

# **Regulations and Syllabi**

## **Bachelor of Economics (B.A., Honours and Honours with Research)**

Programme offered from the  
Academic Year 2024–2025 under  
Choice Based Credit System and  
National Educational Policy (NEP)

## **Department of Economics**

**School of Management Studies  
The Gandhigram Rural Institute  
(Deemed to be University)  
Gandhigram - 624 302  
Dindigul District, Tamil Nadu**

**JUNE-2024**

## **1. NATURE OF THE PROGRAMME**

This Under Graduate Programme (B.A. Honours and Honours with Research) is designed with the combination of pure and applied courses in Economics offered by the Department of Economics, under the School of Management Studies, The Gandhigram Rural Institute – Deemed to be University, Gandhigram.

## **2. ELIGIBILITY FOR ADMISSION**

A pass in the +2 examination in the regular stream is eligible for admission in to the B.A. Honours and Honours with Research Programme.

## **3. AGE**

The upper age limit for admission as on 01.07.2024 is 21 years for UG Programmes (24 years for SC/STs)

## **4. OBJECTIVES OF THE PROGRAMME**

This Programme is designed to train and enable the students to acquire the required skills in different spheres of economics. The specific objectives are to enable the students:

- ✓ To introduce the students basic concepts and theories in the various branches of economics;
- ✓ To inculcate strong technical input by using statistical/Mathematical/econometrics tools and methodology;
- ✓ To provide exposure to the national and international economic issues and problems;
- ✓ To obtain Research and Development skills and Win-Win strategies for economic development; and
- ✓ To prepare personnel for civil service and Indian Economic Service examinations.

### **Programme Outcome (PO)**

- ✓ Becoming knowledgeable in the subject matter of economics and applying the principles of economics in the society;
- ✓ Learning analytical skills in economics;
- ✓ Understanding professional ethics, and Nation Building initiatives in the field of economics;
- ✓ Identifying complex economic issues and offering solutions to them; and predicting and synthesizing economic events.

### **Programme Specific Outcome (PSO)**

- ✓ Apply the knowledge of economics in decision making;
- ✓ Identify Solve the problems in the field of economics;
- ✓ Prepare blue print for development of various economic actors;
- ✓ Understand the behaviour of key variables in the Economy;
- ✓ Understand the realities of domestic as well as the global economy.

## **5. STUDENTS INTAKE**

Number of students to be admitted for B.A, Economics Honours Programme is 40.

## 6. CURRICULUM DESIGN (ALLOCATION OF COURSES, CREDITS AND MARKS)

The B.A., Economics Honours Programme shall consist of four academic years with Eight Semesters with exit option . This Programme is offered under National Education Policy (NEP) and Choice Based Credit system (CBCS) pattern and it consists languages Core (Minor and Major, Multidisciplinary and Value Added Course.

## 7. AWARDING UG CERTIFICATE, UG DIPLOMA, AND DEGREES

**UG Certificate:** Students who opt to exit after completion of the first year and have secured 40 credits will be awarded a UG certificate if, in addition, they complete one vocational course of 4 credits during the summer vacation of the first year.

**UG Diploma:** Students who opt to exit after completion of the second year and have secured 80 credits will be awarded the UG diploma if, in addition, they complete one vocational course of 4 credits during the summer vacation of the second year.

**3-year UG Degree:** Students who wish to undergo a 3-year UG programme will be awarded UG Degree in the Major discipline after successful completion of three years, securing 120 credits and satisfying the minimum credit requirement.

**4-year UG Degree (Honours):** A four-year UG Honours degree in the major discipline will be awarded to those who complete a four-year degree programme with 160 credits and have satisfied the credit requirements.

**4-year UG Degree (Honours with Research):** Students who secure 75% marks and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. They should do a research project or dissertation under the guidance of a faculty member of the University/College. The research project/dissertation will be in the major discipline. The students who secure 160 credits, including 12 credits from a research project/dissertation, are awarded UG Degree (Honours with Research).

## 8. EXIT OPTION:

If the student is willing to exit after successfully completed;

- ✓ Undergraduate degree programmes of either 3 or 4-year duration, with multiple entry and exit points and re-entry options, with appropriate certifications such as:
- ✓ a UG certificate after completing 1 year (2 semesters) of study in the chosen fields of study,
- ✓ a UG diploma after 2 years (4 semesters) of study,
- ✓ a bachelor's degree after a 3-year (6 semesters) programme of study,
- ✓ a 4-year bachelor's degree (honours) after eight semesters programme of study. If the student completes a rigorous research project in their major area(s) of study in the 4th year of a bachelor's degree (honours with research).
- ✓ The 4-year bachelor's degree programme is considered a preferred option since it would provide the opportunity to experience the full range of holistic and multidisciplinary education in addition to a focus on the chosen major and minors as per the choices of the student.

**9. THE DEPARTMENT OF ECONOMICS OFFERS THE FOLLOWING MINOR AND MULTIDISCIPLINARY COURSES TO OTHER DEPARTMENTS**

24ECUB1101	-	Business Economics
24ECUB2201	-	Indian Economic Development
24ECUB2101	-	Elements of Economics
24ECUB2202	-	Indian Economic Development
24ECUB3103	-	Environmental Economics
24ECUB3204	-	Energy Economics
24ECUB4105	-	Economics of Growth and Development
24REEVO537	-	Energy Economics

**10. PROJECT / WORKING PAPER:** Those who appear for sixth semester have to prepare Project report/ Working paper for four credits.

**Project and Dissertation Evaluation:**

Sl.No	Particulars	B.A., Honours Programme	B.A., Honours with Research Programme
1	Internal	40	120
2	External	40	120
3	Joint Viva Voce	20	60
Total		100	300

**11. Dissertation:** The students are expected to conduct research project work in Economics and to submit under the guidance of supervisor concerned. Marks for Project work is 300. The marks will be awarded by the supervisor concerned (purely internal and an external members).

