

**M.A. Hons. 5 Years Integrated Course (Economics)  
2016-2018**

**Programme Specific Outcomes**

- PSO1 To impart in depth knowledge to students about economic theory regarding utilization and allocation of resources including labour, natural resources and capital.
- PSO 2 To develop students understanding about how market for goods and services function and how income is generated and distributed.
- PSO3 To give students in depth knowledge into special fields of choice like agricultural economics, industrial economics, financial market, development economics, international trade, urban economics econometrics, mathematical economics etc.
- PSO4 To make students familiar with economic theories and their relevance, econometrics, quantitative techniques and applied research in a wide variety of fields within economics.
- PSO5 Students would know how the economy is influenced by economic policy, technological advances and demographic conditions

<b>Paper. Nomenclature</b>		<b>Semester-I (2015-16)</b>		
<b>Total</b>		<b>Theory</b>	<b>Internal</b>	
<b>No.</b>			<b>Assessment</b>	
I .1	Indian Economy: Problems and Prospects –I	80	20	100
I .2	Micro Economics-I	80	20	100
I .3	Mathematics for Economic Analysis –I	80	20	100
I .4	Basic concept in Sociology	80	20	100
I .5	English –I	80	20	<u>100</u>
				<b>Total =500</b>
<b>Semester-II</b>				
II .1	Indian Economy: Problems and Prospects-II	80	20	100
II .2	Micro Economics-II	80	20	100
II .3	Mathematics for Economic Analysis – II	80	20	100
II .4	Society, Culture and Social Change	80	20	100
II .5	English –II	80	20	<u>100</u>
				<b>Total= 500</b>
<b>Total of I &amp; II Semester = 1000</b>				
<b>Semester-III (2016-17)</b>				
III .1	Economic History of India 1857-1947	80	20	100
III .2	Macro Economics-I	80	20	100
III .3	Development Economics – I	80	20	100
III .4	Welfare Economics-I	80	20	100
III .5	Statistics for Economic Analysis-I	80	20	<u>100</u>
			Total	500
<b>Total of I, II &amp; III Semester = 1500</b>				

**Semester-IV**

IV .1	Computer Applications in Economic Analysis	80	20	100
IV .2	Macro Economics – II	80	20	100
IV .3	Development Economics- II	80	20	100
IV .4	Welfare Economics-II	80	20	100
IV .5	Statistics for Economic Analysis-II	80	20	<u>100</u>
			Total	500

**Total of I, II, III & IV Semester= 2000****Semester- V (2017-18)**

V .1	History of Economic Thought-I	80	20	100
V .2	Econometrics	80	20	100
V .3	Basics of Financial Markets	80	20	100
V .4	Economics of Agriculture	80	20	100
V .5	International Economics I	80	20	<u>100</u>
			Total	500

**Total of I, II, III, IV & V Semester =2500****Semester-VI**

VI.1	History of Economic Thought-II	80	20	100
VI.2	Human Resource Development	80	20	100
VI .3	Economics of Public Finance	80	20	100
VI .5	International Economics II	80	20	<u>100</u>
			Total	500

**Grand Total of I to VI Semester =3000****Semester-VII (2018-19)**

<b>Paper. Nomenclature</b>	<b>Theory</b>	<b>Internal</b>	<b>Assessment</b>	
<b>Total</b>				
<b>No.</b>				
VII .1	Advanced Economic Theory–I	80	20	100
VII.2	Econometrics Applications-I	80	20	100
VII .3	Operations Research –I	80	20	100
VII .4	Public Economics	80	20	100

**Semester-VIII**

VIII .1	Advanced Economic Theory –II	80	20	100
VIII .2	Econometrics Applications -II	80	20	100
VIII .3	Operations Research – II	80	20	100
VIII .4	Environmental Economics	80	20	100

**Semester-IX**

IX. 1(a)	Agriculture and Rural Development	80	20	100
IX. 1 (b)	Agriculture and Rural Development	80	20	100
IX. 2 (a)	Banking and Insurance	80	20	100

### Semester-X

**No formal teaching would be offered in the department in this semester. However, under the overall supervision of the department, the student would be attached to one or the other Public/Private organization in her/his majoring area so as to get on the job training and work experience. Alternatively, students may submit dissertation in the area of their specialization. Dissertation/Project: Maximum Marks-400 (300 for Evaluation and 100 for Viva-voce)**

#### I.1 – INDIAN ECONOMY: PROBLEMS AND PROSPECTS –I

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

##### Course Outcomes:

- C01:** Students will gain knowledge about poverty and unemployment in India and programmes for its eradication.
- C02:** Students will gain knowledge of various aspects of Indian agriculture.
- C03:** Students would gain knowledge of various issues of Indian economy.

#### UNIT – I

**Introduction to Indian Economy** – Basic characteristics and features of Indian economy. Economic Planning in India : Features , Objectives and Assessment of Indian Planning. (Plan wise details to be excluded).

#### UNIT – II

Demographic features of India's population. Inter-state disparities in the pattern of development. Structural Change in the distribution of Income and Workforce in India.

#### UNIT – III

Poverty and unemployment in India. Programmes for eradication of poverty and unemployment with special reference to the post – reform era.

#### UNIT – IV

**Agriculture:** Features of Indian Agriculture. Impact of Green Revolution on Indian Agriculture. Recent Trends in Agricultural Development -- Causes of Deceleration and Future Challenges

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall**

**contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

**Reading List:**

- Brahmananda, P.R. and Panchmukhi : The Development Process of Indian Economy, Himalaya Publishing House, New Delhi. Latest Edition
- Lucas ,E.B., and Papanek, G.F.: The Indian Economy- Recent Developments and Future Prospects, Oxford University Press, New Delhi. Latest Edition
- Deepashree : Indian Economy Performance and Policies Anno Books Pvt. Ltd., New Delhi Latest Edition
- S.K.Mishra, V.K. Puri : Indian Economy : Its Development Exper5ience, Himalaya Publishinhg House, New Delhi (Latest Edition)
- Economic Survey: Government of India. Latest Issue.
- Economic and Political Weekly: Various Issues
- A.N. Aggarwal : Indian Economy, V.K. Publications.
- World Bank, World Development Report (Latest), World Bank, Development Indicator 2010 2010.
- Mishra, S.K and V.K Puri Indian Economy- 151 Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.

## I.2 - MICRO ECONOMICS-I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam: 80**

**Internal Assessment: 20**

### Course Outcomes:

- C01:** Students will gain knowledge about nature and scope of micro economics.
- C02:** Students will gain knowledge about theory of production and cost and also an insight into demand analysis..
- C03:** Students would gain knowledge of various issues of Indian economy.

### UNIT-I

**Introduction and basic concepts:** Nature and scope of micro economics, Basic Economic Problem - Choice and Scarcity, Methodology of Economics -Inductive and Deductive methods, Positive vs. Normative Economics, Static and Dynamic Analysis, Partial vs. General Equilibrium Analysis.

### UNIT –II

**Demand analysis:** Law of Demand, demand of a firm and Market; Elasticity of Demand - Price, Cross and Income Elasticity of Demand - Measurement of price Elasticity of Demand; Consumer Behaviour: Theories of Demand; Cardinal Utility approach; Indifference curve, Consumers equilibrium. Price, Income and Substitution effects (Hicks Allen & Slutsky method), Revealed Preference Theory.

### UNIT-III

**Theory of production and cost:** Production Function - The Law of Variable Proportions; Returns to Scale-Isoquant; Least Cost Combination and Producer's Equilibrium, Traditional and Modern theories of Costs, Cost-output relation.

### UNIT-IV

**Price and output determination:** Perfect competition: Features, Price determination in short and long run Equilibrium of Firm and Industry, Monopolistic competition – features, equilibrium of the firm with product differentiation and selling cost. Monopoly: Price and output determination, Price discrimination, Bilateral Monopoly

**Note:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

### Reading List:

- Koutsoyiannis, A: (1979): Modern Microeconomics (2nd ed), Macmillan Press, London.
- Sen, A (1999): Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- Varian, H(2000): Microeconomic Analysis, W.W. Norton, New York.
- Baumol, W.J: (1982): Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Bain, J (1958): Barriers to New Competition, Harvard University Press, Harvard
- Henderson, J.M. and Quandt (1980): Micro Economic Theory: A Mathematical Approach, Mc Graw Hill, New Delhi.
- Ahuja, H.L. (2006): Advanced Economic Theory, Sultan Chand and Co., New Delhi.

### I.3 – MATHEMATICS FOR ECONOMIC ANALYSIS-I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Course Outcomes:**

- C01:** The advance and technically rigorous nature of course would serve as an excellent foundation for students for studying economic with the help of mathematical tools.
- C02:** It would form base for other subjects like: microeconomics, econometrics etc.
- C03:** It would frame an application-oriented mindset.

#### **UNIT-I**

Basics: real number system, sets and set operations, relations and functions, inverse functions; solution of linear equations in two variables, solution of quadratic equations, logarithms and exponents; exogenous and endogenous variables.

#### **UNIT-II**

Fundamentals of Matrices; Determinants. Solution of a system of upto 3 equations by matrix inversion and Cramer's rule. Input-Output analysis – Static open model.

#### **UNIT-III**

Differentiation – idea of limit (but not its evaluation) meaning and economic interpretations of derivative. Rules of differentiation including logarithmic and exponential functions. Unconstrained optimization – single choice variable, global and local.

#### **UNIT-IV**

Calculus of multivariable functions, higher order derivatives, constrained optimization with upto 2 equality constraints

**Note 1: Purpose of the course is to learn application of mathematical tools with understanding in economics. Derivations and proofs are to be avoided.**

**Note 2: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

**Reading List:**

- Chiang, Alpha C. "Fundamental Methods of Mathematical Economics" (Mc-Graw Hill)
- Dowling, Edward T "Mathematics for Economists" (Schaum's outline Series, Tata Mc-Graw Hill)

## I.4(a) - BASIC CONCEPTS IN SOCIOLOGY

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The students will be familiarized with the different concepts of society.
- C02:** The course will help the students to build social and moral ethics.
- C03:** The students will be acquainted with nature, characteristics and significance of economic and political institutions.

