Sustainable development: Basic concepts, Outcome approach and Opportunity approach to sustainable development; Environmental accounting: Basic concepts and measurement; Market valuation approach and Maintenance approach; Poverty and Environment: Common property rights.

#### Reading List:

1. Basu, Kaushik (2002) ó Analytical Development Economics, The Less Developed Economy Revisited Oxford University Press.
2. Chakraborty, S. ó Development Planning, Oxford University Press, India.
3. Ghatak, S. (1986) ó An Introduction to Development Economics, Allen and Unwin, London.
4. Human Development Reports, Technical Notes: UNDP ó various issues
5. Meier, G.M. and J. E. Rauch (2005) ó Leading Issues in Economics Development, (8<sup>th</sup> Edition), Oxford University Press, New Delhi.
6. Ray Debraj (1998) ó Development Economics Oxford University Press.
7. Todaro, M.P. and S.C. Smith (2003), (8<sup>th</sup> Edition) ó Economic Development, Pearson Education, Delhi.
8. Thirwal, A.P. (1999), (6<sup>th</sup> Edition) ó Growth and Development, Macmillan, U.K.
9. W. Arthur Lewis ó Economic Development with Unlimited Supply of Labour in Agarwal and Singh (ed.) Economics of Underdevelopment, Oxford University Press.
10. Misra & Puri ó Development Economics.

## Semester – V (200 Marks)

**Paper – 6: International Trade and Mathematical Applications in Economics**      **100 Marks**

**Group – A: International Trade**      **50 Marks**

### **Unit – I: Pure Theories of International Trade**

Theory of International Trade: Introduction and basic concepts in the theory of international trade; production possibility curves, community indifference curves, offer curves, box diagram. Theories of absolute advantage, comparative advantage and Heckscher-Ohlin theory of trade

Gains from Trade (GFT): concepts of terms of trade and their importance in the theory of trade, factors affecting terms of trade; Doctrine of reciprocal demand ó its importance and limitations in the theory of trade; Gains from trade ó their measurement and distribution, GFT in commodity; endowment model and in factor endowment model

### **Unit – II: Trade Policies**

Trade Policy: Types of tariffs and Quotas, their impact in partial equilibrium analysis, concept of optimum tariff, Free trade vs. Policy of tariffs and quotas in relation to economic growth with special reference to India; Non-tariff barriers to trade

Balance of Trade and Balance of Payments: Concept and Components; Measures to correct Balance of Payment Deficit; Foreign Exchange Market: Fixed and Flexible Exchange Rate.

**Group – B: Mathematical Applications in Economics**      **50 Marks**

### **Unit – III: Basic Mathematical Tools for Economics**

Relations and function ó types of functions; functions of two or more variables

Differential & Integral Calculus ó Simple derivative, partial derivative, conditions for optimization, Indefinite Integration

Matrix Algebra ó concepts and Operations, Null & Identity; Concept of Determinant; Inversion of matrix, Rank of Matrix, Linear equations, Solution of Linear equations by using inversion and by using Cramer's Rule

### **Unit – IV: Mathematical Application in Economics**

Utility function ó Maximisation of Utility with a constraint; Derivation of ordinary and compensated demand curve; Decomposition of price effect

Production and Cost Functions ó Properties and types; Production function ó and elasticity of substitution; Derivation of AC, AVC, AFC, MC and Relation between AC and MC; Output Maximisation with cost constraint

Demand and Supply functions ó Market equilibrium for single commodity and multiple commodity market; Profit function ó equilibrium under perfectly competitive market and monopoly market

#### Reading List:

1. Chiang, Alpha and Kevin Wainwright (2005) - Fundamental Methods of Mathematical Economics, McGraw-Hill
2. Handerson J. & R. E. Quandt ó Microeconomic Theory: A Mathematical Approach, McGraw-Hill, New Delhi
3. E. Silberberg ó The Structure of Economics: A Mathematical Approach, McGraw-Hill, New Delhi
4. Srinath Barua ó Basic Math and its Economic Application
5. Taro Yamane - Mathematical Economics
6. Joydeb Sarkel & Anindya Bhukta ó An Introduction to Mathematical Techniques for Economic Analysis, Book Syndicate Private Ltd.
7. Salvator D. ó International Economic Welfare
8. Sodersten and Reed ó International Economics
9. Kindleberger - International Economics
10. J. Bhagawati ó International Trade, Selected Reading
11. M. Chakoliadis ó International Trade, McGraw-Hill Inc.
12. Cherunilam ó Interantional Economics, Tata McGraw-Hill



## Semester – VI (200 Marks)

### Paper – 7: Issues in Indian Economy

100 Marks

#### Unit – I: Structure and Trends of Indian Economy

Nature and broad characteristics of Indian Economy; Demographic: structure and problems; National Income: Trends and Composition, Poverty and unemployment.