**12. Minimum Credit Requirements to Award Degree under Each Category**

Sl.No	Broad Category	Minimum Credit Requirement	
		3 Year UG	4 Year UG
1	Major	56	80
2	Minor	24	32
3	Multidisciplinary	09	09
4	Ability Enhancement courses (AEC)	12	12
5	Skill Enhancement courses (SEC)	11	11
6	Value Added Course	08	08
7	Summer Internship	02	02
8	Research Project / Dissertation	04	12
	VPP/Filed Study/ Community Engagement/	06	06
<b>Total</b>		<b>132</b>	<b>172</b>

**CURRICULUM DESIGN B.A. ECONOMICS  
(B.A., HONOURS WITH RESEARCH) PROGRAMME  
(Offered from the Academic Year 2024-25 under the CBCS and NEP)**

Semester	Category	Course code	Title of the course	No. of Credits	Lecture hrs/week	Duration of ESE (Hours)	Evaluation		Total
							CFA	ESE	
I	Skill Enhancement course (SEC)	24TAUS1101	Tamil – I	3	3	3	40	60	100
		24MLUS1101	Malayalam – I						
		24HIUS1101	Hindi – I						
	Ability Enhancement Course (AEC)	24ENUA1101	Essential English – Basic	3	3	3	40	60	100
	Value Added Course (VAC)	24PEUV1001	Yoga and Fitness	2	2	-	50	-	50
		24GTUV1001	Let Us Know Gandhi	2	2	-	50	-	50
	Multidisciplinary – I	24CSUI1101	Computational Skill	3	3	3	40	60	100
	Major Core	24ECUC1101	Principles of Economics	4	4	3	40	60	100
Minor Core	24ARUB1101	Introduction to Statistics	4	4	3	40	60	100	
			<b>Sub Total</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>300</b>	<b>300</b>	<b>600</b>
II	Skill Enhancement Course (SEC)	24TAUS1202	Tamil – II	3	3	3	40	60	100
		24MLUS1202	Malayalam – II						
		24HIUS1202	Hindi – II						
	Ability Enhancement Course (AEC)	24ENUA1202	Essential English – Intermediate	3	3	3	40	60	100
Value Added Course (VAC)	24FSUV1001	Environmental Science	2	2	-	50	-	50	
Value Added Course (VAC)	24FAUV1001 Or 24GTUV1002	Heritage and Cultural History of India (Or) Shanthi Sena	2	2	-	50	-	50	
Multidisciplinary – II	XXXXX	Will be Offered by Other Department	3	3	3	40	60	100	
Major Core	24ECUC1202	Microeconomics	4	4	3	40	60	100	
Minor Core	24COUB1201	Principles of Accountancy	4	4	3	40	60	100	
			<b>Sub Total</b>	<b>21</b>	<b>21</b>	<b>-</b>	<b>300</b>	<b>300</b>	<b>600</b>

III	Skill Enhancement course (SEC)	24TAUS2103/ 24MLUS2103/ 24HIUS2103	Indian Language (Tamil/ Malayalam/ Hindi)-III	3	3	3	40	60	100
	Skill Enhancement course (SEC)	24TAUS0004/ 24MLUS0004/ 24HIUS0004	Functional (Tamil/ Malayalam/ Hindi)-III	2	2	-	50	-	50
	Ability Enhancement Course (AEC)	24ENUA2103	Essential English – Advanced	3	3	3	40	60	100
	Multidisciplinary - III	XXXXX	Online course (MOOC)	3	3	3	40	60	100
	Extension	24EXUE2101	Village Placement Programme	2	2	-	50	-	50
	Minor Core	24PSUB2101	Human Rights	4	4	3	40	60	100
	Major Core	24ECUC2103	Macroeconomics	4	4	3	40	60	100
24ECUC2104		Mathematical Methods	4	4	3	40	60	100	
			<b>Sub Total</b>	<b>25</b>	<b>25</b>	<b>-</b>	<b>340</b>	<b>360</b>	<b>700</b>
IV	Ability Enhancement Course (AEC)	24ECUA2201	Regional Economics	3	3	3	40	60	100
		24ECUA2202	Energy Economics						
		24ECUA2203	Health Economics						
	Minor Core	24PSUB2202	Indian Constitution	4	4	3	40	60	100
	Major Core	24ECUC2205	Introduction to Econometrics	4	4	3	40	60	100
		24ECUC2206	History of Economic Thought	4	4	3	40	60	100
		24ECUC2207	International Economics	4	4	3	40	60	100
Extension	24EXUE2201	Community Engagement	2	2	-	50	-	50	
			<b>Sub Total</b>	<b>21</b>	<b>21</b>		<b>250</b>	<b>300</b>	<b>550</b>
V	Major Core	24 ECUC3108	Indian Economy	4	4	3	40	60	100
		24ECUC3109	Money and Banking	4	4	3	40	60	100
		24ECUC3110	Research Methodology	4	4	3	40	60	100
	Minor	24ECUB3101	Data Analytics	4	4	3	40	60	100
	Internship	24ECUC3111	Internship	2	2	-	50	-	50
	Field Study	24ECUE3101	Field Study	2	2	-	50	-	50
			<b>Sub Total</b>	<b>20</b>	<b>20</b>		<b>260</b>	<b>240</b>	<b>500</b>

VI	Major Core	24ECUC3212	Agricultural Economics	4	4	3	40	60	100
		24ECUC3213	Industrial Economics	4	4	3	40	60	100
		24ECUC3214	Economics of Growth and Development	4	4	3	40	60	100
		24ECUC3215	Public Economics	4	4	3	40	60	100
	Minor	24ECUB3202	Demography	4	4	3	40	60	100
	Major	24ECUC3216	Project (or)	4	4	-	0	-	100 <sup>1</sup>
Environmental Economics			4	4	3	40	60	100	
			<b>Sub Total</b>	<b>24</b>	<b>24</b>		<b>240</b>	<b>360</b>	<b>600</b>
VII	Major Core	24ECUC4117	Advanced Microeconomic Theory	4	4	3	40	60	100
		24ECUC4118	Advanced Macroeconomic Theory	4	4	3	40	60	100
		24ECUC4119	Financial Institutions and Markets	4	4	3	40	60	100
Minor	24ECUB4103	Development and Social Dynamism	4	4	3	40	60	100	
	24ECUB4104	Participatory Learning Methods	4	4	3	40	60	100	
			<b>Sub Total</b>	<b>20</b>	<b>20</b>		<b>200</b>	<b>300</b>	<b>500</b>
VIII	Major Core	24ECUC4220	International Trade and Finance	4	4	3	40	60	100
		24ECUC4221	Quantitative Techniques in Economics	4	4	3	40	60	100
		24ECUC4222	Project	12	12	-	-	-	300 <sup>2</sup>
			Sub Total	<b>20</b>	<b>20</b>	<b>-</b>	<b>80</b>	<b>120</b>	<b>500</b>
			<b>Grand Total (I+II+III+IV+V+VI+VII+VIII)</b>	<b>172</b>	<b>172</b>		<b>1970</b>	<b>2280</b>	<b>4550</b>

