

**SYLLABUS**  
**for**  
**Choice Based Credit System**  
**(CBCS)**

**On the basis of**  
**Outcome Based Education**  
**(OBE)**

**ECONOMICS HONOURS**

**PATNA WOMEN'S COLLEGE**

**Autonomous**

**PATNA UNIVERSITY**

3<sup>rd</sup> Cycle NAAC Accredited at 'A' Grade with CGPA 3.58/4

***"College with Potential for Excellence" (CPE) Status Accorded by UGC***

## **Vision**

Rooted in the life, vision, and teachings of Jesus Christ and inspired by Mother Veronica, the foundress of the Apostolic Carmel, Patna Women's College strives to become a centre of academic excellence in higher education, social responsibility, and empowerment of women.

## **Mission Statement**

Patna Women's College, the first college for women in Bihar, is committed to the holistic development of women so as to make an effective contribution to the creation of a better society. To this end, we strive

- To become a center of excellence in higher education for women in an atmosphere of autonomy.
- To excel in teaching-learning, research, and consultancy.
- To provide education that promotes capacity building and holistic development of a person.
- To offer subjects for competency building and motivate/animate a workforce imbued with human values.
- To promote patriotism, communal harmony and cultural integration to maintain a free and peaceful atmosphere on the campus.
- To train the students in creative arts, social service, critical thinking, and leadership in order to make an effective contribution to the creation of a new and value-based society.
- To create women leaders and to make them agents of social change.
- To develop skill oriented and value-based courses, for the all-round development of individuals.
- To promote academic exchange and academia-industry interface.
- To form young women who are 'always wise' and who will dare to 'go ahead and conquer knowledge' through, competence, commitment, delicate conscience, and compassion.

### **PROGRAM OUTCOME**

**Upon completion of the programme, the students will attain the ability to:**

**PO1:** Avail the opportunity to focus on policy issues in Economics.

**PO2:** Become an effective and skilled entrepreneurs.

**PO3:** Broaden their perspectives and have an understanding of the basic economic issues.

**PO4:** Understand the evolution of the economic theories and variables involved in the functioning of the economy

### **PROGRAM SPECIFIC OUTCOME**

**Upon completion of the programme, the students will attain the ability to:**

**PSO1:** Comprehend and suggest various types of solutions to economic problems.

**PSO2:** Undertake research through the use of various econometrics models

**PSO3:** Examine the ongoing economic affairs around the globe.

**PSO4:** Formulate employment avenues and be self- reliant.

**PSO5:** Distinguish from a wide role of Economic specialization.

**PSO6:** Understand the concept of sustainability and Environmental Economics.

## **B.A. (Honours) Economics**

- 1 Core = 6 Credits
- 1 Credit = 15 Hours
- Theory Class = 5 Credits, i.e. 5x15 = 75 Hours
- Tutorial Class = 1 Credit, i.e. 1x15 = 15 Hours

### **Core Courses (6 credits each)**

**Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core Course. ***Each Core consists of six credits, i.e. 90 Hours.***

#### **Semester I**

1. Introductory Microeconomics
2. Mathematical Methods-I

#### **Semester II**

3. Introductory Macroeconomics
4. Mathematical Methods-II

#### **Semester III**

5. Intermediate Microeconomics-I
6. Intermediate Macroeconomics-I
7. Statistical Methods for Economics

#### **Semester IV**

8. Intermediate Microeconomics-II
9. Intermediate Macroeconomics-II
10. Introductory Econometrics

#### **Semester V**

11. Indian Economy-I
12. Development Economics-I

#### **Semester VI**

13. Indian Economy-II
14. Development Economics-II

### **Generic Elective Papers (GE) (6 credits each)**

**Generic Elective (GE) Course:** An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/ subject and vice versa and such electives may also be referred to as Generic Elective.

#### **Semester I**

1. Introductory Microeconomics

## **Semester II**

2. Introductory Macroeconomics

## **Semester III**

3. Indian Economy-I

## **Semester IV**

4. Indian Economy-II

## **Discipline Specific Elective (DSE) (6 credits each)**

**Discipline Specific Elective (DSE) Course:** Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

## **Semester V**

### **DSE-1**

1. Money and Financial Markets

### **DSE-2**

2. Public Economics

## **Semester VI**

### **DSE-3**

3. Environmental Economics

### **DSE-4**

4. Dissertation/Project based on field study

## **Skill Enhancement Course (SEC) (2Credits)**

Skill Enhancement Courses (SEC): These courses may be chosen from a pool of courses designed to provide **value-based and/or skill-based knowledge**.

