

## **Royal School of Humanities and Social Science**

## RSHSS

# **Department of Economics**

Learning Outcomes-based Curriculum Framework (LOCF) for Undergraduate Programme

# **MA in Economics**

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#### 1. Preamble

Economics is the driving force of the modern world. There is a significant need for highly trained economists and analysts who can anticipate and respond to change, examine and extrapolate trends, and think in terms of an interconnected, globalized society.

Becoming an economist typically requires either a master's degree or a PhD, depending on where the students want to work and the specific type of job you're seeking. A post graduate program in economics will allow the students to specialize in a particular aspect of the field.

A student may choose to concentrate in Microeconomics, the Economics of Health Care, and Environmental Economics, Economic policy, International economics or another niche. <u>Choice is at the heart of all decision-making</u>. Individuals, businesses and governments are all faced with making choices in situations where resources are scarce. <u>This is where a knowledge of Economics is vital</u>.

Economics examine topics of obvious importance to human well-being. Employment opportunities are diverse. Economics is applicable in a wide range of fields, such as the following--

Economist, Administration, Financial Analyst, Market Research Analyst, Budget Analyst, Operations Research Analyst, Banks, Finance and investment companies ,Share-brokers, Accounting firms; Business services; Law firms; Major commercial and industrial companies; the Reserve Bank; Treasury; Ministry of Foreign Affairs &Trade; Department of Internal Affairs; Department of Labour; Statistics Dept; Ministry of Commerce; Economic research and consultancy firms; Hospital administration and Health Authorities; Local government and planning authorities; Universities and other educational institutions; Local and national government. Increasingly, policy debate in all areas is being cast in economic terms. Understanding most current issues requires knowledge of Economics.

#### Economics provides a valuable set of intellectual skills.

It is more than just a subject – it's a way of thinking. It provides a logical way of looking at a variety of issues. The analytical techniques employed in Economics enables the student to develop their-- General literacy; Communication and numeracy skills; Skills of abstraction (balancing simplification against relevance); Skills of logical deduction; Critical thinking;

#### Studying Economics provides insights into:

The general environment of resource allocation decisions, opportunity costs and trade-offs, project evaluation and government policy. These are crucially important in many areas. Often these insights are not obvious, and can be counter-intuitive to those who don't apply economic reasoning.

In today's working world, transferable skills and flexibility, together with strong personal characteristics, tend to be more important than specific training in a narrow, vocational area. Employers are particularly keen on candidate with good analytical and problem-solving skills. Training in Economics emphasises these skills..

This MA in Economics programme is intended to equip you with the main tools of the professional economist, whether you intend to work in government, central banking, international organisations or private sector firms such as economic consultancies.

The advanced and technically rigorous nature of the programme offered by the Royal Global University also serves as an excellent foundation for PhD programmes and other research-focused roles.

## 2. Learning Outcomes based approach to Curriculum Planning

#### a. Nature and extent of the MA in Economoics degree programme in Economics:

A post graduate degree in Economics is a Two years degree course which is divided into four semesters under '*The Assam Royal Global University*'. The learning outcomes specify what exactly post-graduates after successfully completing the PG degree programme of study are expected to know, understand and able to practice. This course has been designed to give concepts and ideas, knowledge, skill of problem solving and other attributes relating to post-graduate degree.

### 2.2 Aims of PG Degree Programme in Economics:

The overall objectives of the Learning Outcomes-based Curriculum Framework (LOCF) for MAdegree in Economics are-

- To impart the basic knowledge of Economic theories, principles, models and laws of traditional and modern economics.
- To develop the learner into competent and efficient in the field of Economics.
- To empower learners by communication, professional and life skills.
- To prepare socially responsible academicians, researchers, professionals with global vision.
- To provide and adapt curricula that prepare our graduates for employment and further study as economists
- To provide the students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics
- To provide students with the opportunity to focus on applied and policy issues in Economics
- To provide programmers that allow the students to choose from a wide range of economic specialization

#### 3. Post-Graduate Attributes in Economics:

- Disciplinary knowledge and Understanding: Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of MA Programme in economics. It will provide advanced knowledge of Micro and Macro economics, use of mathematics in Economics, Solving economic issues through research and concepts and knowledge of other courses relating to core areas of study. Along with the core papers, The Assam Royal Global University gives much more emphasis on broader coverage of AEEC, SEC and AECC papers.
- Communication Skills: Ability to express thoughts and ideas effectively in writing and orally is very essential for a student. The Assam Royal Global University at Undergraduate and PG level has made *Communicative English* compulsory for all students in all semesters. A student at PG level will study four papers of Communicative

English as **Ability Enhancement Compulsory Courses (AECC)** with a view to improve communication skills of the students.

- Critical thinking: A student will be capable of using analytic thought to a body of knowledge and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence. Faculty members organize Group Discussion, Power Point presentation, Debate, Quiz, seminars, lecture series etc regularly to develop this quality among the students.
- **Problem solving**: this course is designed to develop capacity to extrapolate from what a student has learned and apply their competencies to solve different kinds of non-familiar problems, and apply one's learning to real life situations.
- Analytical reasoning: Economics is a subject of reasoning that enhances a student's ability to evaluate the reliability and relevance of evidence and can identify logical flaws in the arguments of others. Moreover, the students can analyse and synthesise data from a variety of sources and can draw valid conclusions and support them with evidence.
- **Research-related skills**: Economics is research based subject. Students are asked prepare project report regularly which brings about the sense of inquiry and capability for asking relevant/appropriate questions. They can also develop the ability to recognise cause-and-effect relationships and can draw conclusions from data. Students are required to submit dissertations also.
- **Cooperation/Team work**: Capable of working effectively in diverse teams in both classroom and field-based situations.
- Information/digital literacy :Capable of using computers in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and use appropriate software for analysis of data.
- **Moral and ethical awareness/reasoning**: Capable of conducting their work with honesty and precision thus avoiding unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, and appreciating environmental and sustainability issues.
- Lifelong learning: Capable of self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/re-skilling.

## **4.** Qualification Descriptors for a PG Degree programme in Economics

The qualification descriptors for a PG Degree programme in Economics may include the following:

- Demonstrate
  - A systematic or coherent understanding of the academic field of Economics, its different learning areas and applications, and its linkages with related disciplinary areas/subjects;
  - Procedural knowledge that creates different types of professionals related to Economics area of study, including research and development, teaching and government and public service;
  - (iii) Skills in areas related to specialization area relating the subfields and current developments in the academic field of Economics.
- Use knowledge, understanding and skills required for identifying problems and issues relating to Economics.
- Demonstrate subject-related and transferable skills that are relevant to some of the job trades and employment opportunities.
- A keen interest in research and the study of Economic issues
- Meet one's own learning needs, drawing on a range of current research and development work and professional materials;
- Demonstrate subject-related and transferable skills that are relevant to economic related issues our day to day activities.
- Develop analytical power and logical approach to problem-solving
- Good oral and written communication abilities
- Able to work independently or with team members

## 5. Learning Outcomes of different types of courses for MA in Economics

## **5.1 Programme learning outcomes relating to MA in Economics**

- Demonstrate-
  - (i) in-depth knowledge and understanding about the fundamental concepts, principles and processes underlying the academic field of Economics and its different subfields (Micro and Macro Economics, Mathematical Economics, statistical methods, International Economics, Public Finance, Environmental Economics, Econometrics, Financial Economics, Demography, Development Economics and Indian Economy)
  - (ii) Procedural knowledge that creates different types of professionals in the field of Economics and related fields such as Econometrics, Banking and Finance etc.
- Economics now a days, is considered as the most exciting course, which offers vast knowledge about local issues as well as national and global economic issues.
- Understand and interpret data to reach a conclusion
- Design and conduct experiments to test a hypothesis.
- Understand scientific principles underlying management and welfare at personal level

- Meet one's own learning needs, drawing on a range of current research and development work and professional materials;
- Demonstrate subject-related and transferable skills that are relevant to economic related issues our day to day activities.
- Develop analytical power and logical approach to problem-solving
- Good oral and written communication abilities
- Able to work independently or with team members

#### M. A. in Economics

## Programme Structure (Total Credit-102)

	1 <sup>st</sup> semester						
Sl.No.	Subject Code	Names of subjects	L	Т	Р	С	ТСР
Core Subjects							
1	EC0184C101	Micro Economics-I	4	0	0	4	4
2	EC0184C102	Macro Economics-I	4	0	0	4	4
3	EC0184C103	Quantitative Methods in Economics-I	4	0	0	4	4
4	EC0184C104	Development Economics-Theory and Practice	4	0	0	4	4
	Ability Enhancement Compulsory Courses (AECC)						
5	CEN984A101	Communicative English-I	1	0	0	1	1
6	BHA984A104	Behavioural Science-I	1	0	0	1	1
		Ability Enhancement Elective Courses (AEE	C)				
	Discipline Specific Electives (DSE) Will select one subject from the list given below						
1	EC0184D101	Indian Economy-Pre-Independence Period	4	0	0	4	4
2	EC0184D102	Computer Application in Economics	4	0	0	4	4
				Total	Credit		22

	2 <sup>nd</sup> semester						
Sl.No.	Subject Code	Names of subjects	L	Т	Р	С	ТСР
		Core Subjects					•
1	EC0184C201	Micro Economics-II	4	0	0	4	4
2	EC0184C202	Macro Economics-II	4	0	0	4	4
3	EC0184C203	Quantitative Methods in Economics-II	4	0	0	4	4
4	EC0184C204	Statistical Method and Introductory Econometrics	4	0	0	4	4
	Ability Enhancement Compulsory Courses (AECC)						
5	CEN984A201	Communicative English-II	1	0	0	1	1
6	BHA984A204	Behavioural Science-II	1	0	0	1	1
		Ability Enhancement Elective Courses (AEEC	<b>)</b>				
	1	Will select one course from given a basket of co	urses			-	
7			2	0	0	2	2
		Discipline Specific Electives (DSE)					
	Γ	Will select one subject from the list given below	ow			1	r
1	EC0184D201	Financial System	4	0	0	4	4
2	EC0184D202	Human Resource Development	4	0	0	4	4
				Total	Credit		24