<sup>1</sup> Internal 40 Marks; External 40 Marks; and Joint viva voce 20 Marks

<sup>2</sup> Internal 120 Marks; External 120 Marks; and Joint viva voce 60 Marks

## PRINCIPLES OF ECONOMICS

Semester : I  
Course Code : 24ECUC1101

No. of Credits: 4  
No. of Hours: 64

### Objectives:

1. To enable the students to understand the basic concepts of economics and its application in day-to-day-life.

### Specific Course Objective

1. To learn the definition and principles of Economics.
2. To examine the theory of demand and supply.
3. To establish the functional relationship in production and cost theories.
4. To get exposed to the various market structure.
5. To analyze the various methods of national income and Macroeconomic Policy.

### Specific Course Outcomes

1. Assimilating the fundamental concepts of economics.
2. Gaining knowledge on supply and demand to determine changes in market equilibrium.
3. Analyzing the production cost and return to scale.
4. Understanding the price determination of factors on various market structure.
5. Highlighting the concepts of national income and macroeconomic policy.

### UNIT I: INTRODUCTION TO ECONOMICS

(12 hrs)

Definition and scope of economics Microeconomics vs. Macroeconomics. Basic economic problems: scarcity, choice, and opportunity cost. Production possibilities frontier (PPF) Economic systems: market, command, and mixed economies

### UNIT II: DEMAND AND SUPPLY

(14 hrs.)

Meaning, types and determinants of demand. Supply: Meaning, types and determinants of supply. Market equilibrium and changes in equilibrium Elasticity of demand: price, income, and cross elasticity.

### UNIT III: FACTORS OF PRODUCTION

(12 hrs.)

Meaning of land, labour, capital and organization and features only. Market Structures: Perfect competition: characteristics and equilibrium Monopoly: characteristics, sources, and equilibrium. Monopolistic competition and oligopoly: features.

### UNIT IV: MACROECONOMIC

(12 hrs.)

Circular flow of income, National income accounting: GDP, GNP, NNP Measurement and problems of national income. Unemployment: types, causes, and measurement. Inflation: types, causes, and measurement. Business cycles: phases.

### UNIT V: ECONOMIC POLICIES AND GLOBAL ECONOMY

(14 hrs.)

Market failures: public goods, externalities, and asymmetric information. Government intervention: taxes, subsidies, and regulation. Fiscal policy: tools, objectives. Monetary policy: tools, objectives, and effectiveness. International trade: benefits and balance of payments. Exchange rates and foreign exchange market Economic development: indicators, issues.

### Text Books

1. Ruddar Datt & K.P.M.Sundharam–Indian Economy - S.Chand &Company Ltd, New Delhi, 2016.
2. Puri V.K and Misra S.K: Indian Economy, Himalaya, Mumbai, 2014.
3. Gregory Mankiw (2016) 'Principles of Microeconomics, CBS Publishers, Delhi.

### Reference Books:

1. Uma Kapila (Ed.) (2017-18), Indian Economy Since Independence, Academic Foundation, New Delhi, 28th Edition.
2. Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,
3. Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
4. Dhingra, I C., (2014), Indian Economy, Sultan Chand & Sons, New Delhi.
5. Agarwal.A.N. (2012), Indian Economy, Wiley Eastern Ltd, New Delhi.
6. Government of India, Economic Survey, (various years).

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	3	2	3	1
C02	3	3	2	3	1
C03	3	3	3	3	3
C04	3	3	3	3	2



## INTRODUCTION TO STATISTICS

Semester : I  
Course Code : 24ARUB1101

No. of Credits: 4  
No. of Hours: 64

### Objective

1. To train the students in the theory and application of statistical methods in economics.

### Specific Course Objectives of Learning

1. To learn the basic statistical concepts;
2. To understand sampling and use of Data;
3. To know the measures of central tendency.
4. To study measures of dispersion; and
5. To acquire knowledge of the correlation and regression analyses.

### Specific Course Outcomes

1. Gaining knowledge of sampling design and classification of data.
2. Applying statistical techniques in real life situations.
3. Handling statistical data effectively in practice.
4. Utilizing the statistical tools for finding solutions of economic problems.

### UNIT - I: INTRODUCTION OF STATISTICS and PROBABILITY (10 hrs)

Meaning and Definition – Characteristics, Functions, Scope and Limitations of Statistics- Introduction to Probability.

### UNIT - II: CLASSIFICATION OF DATA AND SAMPLING DESIGN (14 hrs)

Types of Data - Collection of Data - Schedule and Questionnaire - Population and Sample – Census and Sampling – Methods of Sampling - Size of Sampling - Advantages and Limitations of Sampling - Sampling errors and non-sampling errors - Classification and Tabulation of Data - Frequency Distribution – Diagrammatic and Graphic representation of Data.

### UNIT - III: MEASURES OF CENTRAL TENDENCY (12 hrs)

Average: Definition – Objectives – Requisites of a Good Average – Types of Averages; Arithmetic Mean – Median, quartiles, deciles and percentiles – Mode – Geometric Mean – Harmonic Mean – Relationship among the Averages – Limitations of an Average.

### UNIT - IV: MEASURES OF DISPERSION, SKEWNESS, AND KURTOSIS (14 hrs)

Measures of Dispersion: Meaning - Significance – Properties of a Good Measuring of Variation - Methods of Studying Variation; Range – Quartile Deviation – Mean Deviation – Standard Deviation – Lorenz Curve. Skewness and Kurtosis: Definition and Measures of Skewness; Bowley's Co-efficient – Moments - Types and Measures of Kurtosis.

### UNIT - V: CORRELATION AND REGRESSION ANALYSES (14 hrs)

Interlocution to Time Series Analysis and Index Numbers - Meaning and Significance of Correlation – Types of Correlation – Simple Correlation - Karl Pearson's Coefficient of Correlation – Spearman's Rank Correlation – Regression Meaning and Uses – Difference between Correlation and Regression – Methods of Regression; Simple Regression.