### **UNIT – I**

**Nature, Definition & Scope of Sociology:** Its Relationship with History, Economics, Political Science, Anthropology and Psychology

### **UNIT – II**

**Basic Concepts:** Its Nature and Characteristics, Social Structure, Status & Role, Society, Community, Association, Norms and Values

### **UNIT – III**

**Social Groups and Processes:** Nature, Definition & Types: Primary Secondary & Reference Group, Integration, Cooperation and Conflict

### **UNIT – IV**

**Socialization and Social Institutions:** Definition, Stages and Agencies of Socialization; Nature, Characteristics and Significance of Economic and Political Institutions

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

**Reading List :**

- Ahuja, Ram (2001): **Indian Social System**, New Delhi: Rawat Publication.
- Ahuja, Ram (2003): **Society in India**, New Delhi: Rawat Publication.
- Bottomore, T.B. (1972): **Sociology: A Guide to Problems and Literature**, Bombay: George Allen and Unwin (India).
- Fulcher & Scott (2003): **Sociology**, New York: Oxford University Press.
- Giddens, Anthony (2005): **Sociology**, Polity Press.
- Harlambos, M. (1998): **Sociology: Themes and Perspective**, New Delhi: Oxford University Press.
- Harlambos & Holborn (2000): **Sociology**, London: Harper-Collins.
- Inkeles, Alex (1987): **What is Sociology?** New Delhi: Prentice-Hall of India.
- Johnson, Harry M. (1995): **Sociology: A Systematic Introduction**, New Delhi: Allied Publishers.



## II .1 – INDIAN ECONOMY: PROBLEMS AND PROSPECTS –II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The course will impart knowledge regarding Indian taxation system.
- C02:** It will help the students to prepare for different competitive exams related to economics.
- C03:** Students would gain knowledge of various issues of Indian economy.

### **UNIT – I**

Features and Characteristics on Indian Economy. Agriculture: Importance of Agriculture; Causes of backwardness and low productivity; Land Reforms: Need, Implementation and Critical Evaluation.

### **UNIT -II**

Industry: Problems of Industrial Development; Public and Private Sector; Recent Industrial policy. Role and Problems of Small and large Scale Industries; Major large scale industries: Iron and Steel, Petroleum.

### **UNIT-III**

Principles features of Indian Tax structure. Division of financial resources between centre and their states; Direction and composition of exports and imports and changes therein since 1991.

### **UNIT-IV**

Features of Economic reforms and structural adjustment programme: Liberalization, Privatization and Globalization, appraisal of Economic reform programme.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

### **Reading List:**

- Ahluwalia, I.J. and Little, IMD: India's Economic Reforms and Development. (eds.) 1998 (Essays in Honour of Manmohan Singh), OUP, New Delhi.
- Krueger, A.O. (Ed) 2003 Economic Policy Reforms and the Indian Economy, Oxford University Press, New Delhi.
- Ramaswamy, V.S. and Namakumari, S 1999: Strategic Planning and Formulation of Corporate Strategy—Text and Cases, Macmillan, New Delhi.
- Nagaraj, R. 2006: Aspects of India's Economic Growth and Reforms, Academic Foundation, New Delhi.
- Rosen, George 1988: Industrial Change in India 1970 – 2000, Allied Publishers, New Delhi.
- Economic Survey: Government of India: Various Issues.
- Economic and Political Weekly: Various Issues

## II. 2 MICRO ECONOMICS-II

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

### Course Outcomes:

- C01: The students will be introduced to different economic models.
- C02: The students will get to know different market structures.
- C03: The course will emphasize on the analysis of welfare economics.

### UNIT-I

**Price and output determination:** Oligopoly-Price and output determination – Non Collusive: Cournot, Kink demand curve and price rigidity, Collusive: Price leadership, Cartels.

### UNIT-II

**Alternative Theories of the Firm:** Critical evaluation of marginal analysis; Baumal's sales revenue maximization model(simple static with advertisement model); Full-cost pricing rule; Bain's, limit pricing theory.

### UNIT-III

**Theory of Factor Pricing:** Market for Factor Inputs: (largely with reference to Labour): A Firm's and Market Demand for a labour (with one and several variable inputs) and its determinations. Supply of labour to a firm and the Market.

#### Equilibrium Wage Rate and Employment under:-

- (i) Competitive Factor and Product Market
- (ii) Monopsonistic buyer of Labour and perfect competition in Labour market
- (iii) Imperfect competition in product market and Trade Union Monopoly
- (iv) Bilateral Monopoly

### UNIT-IV

**Welfare Economics:** Conditions of Pareto Optimality; Pareto efficiency versus Pareto optimality, Market failure and its causes; Markets with Imperfect competition; consumption and production externalities; public goods. Ways for correcting it.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

#### Reading List:

- Kreps, David M. (1990), A Course in Microeconomic Theory, Princeton University Press, Princeton.
- Koutsoyiannis, A. (1979), Modern Microeconomics, (2nd Edition), Macmillan Press, London.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Sen, A. (1999), Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.
- Manikw Gregory N (1968): PRINCIPLE OF Economics , 3<sup>rd</sup> Edition, Thomson; 3<sup>rd</sup> Indian Reprint (2007)
- Bownol, Williem J and Blinder; Micro Economics; Principles of Policy 9<sup>th</sup> Edition; Thomson, First Indian Edition (2007)



## II .3 – MATHEMATICS FOR ECONOMIC ANALYSIS – II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam: 80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The students will learn the use of Lagrange multiplier methods.
- C02:** The students will be acquainted with the knowledge of maxima and minima of functions.
- C03:** The course will emphasize on the use of net present value and other related concepts.

### **UNIT t-I**

Integration – meaning and economic interpretation. Indefinite and definite integration. Simple techniques including integration by substitution and integration by parts.

### **UNIT -II**

Differential equation – basic concepts, solution of first order linear differential equation. Non-linear differential equation – exact and variable separable type only. Linear differential equation of second order with constant coefficient and term.

### **UNIT -III**

Difference equation – basic concepts, solution of first and second order linear difference equation with constant term and coefficient.

### **UNIT -IV**

Linear Programming – Relevance and basic concepts, Graphic, simplex and dual solution. Economic interpretation of dual

**NOTE 1: Purpose of the course is to learn application of mathematical tools with understanding in**

**Economics. Derivations and proofs are to be avoided.**

**NOTE 2: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

### **Reading List:**

- Chiang, Alpha C. “Fundamental Methods of Mathematical Economics” (Mc-Graw Hill)
- -Dowling, Edward T “Mathematics for Economists” (Schaum’s outline Series, Tata Mc-Graw Hill)

## II.4 - SOCIETY, CULTURE AND SOCIAL CHANGE

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The students will be familiarized with the different concepts of society.
- C02:** The course will help the students to build social and moral ethics.
- C03:** The students will be acquainted with nature, characteristics and significance of economic and political institutions.

### **UNIT – I**

**Society:** Tribul, Rural , Urban Industrial and Post Industrial : Its Nature, Definition & Types.

### **UNIT – II**

**Culture:** Its Nature, Definition & Types: Material and Non-Material Culture; Socialization: Its Importance, Processes and Stages; Social Control: Its Types and Means.

### **UNIT – III**

**Process of Social Change:** Industrialization, Secularization, Modernization & Globalization: Its Nature & Impact on Society.

### **UNIT – IV**

**Concepts & Basis of Social Stratification:** Caste, Class, Power & Gender

**NOTE:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

### **Reading List:**

- Ahuja, Ram (1997): **Society in India: Concept, Theories and Recent Trends**, Jaipur: Rawat Publication.
- Beteille, Andre (1992): **Backward Classes in Contemporary India**, New Delhi: OUP.
- Dube, S.C.(1991): **Indian Society**, New Delhi : National Book Trust.
- Ghurye, G.S. (1968): **Social Tension**, Bombay: Popular Prakashan.
- Karve, Iravati (1961): **Hindu Society: An Interpretation**, Pune: Daccan College.
- Mandelbaum, D.G. (1970): **Society in India**, Bombay: Popular Prakashan.
- Sharma K.L.(ed.) (1994): **Caste and Class**, Jaipur, Rawat Publication.
- Srinivas, M.N.(1980): **India's : Social Structure**, New Delhi : Hindustan Publication.
- Srinivas, M.N.(1985): **Social Change in Modern India**, New Delhi : Orient Longman.
- India: 2010 Govt. of India, New Delhi, Govt. of India publication division.

### III. 1 ECONOMIC HISTORY OF INDIA: 1857 – 1947

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

#### **Course Outcomes:**

- C01:** Students would gain knowledge the position regarding Indian foreign trade before independence.
- C02:** Employment in research institutes as researcher and policy maker.
- C03:** Students would gain knowledge about the history of Indian economy.

#### **UNIT – I**

Why study economic history, the problems in interpreting India's past, the state of the Indian Economy on the eve of independence, Indian Economy in the mid-nineteenth century, growth of the empire and systems of land settlements in the Colonial India.

#### **UNIT - II**

Transformation of the traditional village – economy during the British rule, Commercialization of agriculture – its causes and consequences, Emergence of agricultural labour as a category, movement of agricultural wages and prices during the period – problems of rural indebtedness.

#### **UNIT – III**

The state of industrial development in mid-nineteenth century India, the de-industrialization thesis –its statement and validity, emergence of modern capitalist industrial enterprise in India – Textile (Jute and Cotton), Iron & Steel, Cement, Coal, Tea.

#### **UNIT – IV**

Foreign capital in Colonial India – its extent and impact; foreign-trade-growth and composition; 'guided under-development' of India under the British rule; evolution of provincial finance, the nature and problem of public debt; Economic drain from India -form, extent and consequences.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

#### **Reading List:**

- G. Kaushal : Economic History of India- 1757 to 1966.
  - Kalyani Publishers, New Delhi.
- V B Singh (ed.) : Economic History of India 1857-1956. Allied
  - Publications Private Limited, Bombay, 1965.

### III.2 - MACRO ECONOMICS – I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

#### **Course Outcomes:**

- CO1.** Students will be able to explain the concept of opportunity costs, trade –off and benefits of economics.
- CO2.** Students will learn the concept of fiscal and monetary policies and their effect on economy.
- CO3.** It will demonstrate knowledge of laws of supply and demand and equilibrium.
- CO4.** Students will be familiar about a clear picture of circular flow model.

#### **UNIT -I**

**Introduction:** Nature and Scope of Macro Economics, Difference between Micro and Macro Economics and Importance of Macro Economics.

**National Income:** Concepts, Measurement and limitations of National Income Statistics, Circular flow of income in two, three and four sector economy.

#### **UNIT -II**

**Determination of Income and Employment:** Classical theory of Income and Employment determination, Keynes objections to Classical Theory, Keynesian Theory of Income and Employment determination.

#### **UNIT -III**

**Consumption:** Consumption Function, Technical Attributes of Consumption, Keynesian Psychological Law of Consumption and its Implications.