	3 <sup>rd</sup> semester							
Sl.No.	Subject Code	Names of subjects	L	Т	Р	С	ТСР	
		Core Subjects						
1	EC0184C301	Indian Economy: Post Independence						
	2001010001	Evolution and Present Perspective	4	0	0	4	4	
2	EC0184C302	Public Finance	4	0	0	4	4	
	Ability Enhancement Compulsory Courses (AECC)							
3	CEN984A301	Communicative English-III	1	0	0	1	1	
		Ability Enhancement Elective Courses (AEE)	<b>C)</b>					
		Will select one course from a basket of cours	es					
	EC0184S301	Current Socio-Economic Issues of India	2	0	0	2	2	
		Discipline Specific Electives (DSE)						
		Will select three subjects from the list given be	elow	1	1	1		
1	ECO184D301	Demography	4	0	0	4	4	
2	ECO184D302	Welfare Economics	4	0	0	4	4	
3	ECO184D303	Econometric Method	4	0	0	4	4	
4	ECO184D304	Economics of Insurance	4	0	0	4	4	
5	ECO184D305	Economics and Laws	4	0	0	4	4	
		Project						
1	ECO184C323	Minor Project	0	0	4	4	4	
				Total Credit 27				

4 <sup>th</sup> Semester							
Sl.No.	Subject Code	Names of subjects	L	Т	Р	С	ТСР
	Core Subjects						
1	EC0184C401	International Economics	4	0	0	4	4
2	EC0184C402	Environmental Economics	4	0	0	4	4
Ability Enhancement Compulsory Courses (AECC)							
3	CEN984A301	Communicative English-IV	1	0	0	1	1
Discipline Specific Electives (DSE)							
	Γ	Will select three subjects from the list given be	low				
1	ECO184D401	Agriculture and Resource	4	0	0	4	4
2	ECO184D402	Labour Economics	4	0	0	4	4
3	ECO184D403	Industrial Economics	4	0	0	4	4
4	ECO184D404	Operation Research	4	0	0	4	4
5	ECO184D405	Financial Operations and Management	4	0	0	4	4
6	ECO184D406	History of Modern Economic Analysis	4	0	0	4	4
	Dissertation						
1	ECO184C423	Dissertation	0	0	8	0	8
				Total	Credit		29
		COURSE CREDIT- 22 + 24 + 27 + 29 = 102					

## **Scheme of Evaluation**

#### Theory Papers (T):

- Continuous Evaluation: 15% (Assignment, Class Test, Viva, Seminar, Quiz : Any Three)
- Mid-term examination: 10%
- Attendance: 5%
- End Term Examination: 70%

#### **Practical Papers (P):**

- Continuous Evaluation: 25% (Skill Test, lab copy, viva, lab involvement: Any Three)
  - Attendance: 5%
  - End term examination: 70 %

#### Combined Theory & Practical Papers (TP):

- Continuous Evaluation: 15% (Assignment. Class Test, Lab Experiment, Lab Copy, Viva: Any Three)
  - Mid-term examination: 10%
  - Attendance: 5%
  - End term examination: 70 %

## SYLLABUS (1<sup>ST</sup> SEMESTER)

Paper I/Subject Name: Micro	Subject Code:ECO184C101	
L-T-P-C - 4-1-0-6	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objectives:**

The purpose of a course in Microeconomics is to give students a thorough understanding of the principles of economics that apply to the decisions of individuals--both consumers and producers--within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy.

- To make the students acquaint with the advanced microeconomic principles.
- To familiarize the students with Consumer Behaviour, Production Functions and Allocation of Scare Resources.
- To provide them a proper understanding of financial accounting.

#### **Learning Outcomes:**

Having successfully completed this module a student will be able to learn-

- 1. Students will know certain advanced concepts like- CES production function.
- 2. They will learn how to gauge consumer behaviour, convert desire into demand, create supply and strike equilibrium between the two.
- 3. They will have a knowledge on economic use of scare resources, their optimal use in different market conditions, price and output determinations especially-oligopoly and duopoly markets.
- 4. Students will develop certain behavioural knowledge of utilizing scarce resources in their day to day life.
- 5. They will also develop certain skills of utilizing scarce means.

Module	Topics	Course Content	Maximum number of classes
I	Theory of Production and Cost	Production function and related concepts – Isoquants and Substitution between Factors – Elasticity of Substitution – Returns to Scale and Returns to a Factor – Technical Progress and Production Function – Forms of Production Function; Cobb- Douglas, CES and Fixed coefficient Type – the Ideas of Partial and Total Factor Productivity – Single Decision of a Firm: Choice	10
	CUSI	of Optimal Factor Combination – Expansion Path – Derivation of	

		Cost Function from Production Function – Multi-product Firm: production Efficiency Locus, Production Possibility Frontier and Choice of Optimal Combination of Output of Products	
II	Analysis of Consumer's Choice	A Review of Indifference Curve and Revealed Preference Approach – Violation of the Premises of Indifference curve Approach: Satiation and Lexicographical Ordering – Indirect Utility Function – Dual Properties of Utility and Expenditure Functions, Ray's Identity-ordinary and compensated demand curves and measures of welfare change – Linear Expenditure System	10
ш	Market Structure and Pricing of Products	A Review of Perfect Competition Equilibrium – Monopoly and its Regulation – Monopolistic Competition: Price-Output Equilibrium – Duopoly Models of Cournot, Bertrand and Stackelberg – Kinked Demand Curve Model of Oligopoly – Collusive Oligopoly: Price Leadership Models Contestable Markets.	12
IV	Business Accounts and Managerial Theories of the Firm	Profit and Loss Account, Balance Sheet and Cash Flow Statements of a Firm, Break Even Analysis; A critique of the Traditional Theories of Firm –Contributions of Baumol, Morris and Williamson to Managerial Theories of the Firm	8

#### Text-books:

• *Microeconomics: Theory and Applications;* Madalla and Miller; 2<sup>nd</sup> edition;1989;McGraw Hill; Berkely

#### **Reference Books:**

- Pindyck, R. & Rubinfield, D.L.; *Microeconomics;* 9<sup>th</sup> edition;2017;Pearson; London
- Koutsoyiannis, A; *Modern Microeconomics*; 1<sup>st</sup> edition; 1975; Macmillan; London
- Hal R Varian, Intermediate Micro Economics; 8<sup>th</sup> edition, 1998; Macmillan; London

#### SYLLABUS (1<sup>ST</sup> SEMESTER)

Paper I/Subject Name: Macro Econon	nics-I	Subject Code: ECO184C102
L-T-P-C - 4-0-0-4	Credit Units: 6	Scheme of Evaluation: (T)

#### **Course Objective:**

- 1. To introduce students to the basics of domestic and national income and also to the sectoral composition of national income.
- 2. To inculcate the knowledge of full employment and multiplier.
- 3. To acquaint students with the consumption and investment functions and also various consumption hypothesis.

- 4. To enhance understanding of the technical terms of supply of money and its various components.
- 5. To acquaint students with the theories of demand for money.

#### Learning Outcomes:

- 1. Students would be able to understand the basics of domestic and national incomes.
- 2. Students would be able to determine national income by applying methods of measurement of national income.
- 3. Students would be able to correlate national income with welfare.
- 4. Students would be able to identify the factors affecting consumption.
- 5. Students would be able to develop the knowledge of components of money supply.
- 6. Students would be able to understand the importance of demand for money.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
	A Review of Aggregate Income and its Determination	
I	The Ideas of Income, Domestic Income and National Income; GDP as a	
	Production Total and its sectoral composition, the Circular Flow and GDP as	
	an Expenditure Total; GVA; Green GDP; Introduction to Equilibrium and	12
	disequilibrium in the Macro-economy;	
	Classical Model of Full Employment; Keynes Criticism of Classical theory,	
	The Simple Reynesian Framework and the Multiplier	
II	I heories of consumption function	
	Absolute Income Hypothesis, Relative Income Hypothesis, Permanent	
	Income Hypothesis, Life Cycle Hypothesis, Consumption function and	12
	underdeveloped country	12
	Investment function	
	MEC and MEI- Relationship between MEC and Rate of interest,, the	
	Accelerator, the super multiplier	
	Supply of Money	
	Financial intermediation — a mechanistic model of bank deposit	
Ш	determination; A behavioural model of money supply determination, a	8
	demand determined money supply process; RBI approach to money supply;	
	High powered money and money	
	multiplier; In-side and Out-side Money	
	Demand for Money	0
IV	Modern Quantity theory of money-Friedman, Tobin and Baumol theory of	8
	demand for money.	

#### Text-books:

• Principles of Macroeconomics; SoumenSikdar; 2<sup>nd</sup> edition; 2011; Oxford University Press; London

#### **Reference Books:**

- Mankiw, Gregory; Principles of MacroEconomics; 4<sup>th</sup> edition; 2006; South-Western; London
- Dornbusch Rudiger, Fisher and Stertz; *Macroeconomics;* 11<sup>th</sup> edition; 2017; McGraw Hill; London

#### Course outcome:

After completion of the course the students will be able to learn about-

- Macro Disequilibrium
- Computation of national income and its challenges
- Concept of Green GDP
- Role of financial sector in economic development.

## SYLLABUS (1<sup>ST</sup> SEMESTER)

Paper I/Subject Name: Quantitative M	lethods for Economics-I	Subject Code:ECO184C103
L-T-P-C – 4-0-0-4	Credit Units: 6	Scheme of Evaluation: (T)

#### **Course Objective**

This course is designed to provide a good grounding and an in depth understanding of the theory and application of differential calculus, and other techniques widely used in Economics. Topics of study include functions, univariate optimization, elasticity, financial mathematics, multivariate optimization, unconstrained optimization, matrices, integration etc.