## **Semester III**

1. Inter Religious Studies (Value based)

## **Semester IV**

2. Entrepreneurial Skill

## **CHOICE BASED CREDIT SYSTEM IN B.A. ECONOMICS (Honours)**

<b>Sem .</b>	<b>Core Course (14) <u>6 Credits each</u></b>	<b>Ability Enhancement Compulsory Course AECC (2) <u>2 Credits each</u></b>	<b>Skill Enhancement Course SEC (2) <u>2 Credits each</u></b>	<b>Discipline Specific Elective DSE (4) <u>6 Credits each</u></b>	<b>Generic Elective GE (4) <u>6 Credits each</u></b>
<b>I</b>	<b>ECO CC101:</b> Introductory Microeconomics <b>ECO CC102:</b> Mathematical Methods for Economics-I	English/ MIL Communication/ Environmental Science			<b>ECO GE101:</b> Introductory Microeconomics
<b>II</b>	<b>ECO CC203:</b> Introductory Macroeconomics <b>ECO CC204:</b> Mathematical Methods for Economics-II	English/ MIL Communication/ Environmental Science			<b>ECO GE202:</b> Introductory Macroeconomics
<b>III</b>	<b>ECO CC305:</b> Intermediate Microeconomics-I <b>ECO CC306:</b> Intermediate Macroeconomics-I <b>ECO CC307:</b> Statistical Methods For Economics		<b>IRS SEC301:</b> Inter-Religious Studies (Value based)		<b>ECO GE303:</b> Indian Economy -I
<b>IV</b>	<b>ECO CC408:</b> Intermediate Microeconomics-II <b>ECO CC409:</b> Intermediate Macroeconomics-II <b>ECO CC410:</b> Introductory Econometrics		<b>ECO SEC402:</b> Entrepreneurial Skill (Skill based)		<b>ECO GE404:</b> Indian Economy -II
<b>V</b>	<b>ECO CC511:</b> Indian Economy –I <b>ECO CC512:</b> Development Economics-I			<b>ECO DSE501:</b> Money and Financial Markets <b>ECO DSE502:</b> Public Economics	
<b>VI</b>	<b>ECO CC613:</b> Indian Economy –II			<b>ECO DSE603:</b> Environmental Economics	

	<b>ECO CC614:</b> Development Economics-II			<b>ECO DSE604:</b> Dissertation/ Project	
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### **Course Structure for B.A. (Hons.) Economics**

<b><u>Semester-I</u></b>	<b><u>Semester-II</u></b>
<b>ECO CC101:</b> Introductory Microeconomics	<b>ECO CC203:</b> Introductory Macroeconomics
<b>ECO CC102:</b> Mathematical Methods for Economics-I	<b>ECO CC204:</b> Mathematical Methods for Economics-II
<b>ENG AEC101 :</b> English Communication <b>HIN AEC101 :</b> fgUnh O;kdj.k vkSj IEizs"k.k	<b>EVS AEC202 :</b> Environmental Science
<b>ECO GE101:</b> Introductory Microeconomics	<b>ECO GE202:</b> Introductory Macroeconomics

<b><u>Semester-III</u></b>	<b><u>Semester-IV</u></b>
<b>ECO CC305:</b> Intermediate Microeconomics-I	<b>ECO CC408:</b> Intermediate Microeconomics-II
<b>ECO CC306:</b> Intermediate Macroeconomics-I	<b>ECO CC409:</b> Intermediate Macroeconomics-II
<b>ECO CC307:</b> Statistical Methods for Economics	<b>ECO CC410:</b> Introductory Econometrics
<b>IRS SEC301:</b> Inter-Religious Studies (Value Based)	<b>ECO SEC402:</b> Entrepreneurial Skill
<b>ECO GE303:</b> Indian Economy-I	<b>ECO GE404:</b> Indian Economy-II

<b><u>Semester-V</u></b>	<b><u>Semester-VI</u></b>
<b>ECO CC511:</b> Indian Economy-I	<b>ECO CC613:</b> Indian Economy-II
<b>ECO CC512:</b> Development Economics-I	<b>ECO CC614:</b> Development Economics-II
<b>ECO DSE501:</b> Money and Financial Markets	<b>ECO DSE603:</b> Environmental Economics

<b>ECO DSE502:</b> Public Economics	<b>ECO DSE604:</b> Dissertation/Project
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## Details of Credits for Courses under B.A., B.Sc., B.Com. Honours

### Economics

Semester	Course	Theory	Practical	Tutorial	Total Credits
<b><u>I. Core Course (14 Papers) – 06 credits each</u></b>					
<b>I</b>	1. Introductory Microeconomics	5	-	1	6
	2. Mathematical Methods for Economics-I	5	-	1	6
<b>II</b>	3. Introductory Macroeconomics	5	-	1	6
	4. Mathematical Methods for Economics-II	5	-	1	6
<b>III</b>	5. Intermediate Microeconomics-I	5	-	1	6
	6. Intermediate Macroeconomics-I	5	-	1	6
	7. Statistical Methods for Economics	5	-	1	6
<b>IV</b>	8. Intermediate Microeconomics-II	5	-	1	6
	9. Intermediate Macroeconomics-I	5	-	1	6
	10. Introductory Econometrics	5	-	1	6
<b>V</b>	11. Indian Economy-I	5	-	1	6
	12. Development Economics-I	5	-	1	6
<b>VI</b>	13. Indian Economy -II	5	-	1	6
	14. Development Economics-II	5	-	1	6
<b><u>II. Elective Course – 06 credits each</u></b>					
	<b>A. 1. Discipline Specific Elective-DSE(4 papers)</b>				
<b>V</b>	1. Money and Financial Markets	5	-	1	6
	2. Public Economics	5	-	1	6
<b>VI</b>	1. Environmental Economics	5	-	1	6
	2. Dissertation/Project	5	-	1	6
	<b>B. 1. Generic Elective / Interdisciplinary (4 papers)</b>				
<b>I</b>	1. Introductory Microeconomics	5	-	1	6
<b>II</b>	2. Introductory Macroeconomics	5	-	1	6
<b>III</b>	3. Indian Economy-I	5	-	1	6
<b>IV</b>	4. Indian Economy-II	5	-	1	6
<b><u>III. Ability Enhancement Courses – 02 credits each</u></b>					
	<b>1. Ability Enhancement Compulsory (AECC)</b>				
<b>I</b>	English / Hindi Communication	2			2
<b>II</b>	Environmental Science	2			2
	<b>II. Skill Enhancement Course (SEC)</b>				
<b>III</b>	1. Inter Religious Studies	2	-	-	2
<b>IV</b>	2. Entrepreneurial Skill	1	1	-	2
<b>TOTAL</b>					<b>140</b>

Institute should evolve a system/policy about ECA / General Interest / Hobby / Sports / NCC / NSS / related courses on its own.