**Income – Consumption Relationship:** Absolute and Relative Income Hypothesis and Permanent Income Hypothesis.

#### **UNIT -IV**

**Investment Function:** Types of Investment, Determination of level of Investment, Marginal Efficiency of Capital (MEC).

**Theories of Investment:** Classical and Keynesian Theory of Investment (Marginal Efficiency of Investment), Saving –Investment Equality.

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

#### **Reading List:**

- Lipsey R.G. and K.A. Christal (1999) “Principles of Economics” 9<sup>th</sup> Ed., Oxford University Press.
- Ackley, G (1978), “Macroeconomics: Theory and Policy”, Macmillan, New York.
- Branson, W. A. (1989), “Macroeconomics: Theory and Policy”, 3<sup>rd</sup> ed. Harper and Harper and Row, New York.
- Shapiro, E (1996), “Macroeconomics: Analysis” Galgotia Publication, New Delhi.

- Stiglitz J. E. and Carl E. Walsh (2002), Principles of Macroeconomics, W.W. Norton and Company, New York.
- Paul Samuelson and Nordhaus: (2005) “Economics” (18<sup>th</sup> Ed.) Tata Hill Publishing Company, New York.
- Mankiw N. Gregory: (2007) “Principles of Economics,” Thomson, Indian Reprint.
- Lipsey R.G. and K.A. Chrystal (2007) “Economics”, Oxford University Press, Oxford.



### III. 3 - DEVELOPMENT ECONOMICS - I

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

#### Course Outcomes:

- C01:** Students would be acquainted with the various perspectives of economic growth and its relevance.
- C02:** Students would become familiar with factors affecting economic growth and development.
- C03:** Students would be able to apply economic theories and concepts to contemporary social issues, as well as formulation and analysis of policy and recognize the role of ethical values in economic decisions.

#### UNIT –I

**Basic Concepts of Economic Development:** Economic Growth and Development, Concept of underdevelopment and basic characteristics; Determinants and Measurement indicators (PQLI and HDI) of economic development: sustainable economic development.

#### Unit-II

**Theories of Economic Development:** Adam Smith, Karl Marx and Schumpeter.

#### Unit-III

**Development Approaches to Development:** Vicious Circle of Poverty, Lewis dual economy model, leibenstein critical minimum effort theory, balanced vs. unbalanced growth theories.

#### Unit-IV

**Economic Planning and Policy:** Development planning: rationale, Strategies and objectives of planning; Role of state and Capital formation in economic development

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory

#### Reading List:

- Thirlwall, A. P.(2003),“Growth and Development”, Seventh edition, Palgrave Macmillan, New York.
- Todaro, Michael P. and Stephen C Smith (2004) “Economic Development”, Pearson Education, (Singapore) Pvt. Ltd., Indian Branch, Delhi.
- Ray, Debraj(2004), “Development Economics”, Seventh impression, *Oxford University Press, New Delhi.*
- Meier, Gerald M. and James E. Rauch (2000), “*Leading Issues in Economic Development*”, Oxford University Press, New York.
- Ghatak,
- Subrata (2003) Indian Reprint 2007: Introduction to Development Economics, Rout ledge, London & New York
- Rist, Gilbert (2002) The History of Development Academic Foundation, New Delhi
- Ghosh, Arun (1996) Paradigms of Economic Development, IAS, Shimla.
- Fukuda-Parr Sakiko and Kumar Shiva, A K (2003) Readings in Human Development Oxford University Press
- Sen, A K (ed.) (1970): Growth Economics, Penguin Books
- Sen, A K (ed.) (1970): Growth Economics, Penguin

### III 4 - WELFARE ECONOMICS-I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

#### **Course Outcomes:**

- C01:** The course will introduce various concepts of welfare economics.
- C02:** Students would learn to construct models and use general equilibrium analysis.
- C03:** Students would be able to evaluate the welfare effects of policy changes in a coherent way.

#### **UNIT-I**

Benthamite Approach to Aggregate Welfare; Optimum Resource Allocation and Welfare Maximization,

#### **UNIT-II**

Assumption of Uniform Income – Utility Function of Individuals; Questions of Income Distribution; Issue of Interpersonal Comparisons of Utility.

#### **UNIT-III**

Marshallian Welfare Economics; Consumer's Surplus; Measurement of Consumer's Surplus – Difficulties involved, Criticism.

#### **UNIT-IV**

Principle of Compensating Variation; Hicks's Surpluses; Concept of Consumer's Surplus; Consumer's Surplus and Tax-Bounty Analysis

#### **UNIT-V**

Pareto optimality – Optimum exchange conditions, The production optimum, The consumption optimum; Concept of contract curve; Top level optimum;

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

#### **Reading List :**

- Baumol, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
- Pigou, A.C. (1962), The Economics of Welfare(4thEdition), Macmillan.
- Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
- Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers,

### III. 5 STATISTICS FOR ECONOMIC ANALYSIS-I

Max. Marks: 100  
Time: 3 Hrs.

Written Exam:80  
Internal Assessment: 20

#### Course Outcomes:

- C01:** Students would learn the common statistical techniques and terminologies used in the course and understand the concept of a frequency distribution for sample data, and able to summarise the distribution by diagrams and statistics.
- C02:** Students would be able to apply fundamental concepts and use appropriate software tools for data summary and exploratory data analysis.
- C03:** Students would gain knowledge to interpret examples of methods for summarising data sets, including common graphical tools and summary statistics.

#### UNIT –I

**Introduction : Basic concepts:** Population, Sample, Parameter, Statistic, frequency distribution, Cumulative frequency distribution; Graphic and diagrammatic representation of data; Techniques of data collection .Census and Sampling method . Sampling and Non-Sampling Errors.Primary and secondary data.

#### UNIT-II

Measures of Central Tendency: A.M., G.M., H.M., Median, Quartiles, Deciles, Percentiles, Mode

#### UNIT-III

Measures of dispersion: range, inter-quartile range, quartile deviation, mean deviation, variance, standard deviation, Lorenz curve, skewness and Kurtosis, moments

#### UNIT-IV

Index numbers : Concept, price relative, quantity relative and value relative, Laspeyer's, Paasche's and Fisher's index numbers; Family budget method. Problems in the construction and Limitations of index numbers; Tests of an ideal index number. Chain indices or Chain base Index Numbers. Base Shifting, and Deflating of Index Numbers .Cost of Living Index Numbers.

**Note:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

#### Reading List:

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill, 1992)
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4<sup>th</sup> edition), Pitman, Australia.

## IV .1 - DATA BASE OF INDIAN ECONOMY AND COMPUTER ANALYSIS OF DATA

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** Students would learn the common statistical techniques and terminologies used in the course and understand the concept of a frequency distribution for sample data, and able to summarise the distribution by diagrams and statistics using research software.
- C02:** Students would become familiar with the sources of vital statistics data, how to interpret such data and how to perform basic tests to evaluate them which will help students in their doctoral research.
- C03:** Students would learn statistical methods to be commonly used in the functional areas of business including accounting, finance, management, and marketing on Excel and SPSS.

### **Unit-I**

Importance of data in economic analysis and Policy formulation.

Nature and Types of data: Sample, Census, Primary, Secondary, Micro, Aggregative etc. Statistical and Data Collection system in India at the Centre and in the States. Major Statistical Publications in India.

### **Unit-II**

Population, National Income, Agriculture, Industry, Employment and Labour, Wages and Prices, Public Finance, Money Supply and Banking, Foreign Trade, Consumer Expenditure, Health and Education. Statistics in India: Aspects of each on which data are available, main data publications in each category and conceptual and empirical problems in the use of each types of these statistics.

B. Computer Analysis of Data

### **Unit-III**

Introduction to Microsoft Excel and Lotus 1-2-3

- Creation of worksheets; Data entry, formatting, sorting and validation; Importing and exporting of data files and web queries. - Uses of mathematical, financial and statistical function and what if analysis.

- Data Analysis: ANOVA, Correlation, F-test, Z-test and t-test.

- Creation of diagrams and graphs.

- Regression and Forecasting using worksheets.

Introduction to Microsoft Power Point:

Preparation of presentations in Power point using design template and Text structure layouts.

### **Unit-IV**

Introduction to Window based Statistical Packages

- Creation of data files, assigning names and labels to variables, sort cases, split files, import/export of files.

- Data Analysis: Descriptive statistics, Comparing means, Correlation, ANOVA, parametric and non-parametric tests, Regression Analysis and preparation of graphs and diagrams.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

Reading List:

Raza, M, Naqvi, S & Dhar, J : Sources of Economic and Social Statistics in India. Eureka Publications, New Delhi

Rao, C R (Editor) (1972) : Data Base of Indian Economy, Vol. I and Vol. II Statistical Publishing Society, Calcutta

Arora, Ashok and Bhatia, : Information System for Managers, Excel Books,

## **IV .2 - MACRO ECONOMICS – II**

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

CO1. It will help the students to apply supply and demand models to analyze responses of market to external events.

CO2 It will help students to describe IS-LM model.

CO3 The course will illustrate the role of financial institutions in the economy.

CO4 Students will be able to explain concept of gross domestic product, inflation and unemployment

### **UNIT-I**

**Keynesian Multiplier:** Concepts, Relation between Multiplier, MPC and MPS, Comparative Static and Dynamic Process. Working of Multiplier in UDC's. Acceleration Principle and Concept of Super Multiplier.

### **UNIT-II**

**Determination of General Price level:** Classical and Keynesian Theory of Money and Prices. **Inflation:** Effects of Inflation, Theories of Inflation: Cost Push and Demand Pull Inflation, Phillips Curve Analysis of Inflation and unemployment.

### **UNIT-III**

**Rate of Interest:** Keynesian and IS-LM Theories of Interest rate.

**Macro Economic Policies:** Monetary and Fiscal Policies.

### **UNIT-IV**

**Trade Cycles:** Meanings, Types, Phases and Theories of Trade Cycles (Hicks and Samuelson).

**Economic Growth:** meaning and theories. Harrod-Domar Theory and Neo-classical Theory.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

**Reading List:**

- Lipsey R.G. and K.A. Christal (1999) “Principles of Economics” 9<sup>th</sup> Ed., Oxford University Press.
- Ackley, G (1978), “Macroeconomics: Theory and Policy”, Macmillan, New York.
- Branson, W. A. (1989), “Macroeconomics: Theory and Policy”, 3<sup>rd</sup> ed. Harper and Harper and Row, New York.
- Shapiro, E (1996), “Macroeconomics: Analysis” Galgotia Publication, New Delhi.
- Stiglitz J. E. and Carl E. Walsh (2002), Principles of Macroeconomics, W.W. Norton and Company, New York.
- Paul Samuelson and Nordhaus: (2005) “Economics” (18<sup>th</sup> Ed.) Tata Hill Publishing Company, New York.
- Mankiw N. Gregory: (2007) “Principles of Economics,” Thomson, Indian Reprint.
- Lipsey R.G. and K.A. Chrystal (2007) “Economics”, Oxford University Press, Oxford.