### Text Books

1. Gupta C B & Vijay Gupta (2004), 'An Introduction to Statistical Methods', Vikas Publishing, Delhi.
2. Gupta, S.P.(2018), 'Statistical Methods', Sultan Chand & Sons, Delhi.
3. Pillai, R.S. N. & Bagawathi (2018), 'Statistics', S.Chand&Co., Delhi.
4. Sancheti and Kapoor (2013), 'Statistics', Sultan Chand & Sons, Delhi.

### References

1. Agarwal Y.P. (1988), 'Statistical Methods', Concepts, Applications and Computations, Sterling Publishers, Delhi.
2. Damodar N. Gujarati (2009), 'Elementary of Econometrics', Mcgraw Hill, New York.
3. Gupta S.C. (2016), 'Fundamental Statistics', Himalaya Publishing House Pvt. Ltd, Delhi.
4. Murray R. Spiegel, 'Statistics' (1981), (Schaum's Outline Series), McGraw Hill, Delhi.
5. Murray Spiegel, Larry Stephens and Narinder Kumar (2017), 'Statistics' (Schaum's Outline Series), McGraw Hill, New York.
6. Nagar A.L. and R.K. Das (2006), 'Basic Statistics', Oxford University Press, Delhi.

Outcomes	PS01	PS02	PS03	PS04	PS05
C01	3	3	2	3	1
C02	3	3	2	3	1
C03	3	3	3	3	3
C04	3	3	3	3	2

## MICROECONOMICS

Semester : II  
Course Code : 24ECUC1202

No. of Credits: 4  
No. of Hours: 64

### Objective

1. To provide the students with the theoretical foundations in microeconomic analysis.

### Specific Course Objectives of Learning

1. To understand the basics of microeconomics; and
2. To associate and apply the theories and laws of microeconomics in day to day life.

### Specific Course Outcomes

1. Relating the concepts and tools of microeconomics in real life situations.
2. Applying theories to microeconomic problems in the practical world; and
3. Analyzing basic issues in consumption and production, market and distribution.

### UNIT - I: INTRODUCTION TO MICROECONOMICS (12 hrs)

Definition and scope of microeconomics. Basic concepts: Marginal utility, marginal cost and marginal revenue, Law of demand, derivation of demand curve. Consumer behaviour: utility analysis and indifference curve analysis. Budget constraint and consumer equilibrium Revealed preference theory.

### UNIT - II: THEORY OF PRODUCTION AND COST (12 hrs)

Production function: short-run and long-run, Law of diminishing returns and returns to scale, iso-quants and iso-costs. Cost of production: fixed, variable, and total costs Economies and diseconomies of scale.

### UNIT - III: MARKET STRUCTURES PRICING (12 hrs)

Perfect competition: characteristics and pricing. Monopoly: price discrimination and natural monopoly. Monopolistic competition: product differentiation and pricing and Oligopoly: kinked demand curve, collusive. Pricing strategies: cost-plus pricing, penetration pricing, and price skimming

### UNIT - IV: FACTOR MARKETS LABOUR MARKET (14 hrs)

Demand, supply, and wage determination, Capital market: interest rate determination and investment decisions, Land market: rent determination and economic rent. Entrepreneurship: role and returns. Distribution of income: theories of distribution and inequality

### UNIT - V: MARKET FAILURES AND GOVERNMENT INTERVENTION (14 hrs)

Public goods: characteristics and provision. Externalities: positive and negative externalities and solutions. Asymmetric information: adverse selection and moral hazard. Government policies: taxation, subsidies, and regulation. Welfare economics: Pareto efficiency and social welfare.

### Text Book

1. Ahuja, H.L. (2002) 'Principles of Micro Economics', 12<sup>th</sup> Edn, S.Chand and Company Ltd., Ram Nagar, Delhi.

### References

1. Koutsoyiannis, A. (2000), 'Modern Microeconomics', (2nd Edition), Macmillan Press, London.
2. Layard, P.R.G. and Walters, A.W. (1978), 'Microeconomic Theory', McGrawHill, London.
3. Stigler, G. (1996), 'Theory of Price', PHI, Delhi.
4. Sen, A. (1999), 'Microeconomics: Theory and Application', Oxford University Press, Delhi.
5. Varian, H.R. (2000), 'Microeconomic Analysis', W.W. Norton, New York.
- 6.

Outcomes	PS01	PS02	PS03	PS04	PS05
C01	3	3	2	2	2
C02	3	3	3	2	2
C03	2	2	2	3	3
C04	2	3	3	3	3
C05	2	2	2	3	3

## MACROECONOMICS

Semester : III  
Course Code : 24ECUC2103

No. of Credits: 4  
No. of Hours: 64

### Objective

1. To make the students understand the concepts and theories of macroeconomics

### Specific Course Objectives of Learning

1. To gain clarity in the concepts in macroeconomics;
2. To get exposure to the working of macroeconomics; and
3. To analyze the relationship across macroeconomic variables.

### Specific Course Outcomes

1. Explaining the concepts in macroeconomics;
2. Recognizing institutions and actors in the operation of macroeconomics; and
3. Analyzing the relationship among macroeconomic variables.

### UNIT - I: NATURE AND IMPORTANCE OF MACROECONOMICS AND NATIONAL INCOME (12 hrs)

Macroeconomic – Meaning, Concepts, Nature and scope - Distinction between Macro economic and Microeconomics – Importance – Circular flow of income – National Income- Concepts - Measurement of National Income and its difficulties - Factors determining National Income

### UNIT - II: THEORY OF EMPLOYMENT (12 hrs)

Concept of Full Employment and Unemployment- Types of unemployment - Classical Theory of Employment – J.B. Say’s law of market – J.M. Keynes theory of employment : Effective demand and its importance.

### UNIT - III: CONSUMPTION, SAVING AND INVESTMENT FUNCTION (14 Hrs)

Consumption function – Concepts of, APC and MPC – Determinants of consumption function- Saving Function –APS and MPS- Investment- Meaning, Types, factors affecting Investment – Marginal Efficiency of Capital - Meaning - Factors determining MEC.