#### Learning outcome:

Students are expected to learn-

- 1. Basic concepts like Function, variables, basic algebra etc.
- 2. Basic rules of differentiation, matrices and integration
- 3. Problem solving of differentiation, matrices and integration
- 4. Solve problems involving variables that discretely and continuously grow over time, and compute present discounted values, future compounded values, and rates of growth.

Module	Topics	Maximum number of classes
I	<b>Basic applications</b> Market model, National Income Model, Elasticity of demand, Revenue and Cost .	8
II	<b>Classical Optimization</b> Unconstrained maxima and minima with a single explanatory variable – applications to cost minimization, revenue maximization, tax revenue maximization, profit maximization and equilibrium of firm, Unconstrained maxima and minima with more than one explanatory variables – applications to discriminatory monopoly, Multiproduct equilibrium, Multi- plant equilibrium, equilibrium of firm with advertisement cost and subsidy.	12

Ш	Integration Applications relating to derivation of total functions from marginal functions, estimation of consumer's surplus, producer's surplus, problems relating to investment, capital formation and derivation of simple growth process (Domar).	10
IV	Matrix Algebra and its Applications Rank, Norm and Trace of a matrix, Partition matrix, Matrix inversion, National Income model, Structure of input-Output table, Static Leontief system –Domestic and External sector	10

#### Text Books:

• Basic Mathematics and its Economic Applications; Barua, S.:4<sup>th</sup> edition; 2017; Macmilan India Limited ; kolkata

#### Reference Boooks:

- Chiang, A.C. & Wainwright, K.; *Fundamental Methods of Mathematical Economics*; 4<sup>th</sup> ;2012; McGraw Hill Education; New Delhi
- Henderson, J M and Quandt, R E; *Micro-Economic Theory- a Mathematical Treatment*; 3rd Edn; 2003; McGraw Hill education; New delhi
- Allen, R G D; *Mathematical Economics for Economists*;3<sup>rd</sup> edition; 2003; St Martin press; New york.

## SYLLABUS (1<sup>ST</sup> SEMESTER)

Paper I/Subject Name: De	evelopment Economics-Theory and Practice	Subject Code:EC0184C104
L-T-P-C - 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

- 1. To introduce students to the index of economic development and also the various problems of developing countries, specially poverty and inequality.
- 2. To develop the knowledge of various theories and models of economic development.
- 3. To acquaint them with the important aspects of the process of economic planning.
- 4. To enhance understanding of the importance of trade in economic growth.

#### Learning Outcomes:

- 1. Students would be able to define and measure economic development by using some tools, like Per Capita Income, HDI, HPI, etc.
- 2. Students would be able to acquaint them with various models and theories of economic growth and development.
- 3. Students would be able to develop the knowledge of skills of planning.
- 4. Students would be able to realise the role of trade in the path of economic growth of a country.

Module	Topics	Maximum number of classes
I	Development and its Measurement Problems in Defining Economic Development, Per Capita Income as an Index of Development, Alternative Measures of Development Gap: HDI, GDI and related indices-HDI, HPI, MDI etc. Poverty and Inequality Poverty: Concepts and Measurement, Income Inequality: Axioms, Index and Measures. Redistribution with Growth	12
	<b>Classical Development Theories</b> Theories of Evolution of a Capitalist Economy: Classical, Marx and Schumpeter, Theories of Persistence of nderdevelopment: The Vicious Circle Theory, The Stages of Growth: Rostow	
II	Development Strategies Big Push: Rosenstein-Rodan, Balanced Growth: Nurkse, Unbalanced Growth: Hirschman, Critical Minimum Efforts: Leibenstein. Dualistic Pattern of Development Unlimited Supply of Labour and the Dual Economy - Models of Arthur Lewis, Core-Periphery Models - The Process of Cumulative Causation: Myrdal, Neo- Colonial Dependence Model and Fei-Renis, Rural-Urban Migration: The Harris–Todaro Model,	10
111	<b>Development Planning</b> The Concept and Types of Planning, Rationale for Planning in a Developing Economy, ThePlanning Process: Projection of Macro Variables, Input- Output Models and Sectoral Projections, Project Evaluation and Social Cost- Benefit Analysis, Plan Failures, Market Versus Planning, Planning in a Market Oriented Economy, NITI Aayog	10
IV	<b>Trade and Development</b> Trade as an Engine of Growth, Gains from Trade, Terms of Trade and LDCs: Prebisch, Singer and Myrdal's Thesis.	8

#### Text Books:

- *Economic Development*; Todaro and Smith; 8<sup>th</sup> edition; Pearson Education; New delhi *Reference Books:*
- Ahuja, H. L.; *Development Economics*, 6<sup>th</sup> edition; 2014; S. Chand Publishing; New Delhi
- Ray, Debraj; *Development Economics;* 4<sup>th</sup> edition; 2012; Oxford University Press; New Delhi
- Misra&Puri; *Economics of Development and Planning*; 5<sup>th</sup> edition;2015; Himalaya Publishing House; New Delhi

## SYLLABUS (1<sup>ST</sup> SEMESTER)

 Paper I/Subject Name:
 Indian Economics- Pre-Independence Period
 Subject C

Subject Code:EC0184D101

L-T-P-C - 4-0-0-4

Credit Units: 4

Scheme of Evaluation: (T)

#### **Course Objective:**

The objective of the course is to enable students to have knowledge of the scenario of Indian economy during colonial rule.

#### Learning Outcomes:

On completion of this course students will be expected to learn

- background of Indian economy with in the colonial period
- change of agrarian structure
- growth and performance of Indian Railways as a major identity
- Nature of industrialization during British period

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	<b>Introduction: Colonial India: Background and Introduction</b> Pre- British Period; Overview of colonial economy; National Income; population; occupational structure	8
II	<b>Agriculture</b> Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.	12
Ш	<b>Railways and Industry</b> Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.	10
IV	<b>Economy and State in the Imperial Context</b> The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.	10

#### Text Books:

• The Economic History of India 1857-1947; Tirthankar Roy, 3rd edition, 2011; Oxford University Press,.

#### Reference Books:

- Dharma Kumar (editor), *Occupational Structure,* The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter
- Lakshmi Subramanian, "History of India 1707-1857", Orient Blackswan, 2010, Chapter 4.

## SYLLABUS (1<sup>ST</sup> SEMESTER)

Paper I/Subject Name: Computer Application in Economics		Subject Code:EC0184D102	
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)	

#### **Course Objective:**

The objective of the course is to introduce students to basics of computer applications relevant of economic analysis.

#### **Course Outcomes:**

On completion of this course students will be expected to understand economic analysis with the help of computer application. Students will get an exposure to diagrammatic representation, Statistical data analysis and methods like SPSS and STATA.

Module	Topics	Maximum number of classes
I	Diagrammatic Presentation- One dimensional –single, subdivided, multiple deviation; Two dimensional- histogram, pie diagram; Three dimensional- rectangular, cube; Pictograms and cartograms, scatter, line and radar diagrams; Tabular Presentation -Single; Double, Multiple	12
II	The Nature and Source of Data (Economic and Financial), Data Processing, Techniques. Concept of data, record and file; Types of data (Time Series, Cross Sectional and Polled) Structures, data analysis and accuracy of data. File Handling and operations like opening, appending and cascading, closing and attribute control; Data Storage and retrieval; Data operations; Algorithms like sorting, merging, joining and bifurcation; Data base concepts and operation on database; DBMS and RDBMS	10
111	Statistical Processing Techniques and Methods-Series , Arithmetic Progression and Geometric Progression and Divergent and Convergent Series. Time and frequency series, regression methods and techniques; Regression analysis; Data Validation; Trends and cycle city forecasting and	10
IV	Trend Analysis –Economic Applications of growth and planning. System equation: Specification; Error and correction strategies, Statistical modeling and descriptive statistics with test of significance; Distribution functions, Regression statistics. Use of SPSS and STATA	8

## SYLLABUS (2<sup>nd</sup> SEMESTER)

Paper I/Subject Name: Micro Economics-II		Subject Code:EC0184C201
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objectives:**

The purpose of a course in Microeconomics is to give students a thorough understanding of the principles of economics that apply to the decisions of individuals--both consumers and producers--within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy.

- To make the students acquaint with the advanced microeconomic principles.
- To familiarize the students with Consumer Behaviour, Production Functions and Allocation of Scare Resources.
- To provide them a proper understanding of financial accounting.

#### **Learning Outcomes:**

Having successfully completed this module a student will be able to learn-

- Students will know certain advanced concepts like Present value, evaluation of investment projects
- They will learn how to gauge General and partial equilibrium strike equilibrium between the two.
- They will have a knowledge on economic use of scare resources, their optimal use in different market conditions, Insurance Economics etc
- Students will develop certain behavioural knowledge of utilizing scarce resources in their day to day life.