### IV. 3 - DEVELOPMENT ECONOMICS - II

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

#### **Course Outcomes:**

- C01:** Students would be acquainted with the various development models.
- C02:** Students would become familiar with factors affecting economic growth and development.
- C03:** Students would learn to apply the key development economic growth theories, international trade development theories, and related economic development theories.

#### **UNIT-I**

**Dualistic Development:** Social and Technological dualism; Nurkse disguised unemployment as saving potential, Fei Ranis Theory of Dual Economy. Haris Todaro Modal of Migration.

#### **UNIT-II**

**Models of Growth:** Classical model: Mill Theory, the Marxian model; Keynesian model;

#### **UNIT-III**

Inequality and Development: Meaning, Measurement Lorenz Curve, Kuznets Inverted U Shape curve, Inequality and Development:-Inter connection Population Growth and Economic Development.

#### **UNIT-IV**

**Capital formation:** Meaning and sources; capital output ratio; Human capital: concept and utilization. Foreign aid and Economic Development, Transfer of technology.

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory

#### **Reading List:**

- Thirlwall, A. P.(2003),“Growth and Development”, Seventh edition, Palgrave Macmillan, New York.
- Higgins, B. : Economic Development: Theory and Policies. Central Book Depot, Allahabad, 1963.
- Eicher, Carl and Lawrence Witt (1970): “ Agriculture in Economic Development,” Vora and Co. Publisher Pvt. Ltd. Bombay.
- Kuznets, S (1966) Modern Economic growth, Rate Structure and Spread, Vakils, Feffer and Simons Private Ltd, Bombay.
- Meier, Gerald M. and James E. Rauch (2000), “Leading Issues in Economic Dvelopment,” Oxford University Press, New York.
- Ranis, Gustav and John C. H. Fei (1961): A theory of Economic Development, Oxford University Press, New York.
- Ray, Debraj(2004), “Development Economics”, Seventh impression, *Oxford University Press, New Delhi.*
- Schultz, Theodore W. (1981): Investing in People, Hindustan Publishing Corporation (India), Delhi.

## IV-4 WELFARE ECONOMICS- II

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

### Course Outcomes:

- C01:** The students will be able to examine the ways in which externalities, public goods and monopolies create market failures.
- C02:** Students would learn to study the effectiveness of government policies such as subsidies, taxes, quantity controls, transfer programs and public provision of goods and services.
- C03:** Students would be able to evaluate the welfare effects of policy changes in a coherent way and be able to examine the conditions for economic efficiency.

### UNIT-I

Infinite number of non-comparable optima vs. unique social optimum; Compensation criteria – Contributions of Barone, Kaldor and Hicks.

### UNIT-II

The Scitovsky double criterion; Concept of Community indifference map, Samuelson's utility possibility curve

### UNIT-III

Value judgements and welfare economics Bergson's social welfare function, Arrow's possibility theorem.

### UNIT-IV

Divergence between private and social costs; Problems of non-market interdependence; Externalities of production and consumption; External economies and diseconomies; Problem of public goods; Pigovian welfare economics;

### UNIT-V

Second-best optima; Marginal cost pricing; Cost-benefit analysis; Interdependent utilities; Attempts of develop dynamic welfare analysis

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### Reading List:

- Baumol, W.J. (ed.) (2001), Welfare Economics, Edward Elgar Publishing Ltd., U.K.
- Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
- Pigou, A.C. (1962), The Economics of Welfare(4thEdition), Macmillan.
- Hicks, J.R. (1956), A Revision of Demand Theory, Clarendon Press, Oxford.
- Little, I.M.D. (1949), The Foundations of Welfare Economics, Oxford Economic Papers, Vol. 1.



#### IV. 5 - STATISTICS FOR ECONOMIC ANALYSIS-II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

#### **Course Outcomes:**

- C01:** The students will be familiarized with distinct methods of frequency distribution.
- C02:** Students will be able to analyse different measures of dispersion and their applications.
- C03:** The course will impart knowledge regarding test of significance which will help in further studies.

#### **UNIT –I**

**Correlation and Regression:** Simple Correlation: Type of correlation ,Karl Pearson’s Coefficient of correlation and Spearman’s Rank correlation , Concurrent Deviation method . Coefficient of determination.

Regression analysis –Concept ,fitting of regression lines (method of least squares).Properties of regression coefficients.

#### **UNIT-II**

**Time Series Analysis** - Concept and components, Determination of trend (Linear, Quadratic and Exponential ) and seasonal Variations.

#### **UNIT-III**

Probability: Random experiment, Random variable, Sample space and events. Permutation and combinations . Theorems of Probability (Addition and Multiplication ).Conditional probability.

#### **UNIT-IV**

Theoretical Distribution-Binomial, Poisson and Normal, with their Properties.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

#### **Reading List:**

- Gupta S.C. “Fundamentals of Statistics” S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R “Theory and problems of Statistics” (Schaum’s outline series, McGraw Hill) (1992)
- Karmal P.H. and Polasek M. “Applied Statistics for Economists (4<sup>th</sup> edition), Pitman, Australia.

## V.1 - HISTORY OF ECONOMIC THOUGHT – I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The students will be familiarized with different schools of thought.
- C02:** Students will be able to understand origin and development of history of mankind.
- C03:** The course will impart knowledge regarding theories of different economists.

### **UNIT-I**

Nature and Importance of Economic Thought. Mercantilism: Views on Trade, Money and Prices.

### **UNIT-II**

Physiocracy: Natural Order; Net product and Circulation of Wealth. Classical Political Economy. Adam Smith: Theories of Value and Distribution.

### **UNIT-III**

Ricardian Economics: Value Analysis, Theories of Trade and Distribution.

### **UNIT-IV**

J S Mill: Theory of Value, Views On Production and Distribution. Classical Stationary State with special reference to Mill's views.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### **Suggested Readings**

- Dasgupta, A K (1986) : Epochs of Economic Theory, Oxford University Press, New Delhi
- Collander, D C (Ed.) : Neo-Classical Economists
- Mandel, E (1971) : Marxist Economic Theory, Upra & Co
- Schumpeter, J A (1954) : History of Economic Thought, Oxford University Press
- Samuel Hollander (1987) : Classical Economics
- Tom Bottomore (1980) : Dictionary of Marxist Thought, Basic Blackwell Publishers, England
- O'Brien, D P (1975) : Classical Economists, Oxford, Clarendon Press.
- Dobb, Maurice (1973) : Theories of Value and Distribution since Adam Smith.
- Sweezy, Paul M (1945) : The Theory of Capitalist Development
- Blaug, M (1961) : Economic Theory in Retrospect.
- Eric Roll(1993) : A History of Economic Thought Rupa & Co. Faber & Faber Ltd., London
- Gide, Charles and Rist, Charles (1973): A History of Economic Doctrines, Oxford University Press, Calcutta
- Hunt, E.K. & Mark : History of Economy Thought : A Critical Perspective Third Edition, PHI Learning Private Ltd., New Delhi.
- Smith Adam : Wealth of Nellani: An enquiry into the Nature and Causes of Wealth.

## V .2 – ECONOMETRICS

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

### Course outcomes

- CO1 Course work provides a path to follow research in general area of economics and business.
- CO2 Students would gain understanding of primarily about estimation and hypothesis testing. What is different and generally much more interesting and useful is that parameter being estimated and tested are not just means and variances but relationship between variables, which is much of economics and other social sciences.
- CO3 To familiarise the students to study economics with an applied approach.

### UNIT-I

**Introduction:** Definition, Scope, and Methodology of econometrics; Nature and sources of data for econometric analysis; Specification of an econometric model.

**Simple Regression Models:** Estimators (OLS) and their properties; Statistical inference; Tests of significance and tests of restrictions.

### UNIT-II

**Econometric Problems:** Nature, consequences, detection and remedial measures of the problems of multicollinearity, heteroscedasticity and autocorrelation.

### UNIT-III

**Test Procedures and Model Selection:** Tests of specification and mis-specification, measurement errors, encompassing models, and criteria for model selection.

### UNIT-IV

**Dynamic Models:** Lags in econometrics, Distributed and autoregressive lags, Koyck model,

**Simultaneous Equation Models:** Introduction, Identification problem, Simultaneous equation bias and ILS and 2SLS methods of estimation.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### Reading List:

- Gujarati, Damodar, N: Basic Econometrics, McGraw Hill Edition 2012.
- Intriligator Michael D: Econometric Models, Techniques ,and Application , New Jersey, Prentice- Hall
- Johnston, J: Econometric Methods, 3<sup>rd</sup>. Ed. McGraw Hill, New York 1984.
- Koutsoyiannis, A: Theory of Econometrics, Harper and Row New York, 1973.
- Krishna K.L: Econometric Applications in India , New Delhi, Oxford University Press

- Klein, Lawrence R: An Introduction to Econometrics, Prentice, Engle Wood Cliffs N.J.1962
- Madala G.S : Introduction to Econometrics, John Wiley and Sons, 3<sup>rd</sup> Ed. New York 2001.
- Madhani G.M.K : Introduction to Econometrics, Oxford and IBH Publishing Co. Pvt. Ltd. 1994

### V.3 - BASICS OF FINANCIAL MARKETS

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Course outcomes**

- CO1 Students would have knowledge regarding money market, capital market, stock exchange i.e. Indian Financial System which is the backbone of the country.
- CO2 To familiar students about the relationship between financial development and economic development.
- CO3 To impart knowledge to students about controller of financial system, e.g. RBI, SEBI, IRDA and TERI.

#### UNIT-I

Financial Market and Functions:- Meaning, Classification of Financial Market, The Role of Financial Markets in the Economy, Financial Instruments: Nature Types and Properties of Financial instrument.

#### UNIT-II

Theories of interest rate determination : Classical and Keynesian ,Term structure of Interest rates: theories of interest rates structure, Expectational theory, Segmentation theory.

#### UNIT-III

Call money market, Treasury bill market; Commercial bill market; Market for gilt-edged Securities, Markets for derivatives, futures and options.

#### UNIT-IV

Regulation of Financial Markets: Role and functions of Securities and Exchange Board of India, (SEBI), Insurance Regulatory and Development Authority (IRDA) and Reserve Bank of India (RBI).