### UNIT - IV: PRINCIPLES OF ACCELERATION AND MULTIPLIER (14 Hrs)

Accelerations- Meaning, Concepts - Significance and Limitations; Multiplier-Meaning concepts- different types - working of multiplier and criticisms – Super multiplier.

### UNIT - V: THEORIES OF THE BUSINESS CYCLE (12 Hrs)

Business cycle – Meaning - Characteristics - Phases of Business cycle-Theories of Business cycle – Samuelsons – Hicks- Inflation, Deflation - Monetary and Fiscal policies in controlling business cycle.

### Text book:

1. Ahuja.H.L., (2002) ‘**Macroeconomics Theory and Practice**’, S.Chand & Company Ltd., Delhi, 2002.

### Reference books:

1. Abha Mittal, (2011) ‘**Macroeconomics**’, S. Chand & Company Pvt. Ltd.
2. Chandana Ghosh, Ambar Ghosh., (2013) ‘**Macroeconomics**’, PHI Learning Pvt. Ltd., Delhi.
3. Dwivedi D.N, (2010) ‘**Macroeconomics: Theory and Policy**’, Tata McGraw Hill, Delhi.
4. Gregory Mankiw, N., (2012) ‘**Macroeconomics**’, Worth Publishers.
5. Jhingan M.L (2010) ‘**Macroeconomics**’, Himalaya Publishing House, Delhi.
6. Malhotra R.N, (2009) ‘**Macroeconomics theory and practice**’, Alfa publication.
7. Maria John Kennedy M, (2011) ‘**Macroeconomics Theory**’, PHI Learning Pvt. Ltd., Delhi.

Outcomes	PS01	PS02	PS03	PS04	PS05
C01	2	3	2	3	3
C02	3	1	1	2	3
C03	3	2	2	3	3

## MATHEMATICAL METHODS

Semester : III  
Course Code : 24ECUC2104

No. of Credits: 4  
No. of Hours: 64

### Objective

To train the students in the use of mathematical approaches in economic analyses.

### Specific Course Objectives of Learning

1. To understand the basic concepts and functions of mathematics.
2. To understand the simultaneous equation models.
3. To gain clarity in fundamental concepts of logarithm, permutations and combinations.
4. To learn the set theory for economic operations.
5. To know the uses of matrix.

### Specific Course Outcomes

1. Expressing the economic relationships in different forms of mathematical functions.
2. Applying the simultaneous equations in economic research.
3. Calculating logarithm, permutations and combinations.
4. Examining the set theory for economic operations.
5. Applying the matrix principles in economic analyses.

### UNIT – I INTRODUCTION TO ALGEBRA AND FUNCTION and SIMULTANEOUS EQUATIONS (12 hrs)

Introduction – Meaning – Uses of Mathematical Techniques in Economic Analysis – Basic Rules of Arithmetic Operations – Fraction – Algebraic Symbolism. Simultaneous Equation Meaning – Linear equation with one variable – Simultaneous linear equation with two variables and three variables- Quadratic equation (by using standard quadratic formula only).

### UNIT – II LOGARITHM, PERMUTATIONS AND COMBINATIONS (14 hrs)

Introduction of Logarithm – Definition – Rules of Logarithm (product, quotient, exponent) – Calculation using logarithmic tables (Simple Problems - Permutations and combination- Binominal Expansion

### UNIT – III SET THEORY (12 hrs)

Set Theory – Definition – Types of Set – Universal Set – Operations on Sets – Difference of Sets – Complement of a Set – Demerger's law – Venn diagram (for 2 & 3 Sets) – Problems for 2 Sets and 3 Sets using Venn diagram.

### UNIT – IV DIFFERENTIATION AND INTEGRATION (12 hrs)

Introduction to Differentiation - Rules of Differentiation – Partial Derivatives – Total Derivatives – Maxima and Minima – one variable, Two or More variables- Introduction to Integration – meaning – Rules of Integration.

### UNIT – V: MATRICES AND DETERMINANTS (14 hrs)

Meaning - Types of Matrix – Algebra of Matrices: Addition – Subtraction – Multiplications-Association, Commutative, distributive law – Transpose of a Matrix – Properties of determinants – cofactor matrix – adjoint of matrix- Inverse of a Matrix – Solving a System of Linear Equations: Matrix Inversion Technique and Cramer's Rule.

### Text Books

1. Agarwal C.S and Joshi R.C, (1983) 'Mathematics for Economists', The New Academic Publishing Jalandhar.
2. Bose. D, (2019) 'An Introduction to Mathematical Methods', Himalaya Publishing House, Delhi.
3. Metha, B.C. & Madnani G.M.K. (2017) Mathematics for Economics, S. Chand Publications, New Delhi.

### References

1. Allen R.G.D, (1986), Mathematical Analysis for Economists, Macmillan, London.
2. Alpha C Chiang and Wainwright Kevin (2017), 'Fundamental Methods of Mathematical Economics', McGraw Hill Education, New Delhi.
3. Anthony (2005) 'Mathematics for Economics and Finance', Cambridge University Press, London, UK.
4. Handry A.T. (1999), Operations Research, PHI, New Delhi.
5. Sydsaeter Knut and Peter Hammond (2006), Essential Mathematics for Economic Analysis, 2nd Ed. Financial Times, Prentice Hall: Harlow, England.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	3	1
CO2	3	3	2	2	2
CO3	2	3	2	3	2
CO4	3	3	2	3	2
CO5	3	3	2	3	2

**ABILITY ENHANCEMENT COURSE (Choose any One)**  
**REGIONAL ECONOMICS**

**Semester : IV**  
**Course Code : 24ECUCA2201**

**No. of Credits: 3**  
**No. of Hours : 48**

**Objective**

The main objective of the Regional Economics course is to provide students with an understanding of the economic processes and policies that influence the development of regions.

**Specific Course Objectives of learning**

1. To explore the theories and concepts related to regional development and disparities.
2. To analyze the factors influencing regional economic growth and development.
3. To evaluate the impact of government policies on regional economies.
4. To apply spatial analysis techniques to study regional economic issues.
5. To compare regional development strategies across different countries and regions.

**Specific Course Outcomes**

1. Demonstrate a thorough understanding of the key theories and concepts in regional economics.
2. Critically evaluate the effectiveness of regional development policies.
3. Conduct spatial analysis to identify and assess regional economic trends.
4. Apply theoretical knowledge to real-world regional economic issues.
5. Effectively communicate regional economic concepts and analysis in written and oral forms.