\*wherever there is practical there will be no tutorial and vice-versa.

# **Economics (Honours) Details of CBCS Syllabus**

## **Core Courses (6 credits each)**

### **SEMESTER – I**

**Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Use microeconomic concepts such as saving and investment in their real life situations.

**CO2:** Understand the profit making techniques used by different businesses or firms

**CO3:** Grasp the basic concepts of Microeconomics such as Laws of Demand, Supply and Elasticity

**CO4:** Apply Indifference Curve Analysis in Deriving Demand curve , Income and Substitution Curve

<b><u>ECO CC101 : Introductory Microeconomics</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1.	<b>(a) Exploring the subject matter of Economics:</b> Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.  <b>(b) The Households:</b> The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with	30

	indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision choice between leisure and consumption.	
2.	<b>Supply and Demand: How Markets Work, Markets and Welfare:</b> Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.	20
3.	<b>(a) The Firm and Perfect Market Structure:]</b> Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.  <b>(b) Imperfect Market Structure:</b> Monopoly and anti-trust policy; government policies towards competition; imperfect competition.	15
4.	<b>Input Markets:</b> Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.	10
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
4. Dr. H.L.Ahuja, *Advanced Economic Theory (Microeconomic Analysis)*, S.Chand & Company Pvt. Ltd., 21<sup>st</sup> Edition, 2017.

## **SEMESTER – I**

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Apply methods of various mathematical techniques to economic theory in general.

**CO2:** Understand and have a clear vision, related to various economic theories by the use of different testable propositions or formulas.

**CO3:** Learn Set and Set Operations.

**CO4:** Use Differential and Integral Calculus and its economic application

<b>ECO_CC102 : Mathematical Methods In Economics-I</b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>  This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1.	<b>Preliminaries:</b> Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems.	10
2.	<b>Functions of one real variable:</b> Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; continuous functions: characterizations, properties with respect to various operations and applications; differentiable functions: characterizations, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.	30
3.	<b>Single-variable optimization:</b> Geometric properties of functions: convex functions, their characterizations and applications; local and global optima: geometric characterizations, characterizations using calculus and	10

	applications.	
4.	<b>(a) Integration of functions.</b> <b>(b) Difference equations</b>	25
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.
2. R.G.D.Allen, *Mathematical Analysis for Economics*, A.I.T.B.S.Publishers & Distributors, Delhi.
3. Mehta-Madnani, *Mathematics for Economists*, Sultan Chand & Sons, New Delhi, 2015.

## **SEMESTER – II**

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Develop a proper and in- depth understanding of variables dealing with the aggregate economy.

**CO2:** Analyse the basics of National Income Accounting, which will help them to describe and analyze the economy in quantitative terms.

**CO3:** Understand the major issues and concerns of the economy such as unemployment, inflation, poverty economic growth.

**CO4:** Describe Functions of Money and Determination of Money Supply and Demand.

### **ECO CC203 : Introductory Macroeconomics**

**PWC (Theory: 5 credits + Tutorial: 1 credit )**

### **Course Description**

This course aims to introduce the students to the basic concepts of Macroeconomics.

Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.		
Units	Topics to be covered	No. of hours
1.	<b>Introduction to Macroeconomics and National Income Accounting:</b> Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy; balance of payments: current and capital accounts.	25
2.	<b>Money:</b> Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy.	20
3.	<b>Inflation:</b> Inflation and its social costs; hyperinflation	10
4.	<b>The Closed Economy in the Short Run:</b> Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers.	20
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11 th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*,Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009. 7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.
7. M.L.Jhingan, *Macro Economic Theory*, Vrinda Publications(P)Ltd.

## **SEMESTER – II**

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Develop analytical and organizational skills.

**CO2:** Use mathematical techniques to analyze the economic problems and their effects.

**CO3:** Use Differential and Different Equations in Economics.

**CO4:** Use multi-Variable Optimization.

<b><u>ECO CC204 : Mathematical Methods in Economics – II</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>  This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Differential equations</b>	10
2	<b>Linear algebra:</b> Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations: properties of their solution sets; determinants: characterization, properties and applications.	15
3	<b>Functions of several real variables:</b> Geometric representations: graphs and level curves; differentiable functions: characterizations, properties with respect to various operations and applications; second order derivatives: properties and applications; the implicit function theorem, and application to comparative statics problems; homogeneous and homothetic functions: characterizations and applications.	20
4	<b>Multi-variable optimization:</b> Convex sets; geometric properties of functions: convex functions, their characterizations, properties and	

	applications; further geometric properties of functions: quasiconvex functions, their characterizations, properties and applications; unconstrained optimization: geometric characterizations, characterizations using calculus and applications; constrained optimization with equality constraints: geometric characterizations, lagrange characterization using calculus and applications; properties of value function: envelope theorem and applications	30
	<b>Tutorial Class</b> : Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.
2. R.G.D.Allen, *Mathematical Analysis for Economics*, A.I.T.B.S.Publishers & Distributors, Delhi.
3. Mehta-Madnani, *Mathematics for Economists*, Sultan Chand & Sons, New Delhi, 2015.

## **Generic Elective Papers (GE) (6 credits each)**

### **SEMESTER – I**

**Generic Elective (GE) Course:** An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/ subject and vice versa and such electives may also be referred to as Generic Elective.

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Frame their budget according to their income and price constraint.