They will also develop certain skills of utilizing scarce means **Detailed Syllabus**:

Module	Topics	Maximum number of classes
I	Discounting and Present Value – Inter-temporal Consumption Decision – Inter-temporal Production Decision – Evaluation of Investment Projects – Determination of the Rate of Interest; Attitude towards Risk – Expected Utility – Measures of Risk Aversion – Certainty Equivalence and the Cost of Risk	12
II	Economics of Insurance – Asymmetric Information and Adverse Selection – Moral Hazard – Signaling and Screening - the Principal Agent Problem	10
ш	Pricing of Factors under Perfect Competition – Factor Share and Technical Progress – Backward Bending Supply Curve of Labour – Monopsony	10
IV	Partial Versus General Equilibrium Approaches –Walrasian General Equilibrium System: Existence, Stability and Uniqueness of the equilibrium - Tatonnement and Non–tatonnement Process–Arrow and Debreu re- specification of the Walrasian Economy – Idea of Fixed Point Theorems and	8

their Application to Existence Proof – Uncertainty and the Contingent	
Markets – Ideas of Computable General Equilibrium	

#### Text-books:

• *Microeconomics: Theory and Applications;* Madalla and Miller; 2<sup>nd</sup> edition;1989;McGraw Hill; Berkely

#### **Reference Books:**

- Pindyck, R. & Rubinfield, D.L.; *Microeconomics;* 9<sup>th</sup> edition;2017;Pearson; London
- Koutsoyiannis, A; *Modern Microeconomics*; 1<sup>st</sup> edition; 1975; Macmillan; London

SYLLABUS (2 <sup>nd</sup> SEMESTER)			
Paper I/Subject Name: Macro Economics-II Subject Co		Subject Code:EC0184C202	
L-T-P-C - 4—0-0-4	Credit Units: 4	Scheme of Evaluation: (T)	

#### **Course Objective:**

- 1. To introduce students to the goods and money markets equilibrium, IS-LM model and its extension.
- 2. To enhance understanding of the technical terms of inflation and unemployment trade off.
- 3. To acquaint them with the balance of payments disequilibrium and uses of fiscal and monetary policies as corrective measures to the BOP disequilibria.
- 4. To inculcate the knowledge of advance theories of business cycle.

#### Learning Outcomes

- 1. Students would be able to understand the goods market and money equilibrium and relative effectiveness of monetary and fiscal policies with respect to IS-LM model.
- 2. Students would be able to acquaint them with the important aspects of inflation and unemployment and also the Phillips curve.
- 3. Students would be able to identify the applications of both monetary and fiscal policies to remove internal and external disequilibria.
- 4. Students would be able to elaborate the real business cycle theory and Manu cost model.
- 5. Students would be able to enhance understanding of recession as coordination failure.

Module	Topics	Maximum number of classes
I	<b>Neo-classical and Keynesian views on interest</b> ; The IS-LM model; Extension of IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices. Neo-Classical Synthesis.	12

II	Money, Inflation and Unemployment Inventory and Portfolio Balance Approaches to Demand for Money; Inflation-Unemployment Trade-off: the Philips Curve Analysis; Monetarists' Criticism of the Trade-off, Natural Rate of Unemployment and the Long RunPhilip Curve; Adaptive versus Rational Expectations, New Classical School and the PolicyIneffectiveness Hypothesis	10
ш	IS-LM Model IS-LM model to external sector, BP Curve, Mundell and Fleming Model	10
IV	Advances in Business Cycle Theory Theory of Real Business Cycles, Interpretation of the Labour Market, Importance of Technology Shocks, Neutrality of Money; New Keynesian Economics: Manu Cost Model, Recessions asCoordination Failure	8

#### Text-books:

• Principles of Macroeconomics; SoumenSikdar; 2<sup>nd</sup> edition; 2011; Oxford University Press; London

#### **Reference Books:**

- Mankiw, Gregory; *Principles of MacroEconomics;* 4<sup>th</sup> edition; 2006; South-Western; London
- DornbuschRudiger; *Macroeconomics;* 11<sup>th</sup> edition; 2017; McGraw Hill; London

## SYLLABUS (2<sup>nd</sup> SEMESTER)

Paper I/Subject Name: Quantitative Methods for Economics-II		Subject Code:EC0184C203
L-T-P-C -4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to know application of mathematics in economic theory especially imparting knowledge of Constraint optimization, dynamic analysis, simplex method and game theory.

#### Learning Outcomes:

On completion of this course students will be expected to learn

- About constraint optimization techniques
- Game theory-concepts and its application in economics
- Calculus for dynamic economics analysis
- Simplex method

Module	Topics	Maximum number of classes
	Optimization with Equality Constraint	
I	Optimization with equality constraints, Lagrange's multiplier method –	12
	application to consumer's equilibrium and producer's equilibrium in factor	

	market	
II	Calculus for Dynamic Analysis First and second order differential equation and its solutions – application to dynamic stability of market and simple growth process (Harrod-Domar), First order difference equation and its solution application of difference equation – lagged market model (Cobweb) and Domar model of growth; Optimal Control Theory- Basic Idea– Procedure – A few illustrative examples	10
	<b>Optimization with inequality constraint</b> Liner programming, General formulation Transportation problem, diet problem and production problem – Simplex method of solution for well- behaved and ill-behaved functions (two variables, two constraints only) – Concept of duality, Formulation of dual equations.	10
IV	<b>Game Theory</b> An overview of game theory, Nash equilibrium-economic application, Prisoner's dilemma economic application, Repeated games, Finitely repeated Prisoner's Dilemma and Infinitely repeated Prisoner's Dilemma. Co-operative and non-cooperative games.	8

#### Text Books:

• Basic Mathematics and its Economic Applications; Barua, S.:4<sup>th</sup> edition; 2017; Macmilan India Limited ; kolkata

#### Reference Boooks:

- Chiang, A.C. & Wainwright, K.; *Fundamental Methods of Mathematical Economics*; 4<sup>th</sup> ;2012; McGraw Hill Education; New Delhi
- Henderson, J M and Quandt, R E; *Micro-Economic Theory- a Mathematical Treatment*; 3rd Edn; 2003; McGraw Hill education; New delhi
- Allen, R G D; *Mathematical Economics for Economists*;3<sup>rd</sup> edition; 2003; St Martin press; New york.

## SYLLABUS (2<sup>nd</sup> SEMESTER)

Paper I/Subject Name: Statistical	Method and Elementary Eco	nometrics	Subject Code:EC0184C204
L-T-P-C – 4-0-0-4	Credit Units: 4	Schem	ne of Evaluation: (T)

#### **Course Objective:**

Econometrics is the use of statistical techniques to understand economic issues and test theories. Without evidence, economic theories are abstract and might have no bearing on reality. Econometrics is a set of tools we can use to confront theory with real-world data. It provides the tools to enable the students to extract useful information about important economic policy issues from available data.

This paper is a combination of probability theory and elementary econometrics

#### **Learning Outcomes:**

1. Students would be able to understand the basic concepts of econometrics.

- 2. Students would be able to practically use econometric tools in problem solving.
- 3. Students will also learn the correlation between mathematical concepts and econometric theory.
- 4. Students are expected to learn about theory of probability and its distribution and its importance in the field of research and deriving conclusions.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
-	<ul> <li>Probability: Basic Ideas</li> <li>Axiomatic Definition and derivation of Basic Probability Rules – Conditional Probability, Random variable – Mathematical Expectation and Moments relating to Discrete random variables</li> <li>Theoretical Probability Distributions</li> <li>Binomial, Poisson and Normal Distributions with Properties – Moment</li> <li>Generating Function – The Central Limit Theory (without Proof).</li> </ul>	12
=	<ul> <li>Sample survey: Population, Sample, Parameter, Types of Sampling- Probability and Non-Probability Sampling- Random Sampling, Stratified Random and Systematic Sampling.</li> <li>Testing of Hypothesis: Level of significance, Type I and Type II Errors, One- tailed and Two-tailed Tests – Test based on Standard Normal, t and Chi- Square Distributions.</li> </ul>	10
111	<b>The General Linear Regression Model</b> – Quantitative and Qualitative Explanatory Factors –Least Square Assumptions – OLS Estimators and their Properties – The Coefficient of Determination – Some Results of Two and Three Variable Regression Models - Test of Hypothesis about Regression Coefficients – Prediction with the Linear Regression Equation	10
IV	Further Topics in Linear Regression Consequences of Omission of Relevant Regressors and Inclusion of Irrelevant Regressors; Multi-collinearity: Effects, Detection and Remedies, Heteroscadasticity: Consequences, Tests and Remedy, Auto-correlated Disturbances: Consequences, Detection and Remedy ,Dummy Variable Trap;	8

#### Text Books:

- Statistical Method; Gupta, S P; 28<sup>th</sup> edition;2016; Sultan Chand and Sons; New Delhi
- Econometrics by Example; Damodar Gujarati, 4<sup>th</sup> edition; 2011;, Palgrave Macmillan..

#### References:

- Hazarika, PL; *Essentials for Economics and Business Studies;* 5<sup>th</sup> edition;2015; Akansha Publishing House; Guwahati
- Gupta, S C and Kapoor; *Fundamentals of applied Statistics;* V K; 4<sup>th</sup> edition; 2016;Sultan Chand and sons; New Delhi
- Jeffrey M. Wooldridge, *Econometrics*, CENGAGE learning, India Edition, 2009.

- DimitriosAsteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.
- Kmenta, Jan; *Elements of Econometrics; 2<sup>nd</sup> edition, 2017;* University of Michigan Press; London

# SYLLABUS (2<sup>nd</sup> SEMESTER) Paper I/Subject Name: Financial System Subject Code:EC0184D201

L-T-P-C - 4-0-0-4

Credit Units: 4

Scheme of Evaluation: (T)

#### **Course Objective:**

The objective of the course is to introduce students the Indian Financial system- its constituents, Financial market-its types and functions, financial institutions and their services.

#### **Learning Outcomes:**

- 1. A proper knowledge on financial system of India is a milestone for our students to build up their career in various departments of financial system.
- 2. It will develop their problem solving capacity of various finance related queries.
- 3. Students can get the knowledge of digital methods of banking system

Module	Topics	Maximum number of classes
I	Meaning of financial system, Concepts, Basic functions, Components of financial system, Financial system and economic development; Reforms in Indian financial system	8
11	Financial market: classification, money market and its constituents in India, functions of money market, money market instruments, Treasury Bills, Commercial papers, Commercial Bills, Certificate of deposits, Money at call and short notice, Capital Market: Primary and Secondary market, functions of capital market, methods of issue of new shares, Secondary Market: Listing of securities, Risk management, Trading arrangements, Stock market index, Stock Exchange in India.	12
	Financial institutions-Distinction between Banking and non-banking financial institutions. Structure of banking in India, types of non-banking financial institutions, co-operative banks, management of Non-performing	10

	Assets (NPA), Financial Regulations- RBI, SEBI, IRDA & PFRDA	
IV	Financial instruments and Services, characteristics, emerging financial services-leasing, hire purchases, merchant banking, depository, Investment banking, Mutual fund, Credit Rating, Factoring and Forfeiting, Housing Finance, Financial Inclusion and Micro-finance, Small and Payment Bank	10

#### <u>Text Books</u>:

• Indian Financial System; Bharti, V Pathak; 3<sup>rd</sup> edition; 2011; Pearson ; New Delhi

#### **Reference Books:**

• Gupta, S, Agarwal, Nisha and Gupta, Neeti; *Indian Financial System*; 2<sup>nd</sup> edition; 2011; Kalyani Publishers; New Delhi.