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

**Reading List :**

- Bhole, L M (2003) : Financial Institutions and Markets, Tata McGraw

- Gurusamy. S.(2009):
  - Hill Company Ltd., New Delhi (4th Ed)Financial Markets and Institutions, Tata McGraw
- Punithavathy Pandian :
  - Hill Company Ltd., New Delhi (4th Ed)Financial Services and Market Vikas, Publishing House Pvt. Ltd.

## V 4(b) - ECONOMICS OF AGRICULTURE

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### Course Outcomes

**CO1:** Course provides knowledge agricultural background , farm and agro business activities, agriculture finance and management.

**CO2:** It introduces learner applied part of economics instead theoretical, which deals with allocation of land under various crops, specialization, diversification and other policy amplifications.

**CO3:** Course offer relevant production and various techniques to understand agriculturyte production, cost benefit analysis and enhance learner to make frontier-production function at least cost.

### UNIT-I

**Introduction:** Definition, scope and nature of agricultural economics; Need for a separate study of agricultural economics. Agricultural Linkages with other sectors, Role of agriculture in economic development and Declining importance of agriculture in Economic development.

### UNIT-II

**Production Function Analysis:** Facto-Product, Factor-Factor and Product-Product relationship. Types of farm organizations and organizations and their comparative production efficiency.

### UNIT-III

**Transformation of Agriculture:** Schultz thesis of transformation of traditional agriculture and Green Revolution in Indian agriculture.

**Agricultural Markets:** Aim, Types and Functions of agricultural markets, Criteria for judging efficiency of agricultural market systems.

### UNIT-IV

**Agricultural Credit:** Importance of cedit, Need for Government intervention, agricultural credit system in India.

**Agricultural Price Policy:** Need, Objectives, and instruments of agricultural price policy; Agricultural price policy in India.

**NOTE:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

### ReadingList:

- Soni R.N. (2003) : Leading Issues in Agricultural Economics , Shoban Lal Nagin Chand & co., Jalandhar

- Mellor, J.W. (1968) : The Economics of Agriculture Development council University Press , NEW-YORK
- Schultz, T.W.(1964 : Transforming Traditional Agriculture, Lyall Book Depot,1970
- Sadhu, A.N and : Fundamentals of Agricultural Economics, Himalaya Publishing Himalaya Publishing House, New Delhi
- Amarjit singh (1997): Land Reforms & Agricultural Development .
- Dorner Peter (1972) : Agriculture Price Policy in India.
- Kahlon, A.S. (1982) : Agriculture Problems in India.
- Mamoria, C.B. (1985) : Economics of Agricultural Production and Resource Use.Prentice-Hall of India Pvt. Ltd. New Delhi .
- Matalcalf, D (1969) : The Economics of Agriculture, Penguin

## V .5 – INTERNATIONAL ECONOMICS-I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** They can work on the projects on different aspects of international problems, awarded by IMF, World Bank and other international institutions.
- C02:** The students will be able to compete for various jobs in different export industries and in Ministry of External Affairs, India.
- C03:** Students will be prepared for employment in multinational corporations.

### **UNIT I**

**Trade Theories and Commercial Policy:** Theories of absolute advantage, comparative advantage and opportunity cost: Hecksher-Ohlin theory of trade-its main features, assumptions and limitations.

### **UNIT II**

**Balance of Trade and Balance of Payments:** Concepts and components of balance of trade and balance of payments; Equilibrium and disequilibrium in balance of payments: Various measures to correct deficit in the balance of payment.

### **UNIT III**

**Exchange Rate:** Meaning, concept of equilibrium exchange rate and determination: Fixed versus flexible exchange rates: Managed floating exchange rate.

### **UNIT IV**

**International Monetary System and International Institutions:** Brettonwood systems and its breakdown, International liquidity Special drawing rights, I.M.F.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### **Reading List:**

- International Economics by Rana and Verma
- Indian Economy by Mishra and Puri
- International Economics by Soderston, Bo (1991)
- International Economics by Salvatore, D. (1997)
- International Economics by Kucchal, S.C.
- International Economics, by Kindleberger, C.P.
- International Economics: Theory & Policy by Paul.R.Krugman & Maurice Obstfeld (2009)



## VI.1 - HISTORY OF ECONOMIC THOUGHT – II

**Max. Marks: 100**  
**Time: 3 Hrs.**

**Written Exam:80**  
**Internal Assessment: 20**

### Course Outcomes:

- C01:** The students will be familiarized with different schools of thought.  
**C02:** Students will be able to understand origin and development of history of mankind.  
**C03:** The course will impart knowledge regarding theories of different economists.

### UNIT-I

Marxian Economics: Historical Materialism, Theory of Value, Theory of Capital Accumulation, Theories of Crisis.

### UNIT-II

Jevon's Theory of Value, Bohm-Bawerk's Theory of Capital.

### UNIT-III

Walras's Theory of General Equilibrium. A General Overview of Marshall's Contribution.

### UNIT-IV

Features of Neo-classical economics. J.M Keynes and his contribution; Welfare Economics: Arrow and Social choice Theory; Rational Expectation Modals and the New Classical Macro Economics

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### Reading L:ist

- O'Brien, D P (1975) : Classical Economists, Oxford, Clarendon Press.
- Dobb, Maurice (1973) : Theories of Value and Distribution since Adam Smith.
- Sweezy, Paul M (1945) : The Theory of Capitalist Development
- Blaug, M (1961) : Economic Theory in Retrospect.
- Eric Roll(1993) : A History of Economic Thought Rupa & Co.
- Gide, Charles and Rist, Charles (1973): A History of Economic Doctrines, Oxford University Press,  
Calcutta
- Dasgupta, A K (1986): Epochs of Economic Theory, Oxford University Press, New Delhi
- Collander, D C (Ed.) : Neo-Classical Economists

- Mandel, E (1971) : Marxist Economic Theory, Upra & Co
- Schumpeter, J A (1954): History of Economic Thought, Oxford University Press
- Samuel Hollander (1987) : Classical Economics
- Tom Bottomore (1980) : Dictionary of Marxist Thought, Basic Blackwell Publishers, England

## VI .2 - HUMAN RESOURCE DEVELOPMENT

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The course will explain significant concepts and theories underpinning HRD.
- C02:** Students would develop skills in identifying HRD needs and in designing, implementing and evaluating HRD programs.
- C03:** Students would be able to Critically analyse and evaluate contemporary HRD practices.

### **UNIT-I**

**Human Resource Development (HRD):** Concept, nature, scope, significance, objectives, functions; Traditional and modern approaches; Human Resource Development and Manpower Planning .

### **UNIT-II**

**Human Capital:** Concept of human capital and its determinants, problems of measurement; An appraisal of underlying theories of Human capital formation particularly in the context of developing Economies; Role of public and private investment in human capital formation; Economics of education (formal, informal, on-the-job training and re-training, An introduction to economics of health and nutrition.

### **UNIT-III**

**Functioning of Market for Human Resources:** Internal allocation and brain drain, asymmetric information and functioning of the human resource market; Migration (Theories, and the emerging challenges); Managing Human Resources (wages, incentives- productivity relationship, economics of discrimination).

### **UNIT-IV**

**Human Resource Management Practices:** Human Resource Management in developed countries, and India ( in Public Enterprises and small undertakings); Emerging human resource management concepts and systems in the new millennium; Human Resource Information System.

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory

**Reading List:**

- Bellante, Don and Mark Jackson: *Labor Economics: Choice in Labor Markets*, McGraw-Hill Book Company, New York.
- Campbell, R McConnel and Stanley L.: *Contemporary Labor Economics*, McGraw- Brue, Hill Book Company, New York.
- Kempton, John: *Human Resource Management and Development: Current Issues and Themes*, MacMillan, London.
- Richard B Perterson and Lam Tracy: *Systematic Management of Human Resources*, Addison Wesley Publishing Company, London.
- Schultz, Theodore W. (1981): *Investing in People: The Economics of Population Quality*, Hindustan Publishing Corporation(India), Delhi.
- Stoney, John J.(ed.)

**VI .3 – ECONOMICS OF PUBLIC FINANCE****Max. Marks: 100****Time: 3 Hrs.****Written Exam:80****Internal Assessment: 20****Course Outcomes**

- CO1 The students would learn of the feature the federal structure and financial relationship among them.
- CO2 The course would develop the analytical ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on macroeconomics framework of an economy.
- CO3 It will help students to critically analyse the fiscal reforms and policy choices of the government in developed and developing countries.

**UNIT-I**

**Introduction to Public Finance:** Nature, Scope and Importance. Theory of Maximum Social advantage. Private goods, Public goods and Merit goods. Overview of different role of government: allocation, stabilization and distribution. Optimal provision of public goods.

**UNIT-II**

**Types of Government Budgets:** Revenue account, Capital Account and different concepts of budgetary deficits in the Indian context. Economic and functional classification of Central Govt. Budgets.

**UNIT-III**

**Sources of Public Revenue:** Tax and Non-tax sources, ad valorem and specific taxes, progressive and proportional taxes, direct and indirect taxes.

Approaches to tax equity: Benefit principle; Ability to pay principle. Theory of Incidence of Indirect taxes. Taxable capacity: meaning and determinants.

#### UNIT-IV

**Public expenditure: Rationale for the growth of public expenditure:** Wagner's law of increasing state activities; peacock-Wiseman hypothesis. Canons of public expenditure. Changing Trends and Pattern of direct and indirect taxes in India.

**NOTE :** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory

#### Reading List :

- Musgrave, R & Musgrave, P B: Public Finance in Theory and Practice. McGraw –Hill International eds.
- Houghton, R W (ed.) (1970): Public Finance
- Atkinson, A B and Stiglitz, J E: Lectures on Public Finance
- Peacock, and Straw, G K (1970): The Economic Theory of Fiscal Policy
- Chelliah, R C (1996): Sustainable Growth, Essays on Financial And Fiscal Sector Reforms, Oxford University Press.
- Raghbendra Jha (1999): Modern Public Economics, Rotledge
- Govt. of India, Ministry of Finance: 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> Finance Commission Reports

#### VI .4 - ECONOMICS OF INDUSTRY

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

#### Course Outcomes:

- C01:** The students will be familiarized with behaviour of different market structures.
- C02:** Students will be able to understand concepts of externalities and management issues.
- C03:** The course will impart knowledge regarding industrial trends, pattern, location and migration policies.

#### UNIT-I

**Definition:** Nature and Scope of industrial Economics. History and development of Industrial Economics. Basic Concepts : Firm industry, Market, Market structure, Market power, passive and active behavior of the firm.