**CO2:** Develop knowledge about how the prices are determined in different forms of market..

**CO3:** Apply Demand and Supply Analysis to responses to Market.



**CO4:** Deal with the concept of Consumer Behavior.

<b><u>ECO GE101</u> : Introductory Microeconomics</b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>(a) Exploring the subject matter of Economics:</b> Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.  <b>(b) The Households :</b> The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision choice between leisure and consumption	30
2	<b>Supply and Demand: How Markets Work, Markets and Welfare:</b> Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.	20
3	<b>(a) The Firm and Perfect Market Structure:</b> Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.  <b>(b) Imperfect Market Structure:</b> Monopoly and anti-trust policy; government policies towards competition; imperfect competition.	15

4	<b>Input Markets: Labour</b> and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.	10
	<b>Tutorial Class: Group</b> Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
4. Dr. H.L.Ahuja, *Advanced Economic Theory (Microeconomic Analysis)*, S.Chand & Company Pvt. Ltd., 21<sup>st</sup> Edition, 2017

## **SEMESTER – II**

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Develop a proper and in-depth understanding of variables dealing with the aggregate economy.

**CO2:** Understand the basics of National Income Accounting and analyze the economy in quantitative terms.

**CO3:** Facilitate the major issues and concerns of the economy such as unemployment, inflation, poverty economic growth etc.

**CO4:** Understand the concept and function of Money and Determination of Money supply and demand.

<b>ECO_GE202 : Introductory Macroeconomics</b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b> <p>This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.</p>		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Introduction to Macroeconomics and National Income Accounting:</b> Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy; balance of payments: current and capital accounts.	25
2	<b>Money:</b> Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy.	20
3	<b>Inflation:</b> Inflation and its social costs; hyperinflation.	10
4	<b>The Closed Economy in the Short Run :</b> Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers	20
	<b>Tutorial Class :</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making	15
	<b>TOTAL</b>	90

### Reading List:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11 th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.

6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.
7. M.L.Jhingan, *Macro Economic Theory*, Vrinda Publications(P)Ltd.

**SEMESTER – III**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Understand the concept of consumer behaviour under risk and preferences

**CO2:** Analyse the basic idea of budget constraints

**CO3:** Grasp the concept of cost curves in short and long run

**CO4:** Know the theory of Production, Isoquants, Laws of Return to scale and Law of Variable Proportion.

<b>ECO CC305 : Intermediate Microeconomics – I</b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>  The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.		
Unit	Topics to be covered	No. of hours
1	<b>Consumer Theory:</b> Preference; utility; budget constraint; choice; demand; Slutsky equation	17
2	<b>Consumer Choice:</b> Buying and selling; choice under risk and intertemporal choice	18
3.	<b>Production :</b> Isoquants; production with one and more variable inputs; returns to scale	20
4.	<b>Cost and Revenue :</b> Short run and long run costs; cost curves in the short run and long run; modern concept of cost and revenue analysis.	20

	<b>Tutorial Class :</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.
3. B. Douglas Bernheim and Michael D. Whinston, *Microeconomics*, Tata McGrawHill (India), 2009.
4. H.L. Ahuja. *Advance Economics*.
5. Mankiw. *Micro Economics*.
6. A. Koutsoyiannis. *Modern Micro Economics*.

**SEMESTER – III**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Understand concept of aggregate demand and aggregate supply and other macro economics variables

**CO2:** Understand the concept of inflation, unemployment, price rise and expectations  
about future prices

**CO3:** Grasp the concept of Mundell - Fleming model and about open  
economic system

**CO4:** Understand the concept of BOP and about the transactions of rest of the world

<b><u>ECO CC306 : Intermediate Macroeconomics – I</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b> <p>This course introduces the students to formal modelling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.</p>		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Aggregate Demand and Aggregate Supply Curves:</b> Derivation of aggregate demand and aggregate supply curves and interaction of aggregate demand and supply.	20
2	<b>Inflation, Unemployment and Expectations:</b> Phillips curve; adaptive and rational expectations; policy ineffectiveness debate.	15
3	<b>Open Economy Models:</b> Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity theory and modern approach of exchange rate.	25
4	<b>Balance of Payment :</b> Dornbusch's overshooting model; monetary approach to balance of payments; international financial institutions.	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11 th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Steven M. Sheffrin, *Rational Expectations*, Cambridge University Press, 2nd edition, 1996.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

**SEMESTER – III**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Learn the Basic Concept of statistics and its application

**CO2:** Understand Bay's Theorem, Normal Distribution, Poisson Distribution and  
Credential

**CO3:** Understand Elementary Probability Theory including Probability  
Distribution

**CO4:** Apply the methods of calculating covariance and also the concept of correlation coefficient and regression analyses.

<b><u>ECO CC307 : Statistical Methods for Economics</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Introduction and Overview :</b> The distinction between populations and samples and between population parameters and sample statistics; population moments and their sample counterparts	10
2.	<b>(a) Elementary Probability Theory:</b> Sample spaces and events; probability axioms and properties; conditional probability and Bayes' rule; independence. <b>(b) Random Variables and Probability Distributions :</b> Defining random variables; probability distributions; expected values of random variables and of functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, normal, poisson and exponential random variables)	30
3	<b>(a) Random Sampling and Jointly Distributed Random Variables :</b> Density and distribution functions for jointly distributed random variables; computing expected values; covariance and correlation coefficients <b>(b) Sampling :</b> Principal steps in a sample survey; methods of sampling; the role of sampling theory; properties of random samples.	25



4	<b>Point and Interval Estimation: Estimation</b> of population parameters using methods of moments and maximum likelihood procedures; properties of estimators; confidence intervals for population parameters.	10
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics 11 and its Applications*, Prentice Hall, 2011.
4. William G. Cochran, *Sampling Techniques*, John Wiley, 2007.