SYLLABUS (2<sup>nd</sup> SEMESTER)

Paper I/Subject Name: Human Resource Development		Subject Code:EC0184D202
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to understand issues relating to human resource development.

#### Learning outcome:

- Students will learn about human resource management
- Will understand Planning of man-power
- Will understand about methods of selection procedure of employees, absenteeism, rewards and incentives.

Module	Topics	Maximum number of classes
I	Nature of Human Resource Management, Need f or H.R.M. Approach, Human Resources approaches, process of Human Resources management, HRM and HRD	12
II	Human Capital Formation, indicators, problems and Issues, Human	10

	Capital formation in less developed countries, Human development index. Human Resources Planning and Man Power planning	
111	Human Relations: Nature, objectives, Determinants; perception income group behaviors Approaches to Human relations, values, concepts of Human relations approach – performance appraisal in H.R.M. purpose and methods.	10
IV	Human Resources Management: Recruitment and sources, Methods, Selection procedure: absenteeism, labour turnover, employees training, steps; rewards and incentives – Determinants and types; motivation –types, methods of increasing motivation, theories (Traditional and Modern)	8

#### Text-Books:

• Essentials of Human Resources Management and Industrial Relations; SubbaRao.P.; 2<sup>nd</sup> edition; 2017; Himalaya Publishing House; New Delhi

#### Reference Books:

- WillamB.Werther : Human Resources and Personnel Management, 3rd edition; 2016; Mc. Graw Hill
- Dwivedi R.S. : *Human Relations and Organizational Behaviors Global perspective*,3<sup>rd</sup> edition; 2014 Mac-Millan India; New Delhi



## SYLLABUS (3<sup>rd</sup> SEMESTER)

Paper I/Subject Name: Indian Economy: Post Independence Evolution and Present Perspective Subject Code:EC0184C301

L-T-P-C – 4-0-0-4 Credit Units: 4 Scheme of Evaluation: (T)

#### Course Objective:

The objectives of the course is to

- Introduce students to major trend in economic indicators in India.
- Introduce Policy Measures
- Challenges of the economy.

#### **Course Outcomes:**

On completion of this course students will be expected to understand about

- Purchasing power parity, multi-dimensional poverty etc
- Development strategies during post independent India

- Role of public and private sector in India and trickledown effect
- IT sector and revolution in telecommunication sector
- Global economic environment

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	Various macro indicators of Indian Economy: Ideas of National and Domestic Income, Gross and Net Domestic Product, at Current and Constant Prices, the Rate of Growth of an Economy; Growth and Development, Per Capita Income as a Measure of Economic Development; the Notion of Purchasing Power Parity; Human Development and its Measurement, Inequality and its Measurement; Income Poverty and Poverty Head Count Ration, Multi-Dimensional Poverty; Unemployment and Unemployment Rate; Inflation and Inflation Rate	12
II	<b>Development Strategy in Post Independent India</b> Basic features of the Indian Economy at the time of Independence, The Strategy of Rapid industrialization through Planning and Expansion of the Public Sector, the tickle down effect theory, Performance of the Economy during 1951-80, Need for strategy change – Limited liberalization and special programmes targeting Rural Unemployment and Poverty, The Basic Idea of State versus Market Debate, Economic Liberalization and Opening up of the Economy, Growth and Developmental experience in the Post- liberalization period	10
111	Sectoral Policies and Experiences Agrarian reforms, Green Revolution, the Agrarian Crisis: Composition of the service sector – The telecommunication revolution and the IT sector; The Tax System and Fiscal Reforms; The Capital Market, SEBI and the Stock Exchanges; the Banking and Insurance Sectors and Reforms, IBC	10
IV	India and the Rest of the World WTO and India, Trends in FDI and FII flows, The Present Exchange Rate System, The Post 2008 Global Economic Environment and India	8

#### <u>Text Books</u>:

• Indian Economy; Dhar, P K; latest edition; 2017; Kalyani Publishers ; New Delhi

#### **Reference Boooks:**

- Datt and Sundharam; Indian Economy; Latest edition; 2017; S chand Company; New Delhi
- Mishra &Puri; *Indian Economy*; latest edition; 2017; Himalayan Publishing House; New Delhi
- Rao, C H Hanumantha; *Agriculture, Food Security, Poverty and Environment- Essays on Post-reform India*; latest edition; latest edition; Oxford University Press, Delhi

## SYLLABUS (3rd SEMESTER)

Paper I/Subject Name: Public Finance	ē	Subject Code:ECO184C302
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objectives:**

The objective of the course is to introduce students to about government finance with special reference to India. It looks into different components of government finance- like public revenue and public expenditure. This is designed as an extension of **Public Finance-I** structured in semester-III. It aims at imparting knowledge of theories of taxation, govt budgeting, centre-state financial relations etc.

#### **Learning Outcome:**

- 1. Students will understand the mechanism of the Government finance.
- 2. Will develop basic knowledge of taxation policies and their role in economic analysis.
- **3.** Will be able to understand govt. policies easily with the help of basic knowledge of public finance.
- 4. Will also develop understanding of fiscal policies and their importance in developing countries.

Module	Topics	Maximum number of
		classes
I	<b>Role of the State in the Economy</b> The role of the government in the economy -allocation, distribution, and stabilization functions. Criteria for policy evaluation – equity, economic efficiency, paternalism and individual freedom and their tradeoff. The welfare cost of inefficient output. <b>The Provision of Public Goods</b>	12
	The nature of Public goods. Public Goods and market failure. The efficient provision of public goods. The Theory of Clubs, Inter-local competition and Tiebout Hypothesis Inefficiency from externalities and its correction.	
	The Theory of Public Choice	
II	Preferred political outcome of a voter and Downs' Rational Voter Hypothesis. Majority Rule and the Median Voter Model. Cyclical Majority Phenomenon and Arrows Impossibility Theorem. Political Positioning and the Median Voter. Voting on multiple issues: Logrolling. <b>Public Expenditure</b> Public Project Appraisal: Cost-Benefit Analysis. Public expenditure on Health	10
	Care, Education and Retirement Security: Rationale and Emerging Issues.	
ш	Public Revenue Concepts of Tax Ratio, Buoyancy, and Elasticity of taxation, Tax Credit, Exemption and Deduction, and Taxable Capacity. Excess burden- Lumpsum	10

	The welfare cost of taxation, Goods and Services Tax (GST) and the Indian experience.	
IV	The Public Budget and Deficit Financing Structure of a public budget. Concepts of Budget Deficits Burden of Deficit Finance- Ricardian Equivalence Theorem. Deficit financing and the Capital market: <i>The Crowding Out Effect</i> . The Welfare Cost of Deficit Finance. Rationale and methods of reducing deficits. <b>Fiscal Federalism</b> Principles of division of financial resources. Instruments of inter- government resource transfer. Horizontal and Vertical fiscal balance. Finance Commission-Role, Functions and Recommendation of current Finance Commission	8

#### <u>Text Books</u>:

• *Public Finance and Fiscal Policy;*Choudhury, R. K. & Chakraborty, R. C.:4<sup>th</sup> edition; 2017; Kalyani Publishers ; New Delhi

#### **Reference Boooks:**

- Andley K.K &Sundharam, K.P.M; *Public Economics and Public Finance*;4<sup>th</sup> edition; 2012 Rattan PrakashanMandir; New Delhi
- Tyagi, B. P.: Public Finance; 12th edition; 2016; Jai PrakashNath& Co; New Delhi

#### **Course Outcomes:**

On completion of this course students will be expected to:

- Learn about canons of taxation and other issues relating to taxation.
- Understanding government budgeting, crowding out effect and deficit budget
- Learn about fiscal policies and its role in economic development
- Know about fiscal federalism with a special reference to India

## SYLLABUS (3rd SEMESTER)

Paper I/Subject Name: Demography	Subject Code:EC0184D301	
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

- 1. To introduce students to the theories of population.
- 2. To enhance understanding of the technical terms of vital rates and life table.
- 3. To inculcate the knowledge of basic measures of nuptiality.
- 4. To acquaint them with important aspects of migration and economically active population.
- 5. To develop the knowledge of population policy.