**UNIT-I: INTRODUCTION TO REGIONAL ECONOMICS: (10 hrs)**

Need for study of Regional Economics, Definition of a region, Different types of regions, Definition and scope of regional economics-Importance of studying regional economics-Differences between region and a nation, Regional income, Problems of estimation, Indicators of regional development, A City Model, Systems of Cities, Monocentric city model, Suburbanization, Hotelling's model.

**UNIT-II: MODELS OF REGIONAL GROWTH (10 hrs)**

Export Base Models, Central place theory (Christaller), Cumulative Causation Models (Perroux, Myrdal, Hirschman), Sector theory (Colin-Kuznets), Multi sector Models and Regional Development Planning, Elements in a Spatial Growth Theory, Locational constants (Weber), Measurements of Agglomeration economies, and Location Preferences, Social and Political factors in regional growth, New economic geography, Rank-size rule.

**UNIT-III: FACTOR MOBILITY IN REGIONAL ECONOMY (10 hrs)**

Inter-regional Migration, Mobility of Capital, Spatial diffusion of innovation and technical progress, Inter-Regional Trade, The basis of interregional trade, Regional trade and factor price equalization, Regional trade and factor migration, Regional balance of payments problems.

**UNIT-IV: THEORIES OF SPATIAL DEVELOPMENT (9 hrs)**

Integration of Regional and Urban Economics, Regional dispersions of National growth, Intraregional concentration, Urban Decentralization, Housing market, Urban transportation, Role of migration.

**UNIT-V: URBAN AND REGIONAL ECONOMIC POLICY ANALYSIS (9 hrs)**

Location and Economic activity. Urban Policy, Regional Policy, Intra-regional concentration, Urban Decentralization, Regional trade and factor migration, Interregional Economics at the International Level.

**Text Books**

- Armstrong, H., & Taylor, J. (2000). Regional Economics and Policy. Economic theory and Underdeveloped Regions, Vora, New Delhi.
- Hoover and Giarratani, Regional Economics, Online Edition Myrdal G (1968)
- Harry W Richardson (1969), Regional Economics Location Theory, urban structure and regional change,
- Macmillan Harry W Richardson-Elements of Regional Economics, Penguin Modern Economic
- Mccann (2013), Urban and Regional Economics, second edition, Oxford98 University Press.
- McCann, P. (2013). Modern Urban and Regional Economics.

**References**

- Jagdish Bhagwati and Arvind Panagariya (2014), Why Growth Matters: How Economic Growth in India reduced Poverty and the Lessons for other Developing Countries, first edition, Public Affairs, U.S. T
- Joseph Stiglitz (2013), The Price of Inequality, Penguin UK. Misra R.P (1974), Regional Development Planning in India, Vikas, New Delhi.
- O'Sullivan, Urban Economics, Sixth Edition, McGraw-Hill 2006 [ISBN (0072984767)]
- Pike, A., Rodriguez-Pose, A., & Tomaney, J. (2017). Local and Regional Development.
- Rakhee Bhattacharya (2015), Regional Development and Public Policy Challenges in India, first edition, Springer.
- Text Harvey Armstrong and Jim Taylor (1978), Regional Economic Policy and its Analysis, First Edition, Philip Allan Publishers Limited, Oxford OX5 4SE
- Thomas Piketty (2014), Capital in the Twenty First Century, Harvard Business School Press India Ltd.
- Thomas Piketty (2015), The Economics of Inequality, Tra edition, Harvard University Press.
- Weidenfeld and Nicolson, 5 Winsley Street London Harry W Richardson (1973), Regional Growth Theory,

## ENERGY ECONOMICS

Semester : IV  
Course Code : 24ECUCA2202

No. of Credits: 3  
No. of Hours: 48

### Objective

1. To make the students to understand the basics of energy economics so as to address to energy problems and issues.

### Specific Course Objectives of Learning

1. To understand the importance of natural resources and energy.
2. To Study relationship between and development
3. To examine nexus between energy and environment.
4. To gain skills in energy planning and management
5. To document the energy profile.

### Specific Course Outcomes

1. Demonstrating linkage between energy and environment.
2. Analyzing the energy use and institutional framework.
3. Comparing and contrasting between energy and environment
4. Formulating energy planning and demonstrating management
5. Compiling the profile of various energy sources in India

### UNIT - I: BASICS OF ENERGY ECONOMICS

(10 hrs)

Natural Resources – Classification – Importance – Role of Natural Resources in Economic Development – Energy Resources – Classification – Properties and Forms of Energy –Energy Economics – Origin, Scope and Nature.

### UNIT - II: ENERGY AND DEVELOPMENT INSTITUTIONS

(10 hrs)

Role of Energy in Economic Development – Energy Indicators - Energy Intensity and Energy Elasticity – National and International Comparison – Role of International Institutions – OPEC, IEA, World Energy Council and World Bank.

### UNIT - III: ENERGY NEXUS ENVIRONMENT

(9 hrs)

Energy Environment Nexus Crisis – Causes and Consequences – Remedial Measures –Impact of Energy Consumption and Production on Environment with illustrations – Role of Energy Economists in Solving Energy Crises.

### UNIT - IV: ENERGY PLANNING AND MANAGEMENT

(10 hrs)

Energy Planning and Energy Conservation – Meaning, Objectives and Importance – Energy Management – Meaning, Objectives and Importance – Recent Developments: Energy Auditing – Energy Accounting – Energy conservation - Energy Pricing and Taxes – Role of Economists in Sustainable Energy Management.

### UNIT - V: INDIA'S ENERGY PROFILE

(9 hrs)

Indian Energy Sector – Energy Supply sources and trends in production – Energy Demand on sectoral consumption trend – Renewable Energy Sources and Technologies - Renewable Energy Programmes and Policies in India- Green Energy; Scope and Opportunities- Barriers

### Text Books

1. Agarwal, M.C. and Monga, J.R. (1992) '**Economic and Commercial Geography**', National Publishing House, Delhi.
2. Agarwal, S.K. (1985) '**Environment and Natural Resources Economics**', Scott Foresman & Co., London.
3. Common, M. (1985) '**Environmental and Resource Economics**', Longman, London.
4. Karpagam, M. (1991) '**Environmental Economics**', Sterling, Delhi.
5. Kneese. A.V and Sweeny, J.L, 1993) '**Handbook of Natural Resource and Energy Economics**', North Holland.
6. Richard Eden (1981) '**Energy Economics – Growth, Resources and Policies**', Cambridge University Press, London.