**SEMESTER – IV**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Differentiate between Partial and General Equilibrium

**CO2:** Analyse the behavior patterns of different economic agents and market situations

**CO3:** Understand Imperfect Competition and Game Theory

**CO4:** Learn about Externalities and Market Failure

<b><u>ECO CC408 : Intermediate Microeconomics – II</u></b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>General Equilibrium Analysis :</b> Partial Equilibrium and General Equilibrium Analysis; General Equilibrium of Exchange and Consumption; a pure exchange economy model and general equilibrium of production. Transformation curve and General Equilibrium of production and competitive general equilibrium is Pareto efficient	20
2	<b>Market Structure:</b> Perfect Competitive and Monopoly; pricing with market power; price discrimination; peak-load pricing; two-part tariff	20
3	<b>Imperfect Competition :</b> Monopolistic competition and game theory.	15
4	<b>Market Failure:</b> Externalities; public goods and markets with asymmetric information.	20
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010. The workbook by Varian and Bergstrom could be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning

(India), 2010.

3. Dr. H.L. Ahuja, *Advance Economics Theory*, S. Chand Publication.

**SEMESTER – IV**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Analyze the long-run dynamic issues like growth and technical progress

**CO2:** Describe micro-foundations of the various aggregates

**CO3:** Explain and compare Monetary and Fiscal Policies

**CO4:** Learn about Classical , Neo- Classical and Keynesian School of Macro Economic Thought

<b><u>ECO CC409 : Intermediate Macroeconomics – II</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b> <p>This course is a sequel to Intermediate Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.</p>		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Economic Growth:</b> Classical Model of Economic Growth; Harrod-Domar model; Solow model; Golden Rule.	20
2	<b>Macroeconomic Foundations:</b> <ol style="list-style-type: none"> <li>Consumption Function : Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses.</li> <li>Investment functions and determinants of investment; Theory of MEC.</li> <li>Demand for money; Classical and Keynesian approach.</li> </ol>	30
3	<b>Fiscal and Monetary Policy:</b> Conceptual Analysis of Monetary and Fiscal Policies, objectives, targets and assessment.	15
4	<b>Schools of Macroeconomic Thoughts:</b> Classical Neo-Classical and Keynesians.	10
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11 th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.

4. Charles I. Jones, *Introduction to Economic Growth*, W.W. Norton & Company, 2nd edition, 2002.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009. 7. Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

**SEMESTER – IV**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Formulate hypothesis and know about Normal Distribution, Chi-square , F-test and T- test

**CO2:** Understand the concept of Type I and Type II errors

**CO3:** Learn Least Square in Linear Regression Model

**CO4:** Grasp the concept of Heteroscedasticity and Serial Correlation

<b><u>ECO CC410 : Introductory Econometrics</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Nature and Scope of Econometrics</b>	5
2	<b>Statistical Concepts:</b> Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test.	20
3	<b>(a) Simple Linear Regression Model: Two Variable Case:</b> Estimation of model by method of ordinary least squares; properties of estimators; goodness of fit; tests of hypotheses; confidence intervals. <b>(b) Multiple Linear Regression Model:</b> Estimation of parameters; properties of OLS estimators; goodness of fit - R <sup>2</sup> and adjusted R <sup>2</sup> .	30
4	<b>Violations of Classical Assumptions: Consequences, Detection and Remedies:</b> Multicollinearity; heteroscedasticity; serial correlation	20
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Readings :**

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.

3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011.
4. D. N. Gujarati and D.C. Porter, *Essentials of Econometrics*, McGraw Hill, 4th edition, International Edition, 2009.
5. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3rd edition, Indian edition, 2007.

**SEMESTER – V**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Demonstrate the Paradigm shift in policy and economic indicators in the post Independence India

**CO2:** Analyze the rapid changes taking place in India in terms of plan period, human development, Education and Health

**CO3:** Grasp the Concept of Poverty and Unemployment in Indian Perspective

**CO4:** Analyze the composition, Volume and Direction of Indian Foreign Trade

<b><u>ECO CC511 : Indian Economy-I</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Economic Development since Independence:</b> Major features of the economy at independence; constraints, institutions and policy framework during plan periods an assessment of performance; sustainability and regional contrasts; structural change.	30
2.	<b>Population and Human Development:</b> Demographic trends and issues; education; health and malnutrition.	15
3.	<b>Growth and Distribution:</b> Trends and policies in poverty; inequality and unemployment.	15
4	<b>India's foreign trade :</b> Volume; composition; direction; trend and EXIM Policy Assessment.	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. *An Uncertain*



*Glory: India and its Contradictions*, Princeton University Press.

2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, —Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, —India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development*.
5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and Political Weekly*, January.
6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, —Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, —Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, —The Progress of School Education in India, *Oxford Review of Economic Policy*. \
10. J.B.G. Tilak, 2007, —Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development*.
11. T. Dyson, 2008, —India's Demographic Transition and its Consequences for Development in Uma Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, —China and India: Idiosyncratic Paths to High Growth, *Economic and Political Weekly*, September.
13. K. James, 2008, —Glorifying Malthus: Current Debate on Demographic Dividend in India *Economic and Political Weekly*, June.
14. Reetika Khera, 2011, —India's Public Distribution System: Utilisation and Impact *Journal of Development Studies*.
15. Aniruddha Krishna and Devendra Bajpai, 2011, —Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
16. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics*, Oxford University Press.

**SEMESTER – V**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Understand the different concepts of development and evaluate the gross national growth experience.