#### Learning Outcomes:

- 1. Students would be able to acquaint them with various theories of population.
- 2. Students would be able to understand the measures of reproductivity.
- 3. Students would be able to develop the knowledge of migration and various factors affecting different forms migration.
- 4. Students would be able to estimate population for a future period of time.
- 5. Students would be able to inculcate knowledge of population policies for controlling population growth.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	<b>Theories of population</b> The Malthusian Theory of population. Theory of Optimum Population, Theory of Demographic Transition, Theory of Becker and Easterlin, Henry Leibenstein's Selective Rationality Theory. Concept of Stable Population and Stationary Population. The Stable Population model, its vital rates and other characteristics.	10
II	Vital Rates and the Life Table Measures of Reproductively - Total Fertility Rate, Gross Reproduction Rate, and Net Reproduction Rate, Standardised Fertility and Mortality Rates, Different Approaches to Measuring Infant Mortality Rate. Concept of a Life Table. Relationship among the different life table functions.	10
III	<ul> <li>Nuptiality</li> <li>Basic measures of nuptiality, Estimation of the singulate mean age at marriage</li> <li>Population Projection</li> <li>Component method of projection of population at the national level.</li> <li>Projection of the economically active population</li> <li>Migration</li> <li>Internal migration – concepts, determinants and consequences. Measures of internal migration. International migration – types, determinants and consequences. Migration</li> <li>Lebeinstein's law of migration, Everette Lee's theory of migration, Todaro's model of rural-urban migration, L-F-R model of migration</li> </ul>	12
IV	Economically Active Population Basic concepts and definitions. Female participation in the workforce. Population Policy Population policies affecting fertility in developed and less developed countries. Populationpolicies and programmes in India.	8

#### Text books:

• *Principles of Demography*; Bogue, D. J.; 2nd edition, 1969 John Wiley & Sons Inc (April 1969) New York

• Basic Demographic Techniques and Applications; Srinivasan, K. (1998), Sage, New Delhi.

## SYLLABUS (3<sup>rd</sup> SEMESTER)

Paper I/Subject Name: Welfare Economics

Subject Code:EC0184D302

L-T-P-C - 4-0-0-4

Credit Units: 4

Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to theories and principles relating to welfare economics.

#### Learning Outcomes:

On completion of this course students will be expected to learn about

- Origin of welfare economics
- Peroto optimality and its role economic analysis
- Modern Theories given by Kaldor, Hicks and Scitovosky
- Externalities, Social cost and its calculation

Module	Topics	Maximum number of classes
I	Pre-Paretian Welfare Economics Benthamite Approach to Aggregate Welfare; Optimum Resource Allocation and Welfare ,-Maximization, Assumption of Uniform Income Utility Function of Individuals; Question of Income Distribution; Issue of Interpersonal Comparisons of Utility; Marshallian Welfare Economics; Consumer's Surplus; Measurement of Consumer's Surplus — Difficulties involved, Criticism; Principle of Compensating Variation; Hicks's Consumer's surpluses.	10
II	<b>Paretian Welfare Economics -I</b> Pareto optimality — Optimum exchange conditions, The production optimum, The consumption optimum; Concept of contract curve; Top level optimum; Infinite number of non- comparable optima vs. unique social optimum; Compensation criteria.	10
III	Paretian Welfare Economics -II	10

	Contributions of Barone, Kaldor and Hicks; The Scitovsky double criterion; Concept of community indifference map, Samuelson's utility possibility curve; Value judgments and welfare economics; Bergson's social welfare function, Arrow's possibility theorem.	
IV	<b>Recent Developments in welfare Economics</b> 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; Second - best optima; Marginal cost pricing; Cost- benefit analysis; Interdependent utilities; Attempts to develop dynamic welfare analysis. Pigovian Welfare Economics	10

#### Text-Book:

• An Introduction to Welfare Economics; Per Olov Johansson; 4<sup>th</sup> edition; 2009;Oxford Press University.

#### Reference Books:

- Baumol, W.J.; Welfare Economics and the Theory of the State; Second Edition; 2011; Longmans, London.
- Broadway, R.W. and N. Bruce; *Welfare Economics*; 2<sup>nd</sup> edition; 1986; Basil Blackwell, Oxford.

## SYLLABUS (3<sup>rd</sup> SEMESTER)

Paper I/Subject Name: Econometric Method		Subject Code:ECO184D303
L-T-P-C - 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

Econometrics is the use of statistical techniques to understand economic issues and test theories. Without evidence, economic theories are abstract and might have no bearing on reality. Econometrics is a set of tools we can use to confront theory with real-world data. It provides the tools to enable the students to extract useful information about important economic policy issues from available data.

#### **Learning Outcomes:**

- 1. Students would be able to understand the advanced Econometric theories.
- 2. Students would be able to practically use econometric tools in decision making.
- 3. Students will also learn the correlation between mathematical concepts and econometric theory.

Module	Topics	Maximum

		number of
		classes
I	<b>Generalised Least Squares and Maximum Likelihood Estimation</b> Non-spherical Disturbance and GLS – Feasible GLS and its Properties Seemingly Unrelated Regression Estimation;.Maximum Likelihood Methods, Estimation and Properties – Likelihood Ratio, Wald and Scope Tests	10
II	<ul> <li>Non-Linear Estimation</li> <li>Non-Linear Least Squares and Iteration process – Models with Binary</li> <li>Dependents Variables – Logit and Probit Models</li> <li>Distributed Lag Models</li> <li>Lag Structure and Parameters – Koyck Model – Partial Adjustment and</li> <li>Adaptive Expectation Models – Estimation of Models with a Lagged</li> <li>Dependent Variable</li> </ul>	10
111	Simultaneous Equation Models Formalization of Identification Problem - Order and Rank Conditions of Identification – Recursive Models – Methods of Estimation: IV, 2SLS, 3SLS and FIML–Simulation and Forecasting	10
IV	<b>Time Series Modeling</b> Univariate Time Series Modeling,-Autocorrelation Function and Correlelogram – Basic Features of AR, MA, ARMA and ARIMA models – Trend versus Difference Stationary - Co-integration, Error Correction Mechanism and ARDL Granger Causality and VAR	10

Text books:

• *Econometrics by Example;* Damodar Gujarati, 4th edition; 2011;, Palgrave Macmillan..

#### **Reference Book**

- Jeffrey M. Wooldridge, *Econometrics*, CENGAGE learning, India Edition, 2009.
- DimitriosAsteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.
- Kmenta, Jan; *Elements of Econometrics; 2nd edition, 2017;* University of Michigan Press; London

## SYLLABUS (3<sup>rd</sup> SEMESTER)

Paper I/Subject Name: Economics for Insurance		Subject Code:ECO184D304
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to the principle of insurance and its economic analysis.

#### **Learning Outcomes:**

On completion of this course students will be expected to learn about-

- Application of economics in risk management in insurance
- Relationship between Insurance and economic development
- Essentials of health and life insurance

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	<b>Economic analysis of Insurance</b> Economic security, Human quest for economic security through time: Definition of insurance; Risk pulling and risk transfer; social Vs. private insurance; Life vs. Non-life insurance; Classification of life, health and general insurance policies	10
II	<b>Risk and Risk Management</b> Fundamentals of uncertainty and risk; nature and source of risk, concept of risk, classification of risk- pure risk and speculative risk, demand for insurance, moral hazard and insurance demand, concept of risk management, Reinsurance, fundamentals of reinsurance, types of reinsurance;	10
111	<b>Insurance and Economic Development</b> Risk management and insurance in economic development, insurance institutions as financial intermediaries; Insurance institutions as investment institutions, insurance institutions in Indian capital market	10
IV	<b>Essentials of life and health insurance</b> Fundamentals of life and health insurance, functions of life and health insurance; mathematical basis of life insurance; Health Insurance and economic development	10

#### **Text-Books**

• Economics of Insurance; Karl H Borch; 9<sup>th</sup> edition; 2009; Elsevair Publisher, Netherland

#### **Reference Book**

• Peter Zweifel and Roland Eisen; Insurance Economics; 1<sup>st</sup> edition, 2012; Springer; London

## SYLLABUS (3<sup>rd</sup> SEMESTER)

#### Paper I/Subject Name: Economics and laws

Subject Code:EC0184D305

L-T-P-C - 4-0-0-4

**Credit Units: 4** 

Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to relate economics and laws, Basics of legal institutions, consumers protections etc.

#### **Learning Outcomes:**

On completion of this course students will be expected to learn about-

- Laws relating to economic decision-making.
- Structure of legal institutions
- How to apply consumer's right
- Laws relating to business organization.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	<b>Economic analysis of law</b> Economic analysis of law, Welfare economics; compensation principles; Social welfare function; Maximization problem; nature of economic reasoning's history and criticism.	10
II	<b>An Introduction to law and legal institutions</b> The civil law and the common law tradition s; kinds of law, the nature of legal dispute, how legal rules evolve.	10
	Law relating to consumer activities Bargain theory; economic role of contract, economic theory of contract, remedies as incentives, formation, Tort law, Definition, economics of tort liability, Consumer-definition, consumer protection, consumer courts, various case studies	10
IV	Law of Business Organization Structure of firm- Kinds, Corporations, capital, shares, debentures, insiders trading, antitrust, RBI, IRDA, MRTP, Role of SEBI, Economics of merger amalgamation and takeovers.	10

#### Text-books:

• *Law and Economics* ;Cooter, R.D and T.S.Ulen; 1<sup>st</sup> edition; 2002; Addision Wesley , New York.

#### **Reference Books:**

- Bouckaert, B and G.DeGeest; Encyclopedia of law and economics; 1999; Edward elgar publishing ltd., UK.
- Ponser R.A and F.Parisi; Law and Economics; 1<sup>st</sup> edition, 1998; Edward Elgar Publishing Ltd. U.K.

Project : Paper I/Subject Name: Minor Project

Subject Code: EC0184C323

L-T-P-C - 0-0-4-4

**Credit Units: 4** 

Scheme of Evaluation: (P)

Students will be guided to do research on a selected topic.

#### **Course Objectives**

Students must have practical knowledge of research. To develop interest on research activities they are asked to submit a minor report on select topics.

#### **Learning Outcomes:**

- 1. Students will learn the processes of data collection, classification, analysis and interpretation.
- 2. They will develop an interest in research work.
- 3. They will have practical knowledge

## **SYLLABUS (4th SEMESTER)**

Paper I/Subject Name: International Economics	Subject Code:ECO184C4

L-T-P-C - 4-0-0-4

Credit Units: 4

01

Scheme of Evaluation: (T)

#### **Course Objective:**

- 1. To introduce students to the theories of international trade.
- 2. To acquaint them with important aspects of terms of trade.
- 3. To enhance understanding of the technical terms of balance of payments and foreign exchange rates.
- 4. To develop the knowledge of international capital movements.