#### Unit – II: Indian Agriculture, Industry and Service Sectors

Agriculture: Agricultural production and productivity, Size of farms, Land reforms, Green Revolution

Industry: industrial Development during planning period, Industrial Policy, Growth and Problems of Large, Small scale and cottage industries.

Service Sector: Foreign Trade of India ó Composition and Direction of India's foreign trade, EXIM policy and foreign trade policy, WTO and its impact on various aspect of Indian economy

#### Unit – III: Financial System: Its Components and Operation

Money Market: structure, role of RBI, Monetary policy of RBI, Indian monetary system,

Capital Market: Structure, SEBI and capital market reforms, mutual funds, OTECI, NBFC, IRDA;

Foreign Capital: FDI, FII; Capital Account Convertibility

#### Unit – IV: Indian Planning and Economic Reforms

Objectives and Strategy of economic planning in India: Development Strategy and LPG Model of development; Public Sector and Indian Planning: Role and performance of Public Sector; Disinvestment of Public sector; Privatisation and Economic Reforms: Privatisation ó the alternative models, Economics Reforms India

#### Reading List:

1. R. Dutt & K.P.M. Sundaram ó Indian Economy, S. Chand & Co. Delhi
2. Mishra & Puri ó Indian Economy, Himalaya Publishing House, Mumbai
3. Uma Kapali (ed.) ó Indian Economy Since Independence, Academic Foundation, Delhi

**Paper – 8: Economic History of India and Basic Econometric Methods** **100 Marks**

**Group – A: Economic History of India (1857 – 1947)** **50 Marks**

**Unit – I: Economic Structure and Change in Primary Sector**

Condition of Indian Economy During the late Mughal and pre-1857 period ó Land Tenure and Revenue, Agriculture, Industry and Foreign Trade (brief overall ideas only)

Transition to Colonialisation ó Evolution of Land Tenure System and Agriculture Decline in Industrial Production, Changes in Infrastructure and Trade, Debate on 'Economic Drain'  
Agriculture ó Trend in Agriculture Production, its effect on Income, Expansion of Market for Agricultural Production, Related Changes, Effects of Expansion of Markets on Income and Employment

**Unit – II: Changes in Secondary Sector and Infrastructure**

Small Scale Industry ó types, Changes in Production, Capital used, Employment pattern.

Large Scale Industry ó types, Changes in Production, Capital used, Labour and Employment (only Cotton and Jute Industries are to be considered)

Development of Infrastructure: Railways and its Development, Improvement in Irrigation System, A brief review of improvement in Health and Education

**Group – B: Basic Econometric Methods** **50 Marks**

**Unit – III: Sampling and Introductory Econometric**

Sampling Distribution ó Meaning and Objectives of Sampling; Types of Sampling; Random Sampling; Parameter, Statistic and its Sampling Distribution; Expectation and Standard Error of sample mean and sample proportion; Random Sampling from a probability distribution; Four fundamental distribution derived from the normal

Statistical Inference ó Estimation and testing of hypothesis; point estimation of parameters; Maximum-Likelihood estimation, Interval Estimation; Theory of test of significance, Type-I and Type-II errors, Power of a test, Large sample tests, Small sample tests

**Unit – IV: Sampling and Statistical Inference**

Two Variable Classical Linear Regression: Definition and Scope of the Regression Model; Problem of Estimation of Coefficients of the regression model: Assumptions; the Ordinary Least Squares (OLS) estimates ó properties of the OLS estimators; measures of 'Goodness of Fit'. Inference in linear regression model

Reading List:

1. Tapan Raychadhuri and Irfan Habib (eds): Cambridge Economic History of India Vol. I, Cambridge University Press
2. Dharma Kumar (ed.): Cambridge Economic History of India Vol. II, Cambridge University Press
3. V.B. Singh (ed.): Economic History of India, 1857-1956, Allied Publisher
4. Tirthankar Roy: The Economic History of India 1857-1947, Oxford University Press
5. G. Kanshal: Economic History of India 1757-1966, Kalyani Publishers
6. G.S. Maddala ó Introduction to Econometrics, 3<sup>rd</sup> edition, John Wiley & Sons Ltd.
7. D. Gujarati ó Essential of econometrics
8. D. Dougherty - Introduction to Econometrics, OUP
9. S.D. Gujarati ó Basic Econometrics, McGraw-Hill Higher Education
10. J.M. Wooldridge ó Econometrics, Cengage Learning, India Edition