#### UNIT-II

Conceptual framework for the study of Industrial Economics. Organizational form and alternative motives of the firm. Industrial efficiency and technical efficiency. Optimum size of the firm. Growth of the Firm: Acquisition, diversification, merger constraints on Growth : demand, managerial and financial.

#### UNIT-III

**Market Structure:** Seller's concentration; product differentiation; entry conditions and economics of scale. Advertising strategy: The determinates of Profitability.

#### UNIT-IV

**Theories of Industrial Location:** Factors affecting location; contributions of weber and Sargent Florance. Location policy in India since Independence, Industrial concentration and dispersal in India.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

#### **Reading List:**

- Martin, Stephen(1989): Industrial Economics: Economic Analysis and Public Policy. Macmillan Publishing Co., New York.
- Clarke, R (1985): Industrial Economics, Blackwell Publishers, Oxford
- Shepherd, William G (1990): The Economics of Industrial Organization Prentice Hall, New Jersey (3<sup>rd</sup> Ed.)
- Scherer, F M & Ross, David (1990): Industrial Market Structure and Economic Performance, (3<sup>rd</sup> Ed.) Houghton Mifflin Company, Boston
- Koutsonyiannis (1979) : Modern Micro-economics. Macmillan, London
- Bains, J S (1959): Industrial Organization. University of California
- Waldman, Don E & Jensen, Elizabeth J (2005): Industrial Organization: Theory and Practice (2<sup>nd</sup> Edition) Pearson Education, Inc. Hay and Morris (1998): Industrial Economics (2<sup>nd</sup> ed.) Oxford University Press, London

## VI.5 – INTERNATIONAL ECONOMICS-II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- C01:** The course will impart importance of equilibrium in balance of payment and measures to correct it.
- C02:** The students will be able to compete for various jobs in different export industries and in Ministry of External Affairs, India.
- C03:** They can work on the projects on different aspects of international problems, awarded by IMF, World Bank and other international institutions.

### **UNIT –I**

Rationale of Protection: Tariff and non-tariff barriers to trade (Quota, voluntary export restraints, export subsidies, dumping and international cartel).

### **UNIT –II**

Economic Co-operation: Forms of Economic Co-operation, Static and Dynamic Effects of Custom Union (Viner, Lipsey) and Free trade Area.

### **UNIT-III**

World Trade Organisation: WTO and India, Recent change in the direction and composition of India's foreign trade.

### **UNIT –IV**

Multi-National Corporation: Working and regulations of MNC's in India, Export Promotion and Import Substitution, and Recent import and export policies.

**NOTE : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### **Reading List:**

- International Economics by Rana and Verma (2012)
- Indian Economy by Mishra and Puri
- International Economics by Soderston, Bo
- International Economics by Salvatore, D. (1997)
- International Economics by Kucchal, S.C.
- International Economics, by Kindleberger, C.P.
- International Economics : Theory & Policy by Paul R. Krugmen & Maurice Obstfeld (2009)
- Darling Kindersley India Pvt. Ltd.

## **VII.1 ADVANCED ECONOMIC THEORY- I**

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- CO1. It will familiar students on creating an understanding among students on the basic reasoning of Economics.

- CO2. It will make students aware about how various economic agents behave optimally given the scarce economic resource and other constraints.
- CO3. Students will be able to understand various economic issues and applied part of the economics.
- CO4. A comprehensive knowledge of Micro Economics will empower students to explain the social reality with better arguments and optimum solutions.

#### UNIT-I

Choice Under Uncertainty: Concept of Contingent Commodities; Measures of risk aversion, risk preference, risk neutrality and the shape of indifference curves between contingent commodities. Consumer equilibrium under different risk preferences. Expected utility under uncertain outcomes: Von Neumann Morgenstern utility and consumer choice.

#### UNIT-II

Indirect utility function, Roy's identity, Expenditure function. Hotelling's & shepherd's Lemmas. Modern derivation of the Slutsky equation. Composite commodity theorem. Integrability Problem.

#### UNIT-III

Empirical Estimation of Demands: Interview and Experimental Approaches to Demand determination. The statistical Approach to Demand Estimation. The form of Demand Relationship. Duality in production and its role in empirical estimation of demand functions.

#### UNIT-IV

Markets with asymmetric information: issues of hidden characteristics/actions and adverse selection/moral hazards in insurance and labour markets.

**NOTE: the question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

#### Reading List:

Comerer, Colin, F, George : Behavioural Economics

- Loewenstein and Mathew Robin (ed.) (2006): (New Age International Publishing Princeton.
- Michael Szenberg and Lall Ram Rattan (ed.) (2004): New Frontiers in Economics Cambridge: Cambridge University Press.
- Henderson, J M and Quandt, R B (1988): Micro Economic theory: A Mathematical Approach (3<sup>rd</sup> Ed.), McGraw Hill, New Delhi.
- Silberberg, E (1978): The Structure of Economics- A Mathematical Analysis, McGraw , New York.
- Varian, H R (1992) : Microeconomics Analysis(3<sup>rd</sup> Ed.) Norton & Company, New York.
- Mas- Colell, Andrew, W M D and Green, J R (1995): Microeconomic Theory New York , Oxford University press.
- Pyndick, R S and Rubinfeld, D L (2001): Microeconomics Patparganj: Pearson Education.

## VII.2 ECONOMETRICS APPLICATIONS-1

**Max. Marks: 100**

**Time: 3 Hrs.**

**Course outcomes**

**Written Exam:80**

**Internal Assessment: 20**

- CO1 Course work provides a path to follow research in general area of economics and business.
- CO2 Students would gain understanding of primarily about estimation and hypothesis testing. What is different and generally much more interesting and useful is that parameter being estimated and tested are not just means and variances but relationship between variables, which is much of economics and other social sciences.
- CO3 To familiarise the students to study economics with an applied approach.

### UNIT-I

The matrix Approach to linear Regression model. The General linear Regression model: Assumptions in matrix notation; OLS estimation; BLUE Properties of OLS estimators; Derivation of unbiased estimator of  $\sigma^2$ ; Gauss Markov Theorem; Coefficient of determination  $R^2$ ; adjusted coefficient of determination  $\hat{R}^2$ ; Hypothesis testing about individual regression coefficients; Testing the overall significance of Regression.

### UNIT-II

Relaxing the assumptions of classical linear Regression model. Multicollinearity: The nature of problem of multicollinearity; Estimation in presence of perfect multicollinearity; Consequences of multicollinearity; Detection of multicollinearity; remedial measures. Heteroscedasticity: The nature of Heteroscedasticity; OLS estimation in the presence of Heteroscedasticity; Consequences of using OLS in the presence of Heteroscedasticity; Detection of Heteroscedasticity; Remedial measures. Auto-correlation: The nature of problem of Auto-correlation; OLS estimation in the presence of Auto-correlation; Consequences of using OLS in the presence of Auto correlation; Detecting Auto-correlation Remedial measures.

### UNIT-III

Applications to Demand Analysis: Single Demand equations: Different functional forms used for the estimation of single demand equation; System of Demand equations: Linear Expenditure system; Problems in the Estimation of Demand Analysis; Dynamic Demand Analysis.

### UNIT-IV

Functional Forms of Regression Model: How to measure elasticity: The Log- Linear Model; comparing Linear and Log- Linear Regression Models; How to measure Growth Rate; The Semilog Model; The Lin- Log Model: When the explanatory variable is Logarithmic; Estimation of Cobb-Douglas Production function and consumption function.

**NOTE: the question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

**Reading List:**

- Gujarati, Damodar, N: Basic Econometrics, McGraw Hill Edition 2012.



- Intriligator Michael D: Econometric Models, Techniques ,and Application , New Jersey, Prentice- Hall
- Johnston, J: Econometric Methods, 3<sup>rd</sup>. Ed. McGraw Hill, New York 1984.
- Koutsoyiannis,A: Theory of Econometrics, Harper and Row New York, 1973.
- Krishna K.L: Econometric Applications in India , New Delhi, Oxford University Press
- Klein, Lawrence R: An Introduction to Econometrics, Prentice, Engle Wood Cliffs N.J.1962
- Madala G.S : Introduction to Econometrics, John Wiley and Sons, 3<sup>rd</sup> Ed. New York 2001.
- Madhani G.M.K : Introduction to Econometrics, Oxford and IBH Publishing Co. Pvt. Ltd. 1994

### VII.3 OPERATION RESEARCH- I

**Max. Marks: 100**

**Time: 3 Hrs.**

**Course Outcomes:**

- C01:** Students would be acquainted with the mathematical skills to analyse and solve linear programming.
- C02:** Students would become familiar with mathematical model of transportation problem.
- C03:** Students will come to know about different project management techniques.

**Written Exam:80**

**Internal Assessment: 20**

#### UNIT - I

Introduction to Operations Research, Nature and significance of Operations Research. Features of Operations Research approach Interdisciplinary Approach, Methodological Approach, Wholistic Approach, Objective Approach, Methodology of Operations Research. Advantages of Operations Research Study; Basic Operations Research Models; Computer software for Operations Research.

#### UNIT - II

Linear programming- Introduction, structure of Linear Programming Model; Assumption of Linear Programming ; Advantages and Limitations of linear programming; Linear Programming Model-Formulation ;Graphical Method, Simplex Method, duality, Economic Interpretation of duality

#### UNIT – III

Transportation Problem; Mathematical Model of Transportation Problem, Solution Algorithm to a Transportation Problem. Methods for finding Initial Solution: NWCM, LCM, VAM, MODI Algorithm.

#### UNIT – IV

Project Management, Basic Differences between PERT and CPM. PERT/CPM Network components and precedence relationships, critical path Analysis; Project Scheduling with uncertain Activity Times.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

#### Reading List:

- Gupta, Prem Kumar and Dira D.S (2007): Operations Research (6<sup>th</sup> ed.), New Delhi: S.Chand & Company Pvt. limited.
- Kapoor, V.K. (2001): Operations Research Techniques for management New Delhi: Sultan Chand & Sons.
- Sharma, J.K. (2013): Operations Research; Theory and Application (5<sup>th</sup> Ed.) Mac Millan Publishers India.
- Taha, H.A. (2012): Operations Research- An Introduction (7<sup>th</sup> Ed.) New Delhi: Prentice Hall of India.

## VII.4 PUBLIC ECONOMICS

**Max. Marks: 100**

**Time: 3 Hrs.**

**Course Outcomes**

**Written Exam:80**

**Internal Assessment: 20**

- CO1 The students would learn of the features of the federal structure and financial relationship among them.
- CO2 The course would develop the analytical ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on the macroeconomic framework of an economy.
- CO3 It will help students to critically analyse the fiscal reforms and policy choices of the government in developed and developing countries.