**CO2:** Analyze the connection between growth and inequality and identify the role of state in economic development

**CO3:** Understand various theories of Economic Growth like Harrod-Domar, Solow- model and endogenous growth models

**CO4:** Learn about the concept of poverty and its measurement and the connection between inequality and poverty

<b><u>ECO CC512 : Development Economics-I</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Conceptions of Technology and Development:</b> Alternative measures of development, documenting the international variation in these measures, comparing development trajectories across nations and within them.	15
2	<b>Growth Models and Empirics:</b> The Harrod-Domar model, the Solow model and its variants, endogenous growth models – Joan Robinson and Kaldor and evidence on the determinants of growth.	25
3	<b>Poverty and Inequality: Definitions, Measures and Mechanisms:</b> Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; mechanisms that generate poverty traps.	20
4	<b>Socio, Political Institutions and Economic Development</b>	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty*, Oxford University Press, 2006.
4. Kaushik Basu, *The Oxford Companion to Economics in India*, OUP, 2007.
5. Amartya Sen, *Development as Freedom*, OUP, 2000.
6. Daron Acemoglu and James Robinson, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press, 2006.
7. Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, 1994

**SEMESTER – VI**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Examine sector –specific policies and their impact in shaping trends in key economic indicators in India

**CO2:** Evaluate the Indian Empirical evidence

**CO3:** Analyze the rapid Economic changes taking place in the economy

**CO4:** Learn about the role of agriculture and industry in Economic development and their performance in Indian perspective

<b><u>ECO CC613 : Indian Economy-II</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>  This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Macroeconomic Policies and Their Impact:</b> Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.	15
2	<b>Policies and Performance in Agriculture:</b> Growth; productivity; agrarian structure technology and agrarian crisis; capital formation; trade; pricing and procurement.	20
3	<b>Policies and Performance in Industry:</b> Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment.	25
4	<b>Trends and Performance in Services</b>	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Shankar Acharya, 2010, —Macroeconomic Performance and Policies 2000-8, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances*

*and Challenges: Development and Participation*, Oxford University Press.

2. Rakesh Mohan, 2010, —India's Financial Sector and Monetary Policy Reforms, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, —Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
4. B.N. Goldar and S.C. Aggarwal, 2005, —Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.
5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, —Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.
6. Kunal Sen, 2010, —Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
7. A. Ahsan, C. Pages and T. Roy, 2008, —Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.
8. Dipak Mazumdar and Sandeep Sarkar, 2009, —The Employment Problem in India and the Phenomenon of the 'Missing Middle', *Indian Journal of Labour Economics*.
9. J. Dennis Rajakumar, 2011, —Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly*, April.
10. Ramesh Chand, 2010, —Understanding the Nature and Causes of Food Inflation, *Economic and Political Weekly*, February.
11. Bishwanath Goldar, 2011, —Organised Manufacturing Employment: Continuing the Debate, *Economic and Political Weekly*, April.
12. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics in India*, Oxford University Press.

**SEMESTER – VI**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Equipped with the theoretical and empirical issues related to demography and development

**CO2:** Analyze the role of globalization and increased international dependence.

**CO3:** Assess the governance of communities and organizations linked to sustainable growth

**CO4:** learn about land reforms in India and its effects on productivity

<b><u>ECO CC614 : Development Economics-II</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Demography and Development:</b> Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation; migration.	20
2	<b>Land, Labor and Credit Markets:</b> The distribution of land ownership; land reform and its effects on productivity; land acquisition; nutrition and labor productivity; informational problems and credit contracts; microfinance; interlinkages between rural factor markets.	15
3	<b>Environment and Sustainable Development:</b> Defining sustainability for renewable resources; a brief history of environmental change; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change.	20

4	<b>Globalization:</b> Globalization in historical perspective; Evaluation of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world.	20
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

### Reading List:

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty*, Oxford University Press, 2006.
4. Thomas Schelling, *Micromotives and Macrobehavior*, W. W. Norton, 1978.
5. Albert O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*, Harvard University Press, 1970.
6. Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, 2010.
7. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, 1990.
8. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
9. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003

## **Generic Elective Papers (GE) (6 credits each)**

### **SEMESTER – III**

**Generic Elective (GE) Course:** An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective.

P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/ subject and vice versa and such electives may also be referred to as Generic Elective.

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Understand India's economic structure at the time of post independence

**CO2:** Comprehend the dynamics of Indian demography with special emphasis on health, education and malnutrition

**CO3:** Know India's foreign trade and its composition of export and import

**CO4:** Analyze the reasons behind poverty, inequality and unemployment

<b><u>ECO GE 303: Indian Economy-I</u></b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Economic Development since Independence:</b> Major features of the economy at independence; constraints, institutions and policy framework during plan periods an assessment of performance; sustainability and regional contrasts; structural change.	30
2.	<b>Population and Human Development:</b> Demographic trends and issues; education; health and malnutrition.	15
3.	<b>Growth and Distribution:</b> Trends and policies in poverty; inequality and unemployment.	15
4	<b>India's foreign trade :</b> Volume; composition; direction; trend and EXIM Policy Assessment.	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15



	<b>TOTAL</b>	90
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### Reading List:

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, —Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, —India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development*.
5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and Political Weekly*, January.
6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, —Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, —Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, —The Progress of School Education in India, *Oxford Review of Economic Policy*.
10. J.B.G. Tilak, 2007, —Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development*.
11. T. Dyson, 2008, —India's Demographic Transition and its Consequences for Development in Uma Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, —China and India: Idiosyncratic Paths to High Growth, *Economic and Political Weekly*, September.
13. K. James, 2008, —Glorifying Malthus: Current Debate on Demographic Dividend in India *Economic and Political Weekly*, June.
14. Reetika Khera, 2011, —India's Public Distribution System: Utilisation and Impact *Journal of Development Studies*.

15. Aniruddha Krishna and Devendra Bajpai, 2011, —Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
16. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics*, Oxford University Press.

**SEMESTER – VI**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Examine sector- specific policies and their impact in shaping trends in key economic indicators in India.