#### **Course Outcomes:**

- 1. Students would be able to discuss various theories of international trade.
- 2. Students would be able to understand the technical aspects of balance of payments and foreign exchange rates.

- 3. Students would be able to determine market equilibrium exchange rate and highlight the functions of foreign exchange market.
- 4. Students would be able to acquaint them with the role of international financial institutions like International Monetary Fund, World Bank, World Trade Organisation, etc.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	<b>Theories of International Trade</b> Heckscher-Ohlin theory of trade and Neo Heckcher-Ohlin theorem. Kravis, Samuelson's Factor Price Equalization Theory, Linder theory of trade. Leontief paradox, Stoper-Samuelson's theorem	10
II	Alternative theories of trade cycle- The theory of the technological gap, theory of the product life cycle, Intra- industry Trade, Trade under imperfect competition	10
Ш	<ul> <li>Terms of trade and Determination of Exchange Rate</li> <li>Theories of exchange rate determination, Fixed and Flexible Exchange</li> <li>control – meaning objectives &amp; methods of exchange control.</li> <li>Balance of Payments</li> <li>Meaning and components of balance of payments; Theories of balance of payments, equilibrium and disequilibrium in the balance of payments.</li> </ul>	10
IV	International Financial Movements International trade and financial institutions – IMF, World Bank & WTO. Foreign investment and their impact on the Indian Economy. Role of Multinational corporation. Meaning types and effects of tariffs and Non- tariff barriers.	10

#### Textbooks

• International Economics ; Dominick Salvatore; 4th edition, 2014; Wiley India

#### Reference

- Francis Cherunilam; International Economics ; Tata McGraw-Hill; Delhi, 2012
- Carbough, R.J. ; International Economics; 2<sup>nd</sup> edition; 1999; International Thompson Publishing, New York.
- Paul R. Krugman& Maurice Obstfeld; International Economics Theory and Policy; 3<sup>rd</sup> edition; 2006; Pearson Education Publication New Delhi

## **SYLLABUS (4<sup>th</sup> SEMESTER)**

Paper I/Subject Name: Enviro	onmental Economics	Subject Code: ECO184C402
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course objectives:**

*Environmental economics* is a subset of economics concerned with the efficient utilization of resources. Because the environment provides both direct value and the raw material intended for economic activity, the environment and the economy are interdependent. For that reason, the way the economy is managed can have an impact on the environment that, in turn, may affect both welfare and the performance of the economy. The objective of the course is to introduce students to concepts, methods and policy options in managing the environment using tools of economic analysis.

#### **Learning Outcomes:**

On completion of this course students will be expected to learn about-

- The relationship between economics and issues of the environment.
- It also enables the students to learn about the concept of sustainable development, its issues and policy measures relating to it.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	Introduction to Environmental Economics Economics of Environment; Systems approach; Thermo- dynamic principles and environment; externalities and market inefficiency – externalities as missing market links; property rights and externalities; Problem of Social cost. Global environmental externalities; Climate change – Economic an d Social Impacts; environmental Pollution and impacts	10
п	Economics of Natural Resource Management Economics of Natural Resources Theories of Optimal Use of exhaustible and renewable resources; Common property resources– Tragedy of Commons;	10
	Economic Valuation of Environment Total Economic Value – Use value, Option value, and non-use values; Valuation methods – direct and Indirect methods of Valuation (Contingent valuation method, Travel Cost method, Hedonic price method)	10
IV	Environmental Policy Instruments Internalizing Environmental externalities – Pigouvian taxes and subsidies; Coase's bargaining solution and collective action; Tradable pollution permits and international carbon tax, Environmental institutions.	10

**Text-books:** 

• The Theory of Environmental Policy, Baumol, W.J.andW.E.Oates , 2<sup>nd</sup> Edition, 1998, Cambridge University Press, Cambridge.

#### **Reference Books:**

- Bromely, D.W.(Ed), Handbook of Environmental Economics, 1935, Blackwell, London.
- Common Micheal and SilgridStagl, Ecological Economics, 2<sup>nd</sup> edition; 2005 Cambridge University Press, Cambridge, U.K.

## SYLLABUS (4<sup>th</sup> SEMESTER)

Paper I/Subject Name: Agriculture an	Subject Code: ECO184D401	
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to understand economics of farming sector with special reference to India.

#### Learning Outcomes:

On completion of this course students will be expected to learn

- About the relationship between economics and issues of the agriculture and farming sector.
- It also enables the students to study demand and supply components of agricultural sector and issues relating to pricing.

Module	Topics	Maximum number of classes
I	<ul> <li>Introduction to Agricultural Economics</li> <li>Nature and Scope of Agricultural Economics – Agricultural Economics and Resource Economics, Agricultural Economics and Environmental Economics; Primary Sector vs. Secondary Sector - Role of Agriculture in Economic Development -Interdependence between Agriculture and the Rest of the Economy.</li> <li>Farming Systems</li> <li>Farming Systems-Subsistence farming, Peasant Farming-Chhayanovian Farm Household Model, Shifting Cultivation, Cooperative Fafrming, Commercial Farming.</li> </ul>	12

=	Farm Management General management and Farm Management, Position and the role of a Farm Manager, Farming objectives, Farm Management Tasks-Planning, Organisation, Implementation, Control, the Decision Making Process in Farm Management-Steps in Decision Making, Farm Size and Productivity, Uncertainty and Risk, Rotation of Crops , Location of Crops. Farm Budgeting-Types. The Economics of Agricultural Production Production Functions – Factor-Factor Relationships , Product-Product Relationships ; Discreet Production Functions – Continuous Production Functions Inverse Production Functions-Duality of Cost and Production	10
Ξ	Agricultural Production Functions: Forms of Production Functions, Original Cobb Douglas Function-Early Generalizations, Cobb Douglas Type of Function – Profit Maximization with the Cobb Douglas Function-Duality and the Cobb Douglas Function; Spillman Production Function, Transcendental Production Function, Cobb Douglas Function with Variable Elasticities, Generalized Power Production Function. <b>Agricultural Factor Markets</b> Land Market: Land Use and Land Prices, Lease Market – Land Tenure System ;Labour Market: Mobility of Labour – Segregation of Labour; Credit Market: Role of Capital in Agricultural Development ; Interlinked markets.	10
IV	<ul> <li>Demand and Supply of Agricultural Products</li> <li>Demand for Farm Products: Factors affecting Demand for Food, Engel law and Engel Elasticities – Supply of Agricultural Products – Supply of Individual Crops and Aggregate Supply – Marketed Surplus and Marketable Surplus – Cobweb Market Model, Nerlove's PAAE Model – Supply Response of Perennials Crops.</li> <li>Behavior of Agricultural Prices</li> <li>Features of Agricultural Prices – Intra and Inter Seasonal and Inter-Year</li> <li>Price Behaviour — Agricultural Price Indices – Agricultural Price Policy: Its Role and Functions – Sectoral Terms of Trade and Economic Growth</li> </ul>	8

#### Text-books:

• Economics of Agricultural Production and Resource Use; Heady, E.O; 2<sup>nd</sup> edition; 2005; Prentice Hall.

#### **Reference Books:**

- Heady, E.O. and Dhillon, J., Agricultural Production Functions; 2008;Kalyani; new Delhi
- Schultz, T.W., The Economic Organisation of Agriculture, 1<sup>st</sup> edition 2011; McGraw Hill.
- Ray, Debraj, Development Economics, 1998; 4<sup>th</sup> edition, Priceton University Press

## SYLLABUS (4<sup>th</sup> SEMESTER)

Paper I/Subject Name: Labour Economics

Subject Code:EC0184D402

#### **Course Objective:**

The objective of the course is to introduce students to understand theories issues relating to labour.

#### **Learning Outcomes:**

- **1.** Students can value the importance of labour in developing country like India. They can compare the rapid emergence of labour intensive industries of India with others.
- **2.** They can also analyze labour's migration behaviour and how communication skills of labourer may create hindrances in their survivals.
- **3.** Students can correlate moral, ethical, cultural and social-political thinking and views with others agents of the economy.

Module	Topics	Maximum number of classes
I	Introduction to Indian Labour Market Features of Indian labour market-size & composition of organized unorganized labour –Labour supply in India - Demand for labour in India Major issues in the Indian Labour market –labour absenteeism & labour turnover labour productivity in India –	12
II	Labour migration & mobility, Women & child labour in India –demographic dividend – globalisation impact on Indian labour market ; sources of labour statistics in India.	10
III	<b>Employment &amp; wage policy in India</b> Employment scenario–emerging trends in employment –features, types & magnitude of unemployment –state policy for employment generation minimum wages –criteria for fixing minimum wages –implications of minimum wages –wage structure –bonus - dearness allowance – wage determination the role of wage boards – feasibility of National wage policy.	10
IV	Labour management in public & private Sector Protection of organ ised & unorganisedlabour – second national commission on labour – managing labour sector reforms & restructuring exit policy & safety net – workers participation in management – Objectives of labour management in corporate sector — Human resource planning, job analysis, recruitment, selection & induction, Labour	8

mobility, Motivation, job satisfaction, fringe benefits-managing labour in a	
competitive world.	

#### Text-Books:

 Aspect of Labour Welfare & Social Security, Sharma A.V, 1<sup>st</sup> edition; 1999, Himalaya publications, house, New Delhi

#### **Reference Books:**

- Mittal A.C & Sanjay Prakash Sharma , Labour Economics, 2<sup>nd</sup> edition, 2008; RSBA Jaypur
- BhagoliwalT.N, Economics of Labour& Industrial Relations, 1998; SahityaBhavan, Agra.
- Hajela P.D, Labour Restructuring in India-A critique if New Economics policies, common wealth publications, new Delhi.
- Mamorina C.B, Labour Problems & Social Welfare; kitabmahal, Allahabad

## SYLLABUS (4th SEMESTER)

Paper I/Subject Name: Industrial Economics		Subject Code:ECO184D403
L-T-P-C - 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objective of the course is to introduce students to theories of firms and industries.