### UNIT-I

**Fiscal Federalism:** Principles of multi-Unit finance; Fiscal federalism in India; Vertical and horizontal imbalance; Assignment of functions and sources of revenue and Constitutional provisions; Finance Commission and Planning Commission.

### UNIT-II

**Indian Public Finances:** Transfer of Resources from Union to States – criteria for transfer of resources; devolution of resources and grants; problems of states' resources and indebtedness; States and local bodies; Transfer of Resource from States to Local Bodies.

### UNIT-III

**Budget:** Zero based Budgeting, Performance Budgeting; Budget making process in India; various concepts of budgetary deficits.

### UNIT-IV

**Public Debt:** Concepts, types and sources of public debt; Burden of public debt; principles of public debt management; Public Debt Management in India.

**NOTE: the question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

#### **Reading List:**

- Atkinson, A. B. and J. E. Siglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
- Govt. of India, Ministry of Finance: Economics Survey (of various years)
- Musgrave R.A. and Musgrave P.B., *Public Economics in Theory and Practice*, McGraw Hill.
- Mandal Sudipto (ed) *Public Finance: Policy Issue of India*.
- M. Govind Rao and Tapan Sen (1998), *Financial Federalism in India*
- M.G. Rao and Tapas Sen (1996), *Financial Federalism in India*, Macmillan India,
- M. Govind Rao *Changing contours in fiscal federalism in India*
- Stieglitz, J.E., *Economics of Public Sector*, J.W. Norton & Company.
- Srivastava D.K. (ed.) *Fiscal Federalism in India*
- Srivastava, D. K. (Ed.) (2000) *Fiscal Federalism in India*, Har-Anand Publications Ltd., New Delhi. Reports of various Finance Commissions

## VIII.1 ADVANCED ECONOMIC THEORY II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course Outcomes:**

- CO1. It will familiarize the students with distinction between Classical, Keynesian and Monetarists schools of Economics.
- CO2 Students will be able to give solutions to assignment problems through Mundell and Swan Model.
- CO3 It will provide information to the students about demand and supply side of economics.

### **UNIT-I**

Monetarist-Keynesian debate on Macro Theory and Policy. Monetarist and Keynesian views on Output and Inflation. The Phillips Curve- Short run and Long run.

### **UNIT-II**

New Classical Economics and New Keynesian Direction: The New Classical attack, The Keynesian Countercritique, New Keynesian Direction. Rational Expectations and the New Classical Macro Economics: The Theory of Rational Expectations; The theory of continuous Market Clearing, The New Classical Economics and The Business Cycles, Supply Side Economics: Taxes , Incentives and Production, Supply Side Economics and Government.

### **UNIT-III**

The New Keynesian Theories of Sticky Wages and Unemployment; Implicit Wage Contracts, Efficiency Wage Models, Insider- Outsider Models, Menu Costs.

### **UNIT-IV**

Macroeconomic Policy in an open economy – The Mundell Fleming Model. The Assignment Problem in International Macro Economics- Mundell Model, Swan Model.

**NOTE: the question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### **Reading List:**

- Branson W (1989) : Macro economic Theory and Policy 3<sup>rd</sup> Edition, Harper Collins
- Dornusch, R (1980) : Open Economy Macroeconomics Basic Books
- Dornbusch, Fisher and Strartz (2002) : Macroeconomics, Ninth Edition, tata McGraw Hills, New Delhi
- Makin, A J : International Macroeconomics, Princeton Hall.
- N Mankiw, and D Romer (1991) (ed.) New Keynesian Economics, MIT, 2 Volumes.
- Sheffrin, S(1999): Rational Expectations, Cambridge University Press.
- Pentecost Eric (2000) : Macroeconomics- An Open Economy Approach Macmillan Press Ltd.
- Raghbendra, Jha (2008) : Contemporary Macroeconomics: Theory and Policy. New Age International Publishers.
- Abel Andrew B, Bernanke Ben S (Fifth Edition) (2007): Macroeconomics Pearson Education Inc., New Delhi.
- Heijdra Ben J/ Ploeg Frederick Van der (2008): The Foundations of Modern Macroeconomics Oxford University Press.
- D' Souza Errol (2008): Macroeconomics Pearson Education Inc., New Delhi.
- Froyen, R(2002) : Macro Economics, 7<sup>th</sup> Edition, Pearson Education Inc., New Delhi.

- Snowden Brian and Vane Howard R (2005): Modern Macroeconomics: Its Origins, Development and current state, Edward Elgar, UK.
- Wendy Carlin/ Soskice David (2007): Macroeconomics: Imperfections, Institutions and Policies Oxford University Press.

## VIII.2 ECONOMETRICS APPLICATIONS-II

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

### Course outcomes

- CO1 Course work provides a path to follow research in general area of economics and business.
- CO2 Students would gain understanding of primarily about estimation and hypothesis testing. What is different and generally much more interesting and useful is that parameter being estimated and tested are not just means and variances but relationship between variables, which is much of economics and other social sciences.
- CO3 To familiarise the students to study economics with an applied approach.

### UNIT-I

Dynamic Econometric Models: Auto- Regressive and Distributed Lag Models: The Role of Log in Economics; The Reasons for Lags; Koyck Approach to estimation of Distributed Log Models, Rationalization of Koyck Model: The Adaptive Expectation model; Partial adjustment Model, Causality in Economics: The Granger Causality Test.

### UNIT-II

Dummy Variables Regression Models. The Nature of Dummy Variables, ANOVA Models, ANOVA Models with two qualitative variables, ANCOVA Models, uses of Dummy variables, The Dummy variable alternative to the chow test.

### UNIT-III

Simultaneous Equation Models: Simultaneous Equation Bias; Consequences of Simultaneous relations, The Identification Problem: Under identification; exact identification; over identification; Rules for identification: The order and Rank Conditions of identification, multicollinearity and identification. Approaches to Estimation: The Method of Indirect least Square and the method of Two-Stage Least Square.

### UNIT-IV

Time Series Econometrics. Some Basic Concepts: Stochastic Processes, Stationary Stochastic Processes, Non- Stationary Stochastic Processes, Unit Root Stochastic Process, Trend Stationary and Difference Stationary Stochastic Processes, Integrated Stochastic Processes, The Phenomenon of spurious Regression, Tests of Stationarity: The Root Test, Co integration Forecasting: AR, MR, and ARIMA Modeling of Time Series Data, The Box- Jenkins(BJ) Methodology.

**NOTE: the question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory**

### Reading List:

- Gujarati, Damodar, N: Basic Econometrics, McGraw Hill Edition 2012.
- Koutsoyiannis, A: Theory of Econometrics, Harper and Row New York, 1973.
- Kmenta, Jan: Elements of Econometrics, 2<sup>nd</sup> ed. Macmillan, New York 1986.
- Krishna K.L: Econometric Applications in India , New Delhi, Oxford University Press
- Patterson Kerry P, : An Introduction to Applied Econometrics: A Time Series Approach, London, Palgrave, 2000.
- Pindyek, R S and D L Rubinfeld: Econometric Models and Economic Forecasts, 4<sup>th</sup> Ed. New York McGraw Hill.



### VIII. 3 OPERATION RESEARCH- II

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

**Course Outcomes:**

- C01:** Students would be acquainted with the knowledge of simulation process.
- C02:** Students would become familiar with mathematical model of inventory problems.
- C03:** Students will come to know about different project management techniques.

#### UNIT - I

Sequencing: Notations, Terminology and Assumption; processing n jobs through two machines; processing n jobs through three machines; processing n jobs through m machines; processing two jobs through m machines.

#### UNIT - II

Inventory Control Model- Introduction and meaning, functional role of inventory Factors involved in inventory problem analysis, steps of Inventory model building. Economic order quantity (EOQ) model with constant Rate of demand, EOQ Model with different Rates of demand.

#### UNIT – III

Introduction to Markov Chains and applications characteristics of a Markov chain, State and transition probabilities, Multi period transition probabilities, Steady- State (Equilibrium) conditions.

#### UNIT – IV

Simulation, steps of simulation process; stochastic simulation and random numbers; Simulation of inventory problems, simulation of queueing problem, simulation of investment problems, simulation of maintenance problems.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight to ten short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

**Reading List:**

- Gupta, Prem Kumar and Dira D.S (2007): Operations Research (6<sup>th</sup> ed.), New Delhi: S.Chand & Company Pvt. limited.
- Kapoor, V.K. (2001): Operations Research Techniques for management New Delhi: Sultan Chand & Sons.
- Sharma, J.K. (2013): Operations Research; Theory and Application (5<sup>th</sup> Ed.) Mac Millan Publishers India.
- Taha, H.A. (2012): Operations Research- An Introduction (7<sup>th</sup> Ed.) New Delhi: Prentice Hall of India.



## VIII .4 - ENVIRONMENTAL ECONOMICS

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### **Course outcomes**

- CO1 Students would have knowledge regarding valuation of environment.
- CO2 To familiar students about the concepts of externalities and opportunity costs.
- CO3 Students would learn about market solutions and government actions to control pollution.

### **UNIT – I**

**Introduction to Environmental Economics** : Introduction; The economy and the environment: inter-linkages; First two laws of thermodynamics

**Economic Efficiency and Market Failures**: Market solutions and efficiency; Market failures; Problem of externalities; Public goods and public bads; Common property resources; Non-convexities; Asymmetric information.

### **UNIT – II**

**Economics of Pollution**: Damage functions and abatement cost functions; Marginal decisions; Optimal level of pollution; Market solutions and government actions; Economic incentives and least-cost solutions; Command and control policies.

### **UNIT – III**

**Valuing the Environment**: Economic valuation of environmental goods; Types of environmental values; Monetary valuation techniques; Non-monetary valuation techniques; Comparing methodologies.

### **UNIT – IV**

**Cost-Benefit Analysis and the Environment**: The theory of cost-benefit analysis; Idea of discounting and choice of discount rate; Framework for cost-benefit analysis; Discounting and future generations.

Economic Growth and Sustainable Development: Economic growth and development; The environmental Kuznets curve; Economics of sustainable development

International Environmental Issues: Economics of climate change; Trade and the environment

**NOTE** : The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory

### **Reading List:**

Goodstein, E.S (2002)

Economics and the Environment (3<sup>rd</sup> ed) Prentice Hall

## IX .1(a) –AGRICULTURE AND RURAL DEVELOPMENT

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

### Course Outcomes

CO1 Course provides knowledge agricultural background , farm and agro business activities, agriculture finance and management.