**CO2:** Evaluate the Indian empirical evidence

**CO3:** Analyze the rapid changes taking place in the country

**CO4:** Understand the performance of agriculture and industry in Indian Perspective

<b><u>ECO G E 4 0 4 : Indian Economy-II</u></b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Macroeconomic Policies and Their Impact:</b> Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.	15
2	<b>Policies and Performance in Agriculture:</b> Growth; productivity; agrarian structure technology and agrarian crisis; capital formation; trade; pricing and procurement.	20
3	<b>Policies and Performance in Industry:</b> Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment.	25
4	<b>Trends and Performance in Services</b>	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. Shankar Acharya, 2010, —Macroeconomic Performance and Policies 2000-8,‡ in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
2. Rakesh Mohan, 2010, —India's Financial Sector and Monetary Policy Reforms,‡ in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, —Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
4. B.N. Goldar and S.C. Aggarwal, 2005, —Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.

5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, —Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.
6. Kunal Sen, 2010, —Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
7. A. Ahsan, C. Pages and T. Roy, 2008, —Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.
8. Dipak Mazumdar and Sandeep Sarkar, 2009, —The Employment Problem in India and the Phenomenon of the ‘Missing Middle’, *Indian Journal of Labour Economics*.
9. J. Dennis Rajakumar, 2011, —Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly*, April.
10. Ramesh Chand, 2010, —Understanding the Nature and Causes of Food Inflation, *Economic and Political Weekly*, February.
11. Bishwanath Goldar, 2011, —Organised Manufacturing Employment: Continuing the Debate, *Economic and Political Weekly*, April.
12. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics in India*, Oxford University Press.

## **Discipline Specific Elective (DSE) (6 credits each)**

### **SEMESTER – V**

**Discipline Specific Elective (DSE) Course:** Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

### **COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Acquaint themselves with the organization structure and the role of financial markets

**CO2:** Integrate the theory and functioning of the financial sector and analyze the financial and banking sector reforms with special reference to India

**CO3:** learn the theories of money supply determination

**CO4:** Understand the concept of Interest Rates and its determination

<b>ECO DSE501 : Money and Financial Markets</b>		
<b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Money:</b> Concept, functions, measurement; theories of money supply determination.	10
2	<b>Financial Institutions, Markets, Instruments and Financial Innovations:</b> a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises. b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.	20
3	<b>Interest Rates:</b> Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.	15
4	<b>(a) Banking System:</b> Balance sheet and portfolio management; Indian banking system: Changing role and structure; banking sector reforms. <b>(b) Central Banking and Monetary Policy:</b> Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.	30
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets*, AITBS, 1996.
4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market*, Oxford University Press, 2011. 32
5. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
6. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
7. N. Jadhav, *Monetary Policy, Financial Stability and Central Banking in India*, Macmillan, 2006.
8. R.B.I. – *Report of the Working Group: Money Supply Analytics and Methodology of Compilation*, 1998.
9. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

**SEMESTER – V**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Understand the nature and scope of Public Economics

**CO2:** Analyze Government Intervention and its implications for allocation, distribution and stabilization fostering efficiency and equity

**CO3:** Analyze the trend of public expenditure, budget system and fiscal policies with special reference to fiscal policies in India

**CO4:** Analyze the pattern of taxation

<b><u>ECO DSE502 : Public Economics</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finances.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Public Economic Theory:</b> (a) Fiscal functions: an overview. (b) Public Goods: definition, models of efficient allocation, pure and impure public goods, free riding.	20
2	Externalities: the problem and its solutions, taxes versus regulation, property rights, the Coase theorem. Taxation: its economic effects; dead weight loss and distortion, efficiency and equity considerations, tax incidence, optimal taxation.	20
3	<b>Indian Public Finances :</b> Tax System: structure and reforms	15
4	Budget, deficits and public debt and Fiscal federalism in India.	20
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15
	<b>TOTAL</b>	90

**Reading List:**



1. J. Hindriks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.
2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector*, W.W. Norton & Company, 3 rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5th edition, 1989.
5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1 st edition, 1998.
6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries*, 2007.

8. Kaushik Basu and A. Maertens (ed.), *The New Oxford Companion to Economics in India*, Oxford University Press, 2013.
9. M.M. Sury, *Government Budgeting in India*, 1990.
10. M. Govinda Rao, *Changing Contours of Federal Fiscal Arrangements in India*, Amaresh Bagchi (ed.), *Readings in Public Finance*, Oxford University Press, 2005.
11. Paul Samuelson, 1955, —Diagrammatic Exposition of a theory of Public Expenditure, *Review of Economics and Statistics*, Volume 37.
12. Shankar Acharya, 2005, —Thirty Years of Tax Reform in India, *Economic and Political Weekly*, May 14-20.
13. Rangarajan and D.K. Srivastava, 2005, —Fiscal Deficit and Government Debt: Implications for Growth and Stabilization”, *Economic and Political Weekly*, July 2-8.
14. M. Govinda Rao, 2011, —Goods and Services Tax: A Gorilla, Chimpanzee or a Genius like Primates?, *Economic and Political Weekly*, February 12-18.
15. Report of the 13<sup>th</sup> Finance Commission, 2010-15. 16. *Economic Survey*, Government of India (Latest). 17. *State Finances: A Study of Budgets*, Reserve Bank of India (Latest).

**SEMESTER – VI**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Acquaint themselves with the various policies and regulatory bodies working for the protection of environment.