### References

1. Anandan M and Ramaswamy S (2016) '**Oil Economics**' MJP Publishers, Chennai.
2. David Pearct et al., (1990) '**Sustainable Development – Economics and Environment in the Third World**', Earthscan Publications, London.
3. Munasinghe, M and Meier, P (1993) '**Energy Policy and Modeling**', Cambridge University Press, Cambridge.
4. Ramaswamy. S. and Anandan, M., (2019) '**Energy Development Issues and Policies**' MJP Publishers, New Delhi.
5. TERI (2019) '**Teri Energy Data Directory and Year Book**, The Energy Research Institute, Delhi.

## HEALTH ECONOMICS

Semester : IV  
Course Code : 24ECUCA2203

No. of Credits: 3  
No. of Hours: 48

### Objective

To teach the applications of economic theory in health sector.

### Specific Objectives of Learning

1. The students would become conversant with concepts and contents of health economics.
2. The students would have gained knowledge in taking up studies in economic issues of health sector.

### UNIT I: INTRODUCTION TO HEALTH ECONOMICS (9 hrs)

Meaning – Definition – Health Function – Types of Health Economics Research – Role of Health Sector in the Economy.

### UNIT II: DEMAND FOR AND SUPPLY OF HEALTH CARE (10 hrs)

Relevance of Consumer Demand Theory to Health – Factors influencing Demand for Health Care – Hospital Production Function – Objectives and Constraints Hospital Size – Hospital Costs and Efficiency – Physician Supply Curve – Physician Payment Mechanism – Physician Induced Demand.

### UNIT III: HEALTH SYSTEMS AND PLANNING IN HEALTH CARE (10 hrs)

Health Systems – Definition – Components – Organization of Health Services – Economic, Political and Cultural Determinants – Need and process of Planning in Health Care – Health Care Planning in India.

### UNIT IV: HEALTH FINANCING AND INSURANCE (10 hrs)

Health Financing – Meaning and Objectives – Development and Community Financing – Health Financing in Developing Countries – Concept of Health Insurance – Types and Importance – Health Insurance and Health Care Demand.

### UNIT V: HEALTH CARE, COSTING AND OUTCOMES (9 hrs)

Health care Costs – Types of Costs – Cost Allocation – Inputs and Outputs: Cost Curves – Reasons for Costing in Health – Issues in Cost-Benefit Analysis.

### Text Books

1. Xavier Martinez – Giralt (2010) “Principles of Health Economics for non-economists” USA.
2. Feldstein P.J. (2004) “Health Care Economics”, Thomson, London.

### Reference Books

1. Berman PA and ME Khan (1993): **Paying for India's Health Care**, Sage Publications, New Delhi.
2. Folland S, Goodman AC, and Stano M. (1987): **The Economics of Health and Health Care**, Prentice Hall, New Jersey.
3. Mills A, and Lee K (Eds.) (1993): **Health Economics Research in Developing Countries**, Oxford University Press, New York.
4. Mills A (1983): **Economics of Health in Developing Countries**, Oxford University Press, New York.
5. Phelps CE (1997): **Health Economics**, Addison Wesley, New York.

## INTRODUCTION TO ECONOMETRICS

Semester : IV  
Course Code : 21ECUC2205

No. of Credits: 4  
No. of Hours: 64

### Objective

- To make the students understand the basic concepts in econometrics and to empirically verify economic relationships.

### Specific Course Objectives of Learning

- To apply and integrate various economic tools.
- To formulate appropriate models and techniques to solve economic problems.
- To apply economic theory for empirical verification.
- To assess complex policy issues and analyze them using economic models.
- To formulate framework for calculating various economic variables.

### Specific Courses Outcomes

- Applying basic econometrics models.
- Utilizing appropriate econometric tools
- Forecasting the economic growth and development
- Assessing the economic conditions
- Analyzing the relationship between various using appropriate models and mathematical techniques.

### UNIT - I: MODELS AND METHODOLOGY (14 hrs)

Econometrics – Meaning –Nature and Scope- Goals – Relationship between Economic theory - Mathematics and statistics - Economic and Econometrics models – Methodology of Econometrics-Goals and limitation – disturbance term – Types of Data, Cross section and Panel Data- Basic concepts of Estimation: Linear and non Linear approaches – Ordinary Least Squares.

### UNIT – II: SIMPLE LINEAR REGRESSION MODEL (10 hrs)

Simple linear Regression model- meaning – Function –Ordinary Least Squares Method of Estimation and its assumptions – Properties of linear stochastic regression model - Gauss Markov theorem- Simple Numerical Problems in SLRM

### UNIT-III: MULTIPLE LINEAR REGRESSION MODEL (12 hrs)

Multiple Linear Regression Model- Meaning – Assumption on MLRM-Properties of OLS Estimates – Evaluating the model Goodness of fit - R Square and adjusted R Square– Simple numerical problems with two independent variables- General MLRM - Interpreting and reporting the model

### UNIT - IV: PROBLEMS IN ECONOMETRICS AND SPECIFICATION OF ERROR (14 hrs)

Autocorrelation, Multicollinearity and Heteroscedasticity: Causes, Consequences and Remedies- Specification Error – Nature and Types of the Specification Error.

### UNIT - V: DUMMY VARIABLES (14 hrs)

Dummy Variables: Meaning - Uses – Significance and Features of Dummy variable Models-Dummy Variable Trap, Dummy Variable Model-Chow Test- Introduction to Regression on Dummy dependent variable model.

### Text Books

- Gujarati Damodar N (1998), 'Essentials of Econometrics', Irwin Mcgraw Hill, Newyork.
- Gujarati, Damodar N (2003), 'Basic Econometrics', Irwin MC graw hill, Newyork.
- Guarati Damodar J. and Dawn C. Porter (2009) 'Essentials of Econometrics' Forth Edition, Irwin MC graw hill, Newyork
- Christopher Dougherty (2011) 'Introduction to Econometrics' oxford University Press, New Delhi.
- Koutsoyiannis A (1992), 'Theory of Econometrics: An Introductory Exposition of Econometric Methods', McMillan, Chennai.
- Koutsoyiannis A (1999), 'Theory of Econometrics', Palgrave Publishers Ltd, Newyork.
- Maddala G S (2002), 'Introduction to Econometrics', John Wiley, Newyork.