CO2 It introduces learner applied part of economics instead theoretical, which deals with allocation of land under various crops, specialization, diversification and other policy amplifications.

CO3 Course offer relevant production and various techniques to understand agri production, cost benefit analysis and enhance learner to make frontier-production function at least cost

### UNIT – I

**Rural Development:** Concept, nature, indicators and importance.

Agriculture and Rural Development Interface: The issues, role, challenges and the prospects.

### UNIT – II

**Rural Institutions and Infrastructure.**

**Rural Institutional Set-up and its Impact on the Process of Rural Development in India:**

Panchayati Raj Institutions, Village Co-operatives, Gender Issues and Rural Development in India.

**Rural Infrastructure in India:** Rural Roads, Banks, Drinking Water Supply and Sewerage System, Electricity, Educational facilities and Healthcare facilities, and Marketing Networks.

### UNIT – III

**Disparities in Rural Development.**

**Inter-state Disparities in Rural Development:** Nature, Causes, Consequences and Remedial Measures.

Rural-Urban Disparities in Living Standards: Nature, Extent, Causes, Consequences, and Solutions.

### UNIT – IV

**Deprived Sections and Rural Development:** Rural Poverty, Nature and Extent, Causes and Consequences and Remedial measures.

**Rural Economic Scene in India:** An overview of Pattern of Assets, Income and Expenditure Distribution.

**NOTE:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

### Reading List:

Chambers, Robert (1983) : Rural Development: Putting the Last First, Longman Pub. Group.

Dixon, Chris J Dixon (1988) : Rural Development in the Third World, Routledge  
Gallant, Nick, Sui Monk Kidd Dave Shaw, Merri Juntti, (2008),“Introduction to Rural Planning”  
Routledge.

- Jain, L C, Krishnamurthy B V and : Grass Without Roots: Rural Development  
Tripathy, I M (1988) under Government Auspices,  
Sage Publications India Pvt. Ltd., New  
Delhi
- Jytte Agergaard, Niels Fold, : Rural-Urban Dynamics: Livelihoods,  
and Katherine Gough eds. (2009) frontiers, Routledge
- McAreavey, Ruth (2009) : Rural Development Theory and Practice,  
Routledge
- Mosley, Malcolm J (2003) : Rural Development: Principles and  
Practices, Sage Publications India Pvt. Ltd., New  
Delhi
- Rao, V M (no date) : Rural Development and The Village  
Economy: Perspectives for Planning for  
Development,  
Sterling Publishers Pvt. Ltd., New Delhi
- Riley, John M (2002) : Stakeholders in Rural Development:  
Critical Collaboration in State-NGO  
Sage Publications India Pvt. Ltd., New  
Delhi
- Saturnino M Borras Jr., (Ed.) : Critical Perspectives in Rural Development  
Studies, Routledge
- Soundarapandian, M (2006) : New Economic Policy and Rural  
Development  
Serials Publications, New Delhi
- Journals:  
Economic and Political Weekly  
Rural Development Perspectives

## IX.1(b) –AGRICULTURE AND RURAL DEVELOPMENT

**Max. Marks: 100**

**Time: 3 Hrs.**

**Course Outcomes**

**Written Exam:80**

**Internal Assessment: 20**

CO1 Course provides knowledge agricultural background , farm and agro business activities, agri finance and management.

CO2 It introduces learner applied part of economics instead theoretical, which deals with allocation of land under various crops, specialization, diversification and other policy amplifications.

CO3 Course offer relevant production and various techniques to understand agri production, cost benefit analysis and enhance learner to make frontier-production function at least cost

### UNIT – I

**Emerging Pattern and Issues of Rural Development in India.**

**Emerging Issues:** Food Security and the PDS: The Problem, Objectives and the Remedial Measures.

### UNIT – II

**Approaches to Rural Development:**

Nurksian Approach, the Cluster Approach to Rural Development. Gandhian Approach on Rural Development.

### UNIT – III

**Strategies of Rural Development:**

**Focusing on Agriculture:** Sustainability, Conservation of Resources such as water management, shifting of people out of agriculture.

**Alternatives in Rural Development:** Dairying and Poultry Farming, Employment Generation for Rural Development: The Role, Scope and Prospects of Rural Non-Farm Enterprises; Rural-Urban nexus and its impact on Rural Development.

### UNIT IV

**Planning for Rural Development:** Policy and Allocation under plans for rural Development.

**The Role of Non-Government Organizations in India.**

**Appraisal of Rural Development in India since Independence.**

**Comparative Study of India and China.**

**NOTE:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

**Reading List:**

Chambers, Robert (2008) : Revolution in Development Inquiry, Earthscan Publication Ltd.

- Dixon, Chris J Dixon (1988) : Rural Development in the Third World, Routledge Gallant, Nick, Sui Monk Kidd, Dave Shaw, Merri Juntti, (2008),Introduction to Rural Planning” Routledge.
- Jain, L C, Krishnamurthy B V and : Grass Without Roots: Rural Development under  
Tripathy, I M (1988) : Government Auspices,  
Sage Publications India Pvt. Ltd., New Delhi
- Jytte Agergaard, Niels Fold, : Rural-Urban Dynamics: Livelihoods, mobility  
Katherine Gough eds. (2009) : and markets in African and Asian frontiers,  
Routledges
- McAreavey, Ruth (2009) : Rural Development Theory and Practice,  
Routledge
- Mosley, Malcolm J (2003) : Rural Development: Principles and  
Practices,  
Sage Publications India Pvt. Ltd., New  
Delhi
- Murat Arsel, Max Spoor (eds.) : Water, Environmental Security and  
Sustainable Rural Development, Routledge
- Saturnino M Borras Jr. (Ed.) : Critical Perspectives in Rural Development  
Studies, Routledge.

Journals:

Economic and Political Weekly  
Rural Development Perspectives  
Journal of Rural and Community Development

## IX .2(a) –BANKING AND INSURANCE

**Max. Marks: 100**

**Time: 3 Hrs.**

**Written Exam:80**

**Internal Assessment: 20**

### Course outcomes

- CO1 Students would have knowledge regarding money market, capital market, stock exchange i.e. Indian Financial System which is the backbone of the country.
- CO2 To familiar students about the relationship between financial development and economic development.
- CO3 To impart knowledge to students about controller of financial system, e.g. RBI, SEBI, and TERI.

### UNIT-I

**Central Banking:** Origin and Evolution; Rationale; Main Functions, Policy Tools, RBI – Role, Functions, Autonomy and monetary management.

### UNIT – II

**Commercial Banking :** Functions, Risk Management – Types of Risk, Risk Management process, Assets/Liabilities Management. Major Developments in Commercial Banking in India since nationalization. Banking Sector Reforms

### UNIT – III

**Development Financial Institutions:** Role, growth and structure of Development Financial Institutions (DFIs) in India, Types and control of NBFCs by RBI.

### UNIT – IV

**International Banking:** Demand for and Supply of International Reserves –International Monetary Fund (IMF) and International Liquidity. European Monetary System - Features of Maastricht Treaty and Post Maastricht Treaty Developments. The Euro currency Market – Development and Financial Implications.

**NOTE: The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.**

### Suggested Reading

#### Reading List:

- Baye, Jansen (1999) : Money, Banking and Financial Markets: An Economic Approach. AITBS Publishers and Distributors, New Delhi
- Carbaugh, Robert J (2008) : International Economics, Eleventh Edition. Thomson South – Western
- Croushore, Dean (2007) : Money and Banking (A Policy Oriented Approach) Houghton Muffin Company, New York.

- Howells, Peter and Bain Keith (2002) : The Economics of Money , Banking and Finance: A European Text.  
Pearson Education Ltd.
- Khanna, Perminder (2005) : Advanced Study in Money and Banking : Theory and Policy, Relevance in the Indian Economy.  
Atlantic Publishers, New Delhi
- Kulkarni, G (1999) : Modern Monetary Theory,  
Macmillan, New Delhi
- Pande, G S (2006) : Principles and Practice of Insurance.  
Kalyani Publications, New Delhi
- Singh Inderjit, Katyal, Rakesh (2006) : Insurance, Principles and Practices  
Kalyani Publications, New Delhi

Supplementary Reading

Economic Survey (Govt. of India) : Different Issues

Reserve Bank of India : Different Reports

## IX .2(b) –BANKING AND INSURANCE

Max. Marks: 100

Time: 3 Hrs.

Written Exam:80

Internal Assessment: 20

### Course outcomes

- CO1 The course will disseminate awareness regarding different insurance policies.
- CO2 To familiarize students with background knowledge of both insurance and banking sectors.
- CO3 To impart knowledge to students about controller of financial system, e.g. RBI, SEBI, IRDA.

### UNIT-I

**Introduction to Insurance:** Concept, Principles and relevance. Insurance and economic development. Types of Insurance.

### UNIT – II

**Life Insurance:** Types, Principles, Growth of Life Insurance Corporation in India; Investment pattern of LIC Funds.

### UNIT – III

**General Insurance:** Types, Principles, Growth of General Insurance Corporation in India. Investment Pattern of GIC Funds, Underwriting procedure.

### UNIT – IV

**Regulation of Insurance:** Nationalisation of Insurance business in India after independence. Malhotra Committee Report. IRDA Act 1999 – salient features. Entry of private players.

**NOTE:** The question paper shall have five units. Each of the first four units will contain two questions and the students shall be asked to attempt one question from each unit. Unit five shall contain eight short answer type questions without any internal choice and it shall be covering the entire syllabus. As such, unit five shall be compulsory.

### Reading List:

- Baye, Jansen (1999) : Money, Banking and Financial Markets: An Economic Approach. AITBS Publishers and Distributors, New Delhi
- Carbaugh, Robert J (2008) : International Economics, Eleventh Edition. Thomson South - Western
- Croushore, Dean (2007) : Money and Banking (A Policy Oriented Approach) Houghton Muffin Company, New York.
- Howells, Peter and Bain Keith (2002) : The Economics of Money , Banking and Finance: A European Text. Pearson Education Ltd.
- Khanna, Perminder (2005) : Advanced Study in Money and Banking : Theory and Policy, Relevance in the Indian Economy Atlantic Publishers, New Delhi
- Kulkarni, G (1999) : Modern Monetary Theory, Macmillan, New Delhi
- Pande, G S (2006) : Principles and Practice of Insurance.



Singh Inderjit, Katyal, Rakesh (2006) : Insurance, Principles and Practices  
Kalyani Publications, New Delhi  
Kalyani Publications, New Delhi

Supplementary Reading

Economic Survey (Govt. of India) : Different Issues  
Reserve Bank of India : Different Reports