#### **Course Outcomes:**

On completion of this course students will be expected to:

- Learn about theories of firm
- Learn about issues of investment
- Learn about how technical change and market structure can influence industrialization.

Module	Topics	Maximum number of classes
Ι	<b>Theory of the Firm</b> Undifferentiated Products-Cournot, Stackelberg, Dominant firm model, Bertrand -Heterogeneous products -Chamberlin's small and large number case -Kinked demand curve theory-Bain's limit pricing-Sales and growth maximization hypothesis -Managerial theories of the firm- Game theoretical models.	10
II	Investment Decisions	10

	Conventional and modern methods -Risk and uncertainty -Sensitivity analysis-Financial statements and ratio analysis -Inflation accounting- Project appraisal methods –Industrial finance - Sources of finance – Capital structure - Incentive, Structure-Incentives-signaling and control arguments-Separation of ownership and control	
111	Vertically Related Markets and Competition Policy Successive and mutually related market power- Monopoly, variable proportions and price discrimination - Monopsony and backward integration – Uncertainty -Diversification, rationing and cost economics and asset specificity-Internal hierarchies-Hierarchies as information systems -Incentive structures and internal labour markets-Supervision in hierarchies -Competition policy: Need and requirements-Mergers and acquisitions- Coordination with other policies	10
IV	<ul> <li>Product market Differentiation and Imperfect Information</li> <li>Lancastrian and Hotelling approaches-representative consumer approach and Chamberlin's model of diversity of tastes-The address approach- Competition in address-Free entry -Pure profit and non -uniqueness in free entry equilibrium -product diversity and multi address firms -Bargains and ripoffs-Theory of sales -Quality and reputations - Product variety -Imperfect discrimination and price dispersions –Advertising - Dorfman Steiner condition - Lemons and information asymmetries.</li> <li>Technical Change and Market Structure</li> <li>The Economics of patents - Adoption and diffusion of innovations - Innovations and rivalry : Kamien and Schwartz -Measures of concentration Concentration ratio –Hirschman -Herfindahl index-Entropy measure – Structure conduct 2 performance paradigm - Contestable markets - Fixed costs, Sunk costs and contestability – Stackelberg -Spence- Dixit model</li> </ul>	10

#### **Text-Books**

• Industrial Economics - Issues and Perspectives, Ferguson, Paul R. and Glenys J. Ferguson; 1994 Macmillan, London.

#### **Reference Books:**

• Ahluwalia, I. J; Industrial Growth in India Stagnation since Mid-sixties, 1985; Oxford University Press, New Delhi.

## SYLLABUS (4th SEMESTER)

#### Paper I/Subject Name: Operation Research

#### Subject Code:EC0184D404

L-T-P-C - 4-0-0-4

**Credit Units: 4** 

Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to understand research methodology and also to conduct a research.

#### **Course Outcomes:**

On completion of this course students will be expected to:

- Learn to conduct a research
- Learn about the techniques of survey.
- Learn about estimation and project management

Module	Topics	Maximum number of classes
I	Definition, features of Operations Research, scientific method in Operations Research, opportunities and shortcomings. An overview of linear programming, formulation of some special problems, solution methods for the ill-behaved problems, solutions via dual, sensitivity analysis in linear programming and its various techniques, integer programming with special reference to the zero-one programming.	10
II	Non-linear Programming, formulation of problems, graphical solution method, Kuhn-Tucker conditions and solution by Kuhn-Tucker conditions. Transportation Problem, an overview of the transportation problem, balanced and unbalanced transportation problem, method of finding out initial solution by North-West Corner Method, Least Cost Method, and Vogel's Approximation Method, loop in transportation table, dual of transportation model, method of finding out optimal solution.	10
111	Queuing Theory, introduction, essential features of a queuing system, estimation of inter-arrival time distribution, Transient- State and Steady- State- distribution of Service Time, Pure Birth Process and Pure Death Process	10
IV	Project Management, introduction, CPM and PERT technique, basic difference between the two, significance of using PERT/CPM, Phases of Project Management, PERT/ CPM Network Components and Precedence Relationships, Activity-on-Node(AON) and Activity-on-Arrow(AOA) network, errors and dummies in Network, Critical Path Analysis, Forward Pass Method and Backward Pass Method, Float of an activity and event.	10

#### **Text-Books:**

• Operations Research Theory and Applications, J K Sharma, 2012; Macmilan, Delhi

#### **Reference Books**

- H A Taha, Operations Research, 1969; 9<sup>th</sup> edition; Pearson; Delhi
- A.M. Natarajan P. Balasubramani A. Tamilarasi, *Operations Research*, 2012; 7<sup>th</sup> edition; Pearson; Delhi

## SYLLABUS (4<sup>th</sup> SEMESTER)

Paper I/Subject Name: Financial Operation and Management

Subject Code:EC0184D405

L-T-P-C - 4-0-0-4

**Credit Units: 4** 

Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to understand principles of measuring risk and return

#### **Learning Outcomes:**

On completion of this course students will be expected to:

- Learn market valuation of bond and equity stock
- Learn about risk management.
- Learn about derivative markets.
- Learn about theories relating to banking performance, market and interest risks of banks and also about bank failure.

Module	Topics	Maximum number of classes
L	The Investment SettingSecurities, Risk & Return, Markets, and Financial Intermediaries. Process ofInvesting: investment policy, security analysis, portfolio construction,portfolio revision and portfolio evaluation. Financial Goals: ProfitMaximization versus Wealth Maximization.Principles of Market ValuationThe valuation of debt instruments: Pure Discount Bonds. Coupon Bonds,Current Yield and Yield to Maturity. Interest Rates and Bond Values.Valuing stock: Value of a Common Stock and the Dividend Discount Model:Zero Growth, Constant Growth and Multiple Growth Models.	12
II	<b>Measuring Risk and Return</b> Risk of a stock. Measures of risk: Volatility of a stock and a stock portfolio. Beta of a stock and a stock portfolio. Portfolio Risk -Return Analysis: Two Asset Case. Efficient Portfolio and Mean-Variance Criterion. The Capital Asset Pricing Model and its implications. The Arbitrage Pricing Theory. Determinants of Beta.	10

	Principles of Risk Management The Risk Management Process. Dimensions of risk transfer: Hedging,	
	The Derivative Market: Traders in a Derivative Market; Hedgers, Speculators and Arbitrageurs. Instruments in the derivative market. Forward ,Futures, Options and Swaps Contracts-Features Options and Swaps Call Option and Put Option. Combining Put, Call and Share: Straddle,	10
	Strangle and Spread. Spread combining Long and Short Options. Factors determining Option prices. Nature of Swaps: Currency Swaps and Interest Rate Swaps	
IV	<ul> <li>Bank Management and Performance Evaluation.</li> <li>Interest Rate Risk and its Assessment. Methods to reduce Interest Rate Risk.</li> <li>Credit Risk and its management through diversification.</li> <li>Measuring Market Risk and its management. Valuation of Commercial Bank.</li> <li>Evaluating Bank Performance: Return on Assets and Return on Equity. Bank Failures.</li> </ul>	8

#### **Text-Books:**

• Fundamentals of Investments. Alexander G. J, Sharpe W. F. & Bailey J. V. (2001) Pearson Education; London

#### Reference Books:

- Madura J.; Financial Institutions and Markets; 2006; Thomson; New Delhi
- Bodie Z, Merton R. C. & Cleeton D. L. *Financial Economics*; 2009; Pearson/ Prentice Hall.

## SYLLABUS (4th SEMESTER)

Paper I/Subject Name: History of Mod	Subject Code:ECO184D406	
L-T-P-C – 4-0-0-4	Credit Units: 4	Scheme of Evaluation: (T)

#### **Course Objective:**

The objectives of the course is to introduce students to development and evolution of economic theories in the world.

#### Learning Outcomes:

On completion of this course students will be expected to learn about contributions of different schools in the process of developing economic theories and principles.

#### **Detailed Syllabus:**

Module	Topics	Maximum number of classes
I	Main contribution in the Theory of Value by a) Ricardo and Marshall b)Samuelson, Paul A. c) Hicks, John R. d) Nash, John F. e) Arrow Kenneth	10
II	Main contribution in the Macroeconomics by – Keynes, Pigou, Hicks Friedman and Domer	10
111	<ul> <li>Main contribution in the International Trade <ul> <li>a).Meade, James E.</li> <li>b) Ohlin, Bertil</li> <li>c) Mundell, Robert A.</li> <li>d) Fleming</li> </ul> </li> <li>Main contribution in the Poverty by Myrdal, Gummar.</li> <li>Main contributions in the applied welfare Economics by Sen, Amartya K.</li> </ul>	10
IV	Main contribution in the Industrial Economics by Stigler, George J. Main contribution in the Decision-making within Economic organizations by Simon, Herbert A. Paul Aulcroogman - Main contribution in the Globalization	10

#### Text-books:

• A History of Modern Economic Analysis; Backhouse, R.; edition 9 December 1986; Wiley-Blackwell;

#### **Reference Books:**

All Books written by the Respective Economists.

## SYLLABUS (4<sup>th</sup> SEMESTER)

Subject Code: ECO184C423

L-T-P-C - 4-0-0-4

**Credit Units: 4** 

Scheme of Evaluation: (P)

#### **Course Objective:**

Dissertation is a lengthy written study on a topic chosen by the student. It is undertaken with the guidance of a faculty supervisor. The main objectives of PG dissertation are to develop a research component in the syllabus. PG students are the future researchers and accordingly this is made compulsory at PG level.

#### Learning Objectives:

Students are expected to learn-

- The ideas to develop and research
- To identify the areas of research according to their choice
- To analyze primary and secondary data to infer conclusions.