**CO2:** Identify various solutions to achieve the core objective of Sustainable Development

**CO3:** Learn about market failure, externalities and internalization of externalities

**CO4:** Analyse various solution to environmental problems

<b><u>ECO DSE603 : Environmental Economics</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b><u>Course Description</u></b>		
This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>Introduction:</b> What is environmental economics; review of microeconomics and welfare economics.	10
2	<b>The Theory of Externalities:</b> Pareto optimality and market failure in the presence of externalities; property rights and the coase theorem.	15
3	(a) <b>The Design and Implementation of Environmental Policy :</b> Overview; pigouvian taxes and effluent fees; tradable permits; choice between taxes and quotas under uncertainty; implementation of environmental policy; rain water harvesting system. (b) <b>International Environmental Problems:</b> Trans-boundary environmental problems; economics of climate change; trade and environment.	35
4	(a) <b>Measuring the Benefits of Environmental Improvements:</b> Non-Market values and measurement methods; risk assessment and perception. (b) <b>Sustainable Development:</b> Concepts; measurement.	15
	<b>Tutorial Class:</b> Group Discussion/ Workshop/ Departmental Seminar/ Assignment/ Power Point Presentation/ Speech/ Debate/ Quiz/ Poster making.	15

**Reading List:**

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey, *Journal of Economic Literature*, Volume 30:675-740.

**SEMESTER – VI**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Apply methodical approaches to real research problems through research, recording Literature review and data collection

**CO2:** Analyze the policy implications of their work and demonstrate knowledge about the significance of research in the field of Economics

**CO3:** Apply the statistical tools in Economics

**CO4:** Acquire advance knowledge by application of theory to real life situation

<b><u>ECO DSE604 : Dissertation/ Project ( 6 Credits)</u></b> <b>PWC (Theory: 5 credits + Tutorial: 1 credit )</b>		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<p><b>Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6<sup>th</sup> Semester.</b></p> <p><b>Dissertation/Project:</b> An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.</p> <p><b>Project work/Dissertation</b> is considered as a special course involving application of knowledge involving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline specific elective paper</p>	
	<b>TOTAL</b>	90

## **Skill Enhancement Course (SEC)(2Credits)**

### **SEMESTER – III**

Skill Enhancement Courses (SEC): These courses may be chosen from a pool of courses designed to provide **value-based and/or skill-based knowledge**.

<b><u>IRS SEC301 : Inter-Religious Studies (Value Based) (02credits)</u></b> <b>PWC</b>		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	Nature and Need of Inter-Religious study, Scope of Comparative Religion.	05
2	Salient Features of Hinduism, Jainism and Buddhism, Salient Features of Christianity, Islam and Sikhism.	10
3	Similarities and Differences among Religions, Conflicting Truth claims of different religions and inter-religious Harmony.	10
4	Religious Tolerance, Secularism.	05
	<b>TOTAL</b>	<b>30</b>

### **Reading List**

1. Chaudhary, C. Neeraj (1979). "Hinduism", B.I. Publication, New Delhi.
2. Devraj, N.K., (1917)- "Hinduism and Christianity" Asian Publishing House.
3. Gordh, George, - "Christian Faith and its Cultural Expression", Printed in USA.
4. Hick, John, - "Philosophy of Religion", Prentice Hall of India.
5. Hopfe, M. Lewis (1983)- "Religion of the World", Macmillan Publishing Co. Inc, New York
6. Masih, Y. (1990)- "Comparative study of Religion", Motilal Banarasi Dass.
7. Sethi, S. Arijit, Pummer, Reinhard, (1979)- "Comparative Religion", Vikas Publishing House Pvt. Ltd, Delhi.
8. Singh, B.N., (1994)- "Vishwa Dharma Darshan ki Samasyain", Ratna Printing Works.
9. Tiwari, Nath Kedar, (1983)- "Comparative Religion", Motilal Banarasi Dass.
10. Ward, CHS (1998) – "Early Buddhism", Caxton Publication, Delhi.

**SEMESTER – IV**  
**COURSE OUTCOME**

**After completion of the course, the students will be able to:**

**CO1:** Develop the abilities of analyzing and understanding business situations and plan entrepreneurial activities accordingly

**CO2:** Acquire necessary knowledge and skill required for entrepreneurial activities and develop creative and critical managerial potentials and skills

**CO3:** Gain practical experience through the Field Study i.e. visits to different industries and organizations.

**CO4:** Make the students capable of exploiting opportunities for Enterprise

<b><u>ECO SEC402 : Entrepreneurial Skill (02credits)</u></b>		
<b>PWC</b>		
<b><u>Course Description</u></b>		
The course introduces us with entrepreneurship and the skills required to start-up any business. It also tries to give a practical insight on the topics by visits to different industries and organisations.		
<b>Unit</b>	<b>Topics to be covered</b>	<b>No. of hours</b>
1	<b>(a) Defining Entrepreneurship</b>  <b>(b) Personal characteristics of Entrepreneurs and Interpersonal Skills:</b> Leadership and Motivation, Communication Skills, Listening, Personal Relations, Negotiation, Ethics.	5
2	<b>Critical and Creative thinking skills:</b> Creative Thinking, Problem Solving, Recognizing Opportunities, Case Study.	3
3	<b>Practical Skills:</b> Goal Setting, Planning and Organizing, Decision Making, Core decision.	2
4	<b>(a) Business Knowledge, Entrepreneurial Knowledge, Opportunity-Specific Knowledge, Venture-Specific Knowledge</b>  <b>(b) Business Project Assessment:</b> Project identification, Project formulation, Project implementation, Project evaluation, Project follow-up.(Viva-voce)	5
	<b>Field Study</b> (Visit to different industries or organisations)	15
	<b>TOTAL</b>	30

**Reading List:**

1. Vasant Desai, *Entrepreneurial Development*, 2011, Himalaya Publishing House.
2. Dr. S.S.Khanka, *Entrepreneurial Development*, 2013, S. Chand & Company Pvt Ltd, New Delhi.
3. *Entrepreneurial Development*, Tata Mc Graw-Hill Publishing Company Ltd, New Delhi.