### References

- Metha and Kranti Kapoor (2005) 'Fundamentals of Econometrics', Himalaya Publishing House, Mumbai.
- Nachane D (2006), 'Econometrics' Oxford University Press, Delhi
- Robert S. Pindyck & Daniel L. Rubinfeld (1998), 'Econometric Models and Economic Forecasts', Irwin Mcgraw Hill, Newyork.
- Shyamala, Navdeep Karur and Arul Pragasam (2013) 'Econometrics' Vishal Publishing Co, New Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	2	3	3



## HISTORY OF ECONOMIC THOUGHT

Semester : IV  
Course Code : 24ECUC2206

No, of Credits: 4  
No, of Hours: 64

### Objective:

To make the students understand the concepts and history of economic thought.

### Specific Objectives of Learning:

1. To provide the students with clarity in the concepts in economic ideas
2. To understand the evolution of modern economic thought.
3. To enable them to forecast the future trends of economics
4. To inculcate Indian economic thinkers
5. To become aware government policies and schemes from the perspectives of Indian economic thinkers.

### Specific Course Outcomes:

1. Gaining knowledge of the origin and development of economic ideas.
2. Understanding the differences Mercantilism and Physiocracy.
3. Understanding the influence of classical economic ideas.
4. Acquiring a comprehension of the Keynesian economic ideas.
5. Analyzing and understand the government policies from the perceptions of Indian economic thinkers.

### UNIT – I: ANCIENT ECONOMIC THOUGHT (12hrs)

Nature and Significance of Economic Thought –Economic ideas of Hebrews, Plato, Aristotle and Roman – KautilyaArthasastra and Thiruvalluvar.

### UNIT – II: MERCANTILISM AND PHYSIOCRACY (12hrs)

Mercantilism – General Outline and factor that gave rise to Mercantilism – Role of State, Money, Interest, Trade – Representatives of Mercantilism – Factor that gave rise to Physiocrats – Main ideas Physiocrats – Representatives of Physiocrats

### UNIT – III: CLASSICAL ECONOMIC AND MARXISM (14hrs)

Adam Smith – Thomas Robert Malthus – David Ricardo – J.B. Say, J.S. Mill – Alfred Marshall – Wiksell- J. B. Clark – Irving Fisher – Taussig – J.A. Schumpeter – Kari Marx.

### UNIT – IV: KEYNESIAN ECONOMICS (12hrs)

Economic ideas of Keynes: Aggregate economy, Liquidity preference Theory and Liquidity Trap – Role of fiscal policy: deficit spending and public works.

### UNIT – V: RECENT INDIAN ECONOMIC THOUGHT (14hrs)

M.K. Gandhi – Jawaharlal Nehru – B.R. Ambedkar – J. C Kumarappa – V.K.R.V Rao-A.K. Sen – Abijit.Periyar, Manmohan Singh, M.S.Swaminathan.

### Text books:

1. Cjarles and Charles Rist, (2007) 'History of Economic Doctrines' D.C Heath and company, New York.
2. Lokanathan . V (2018) 'A History of Economic Thought', S. Chand Publishing, Delhi.
3. Paul. R.R (2015) 'History of Economic Thought', Kalayni Publishers, Delhi.

### References:

1. Alexander Gray. M. A, (1980) 'The Development of Economic Doctrine –An Introductory Survey', Longman Green and Co, London.
2. Fellner . W. (1960) 'Emergence and Content of Modern Economic Analysis' McGraw Hill, New York.
3. Joseph. A Schumpeter (2006) 'History of Economic Analysis' Taylor & Francis e-Library, London.
4. Lewis. H Haney (2012) 'History of Economic Thought', The Macmillan Company, New York.
5. Madan G R (1966), 'Economic Thinking in India', S. Chand and Company, Delhi.
6. Madan G R and Dhooria H S (1963), 'The History and Development of Economic Thought' , S. Chand Publishing, Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	3
CO2	3	3	2	3	3
CO3	3	3	2	3	3
CO4	3	3	2	3	3
CO5	3	3	2	3	3

## INTERNATIONAL ECONOMICS

Semester : IV  
Course Code : 24ECUC2207

No. of Credits: 4  
No. of Hours: 64

### Objective

To expose the students to the principles and theories of international trade.

### Specific Course Objectives of Learning

1. To understand the basic concepts of international trade.
2. To study theories of international trade.
3. To examine the balance of payments in international trade.
4. To learn the exchange rate in international trade.
5. To understand the concepts of tariffs and import quotas.

### Specific Course Outcomes

1. Assessing the gains from international trade.
2. Applying the theories of international trade in the context of globalization.
3. Examining the balance of payments for economic growth.
4. Evaluating the significance of exchange rate in international trade.
5. Examining the role of tariffs and import quotas in trade.

### UNIT - I: INTRODUCTION TO INTERNATIONAL TRADE

(12 hrs)

Meaning – Distinguishing between Internal Trade and International Trade – Advantages – Disadvantages – Current International Economic Problems – Production Possibility Curve – Commodity Indifference Curve – Offer Curve – Trade Indifference Curve.

### UNIT - II: THEORIES OF INTERNATIONAL TRADE

(12 hrs)

Adam Smith's Theory of Absolute Cost Advantage – David Ricardo's Theory of Comparative Advantage – Heberler's Theory of Opportunity Costs – Mill's Theory of Reciprocal Demand – Heckscher – Ohlin Theory of Trade.

### UNIT - III: BALANCE OF PAYMENTS (BOP)

(14 hrs)

Meaning of Balance of Trade and Balance of Payments – Components of BOP – Causes of Disequilibrium in BOP – Measures to Correct the Disequilibrium in BOP – Adjustments Mechanisms of BOP: Automatic Price Adjustment under Gold Standard and Flexible Exchange Rates – Expenditure Changing Monetary and Fiscal Policies.

### UNIT - IV: EXCHANGE RATE

(14 hrs)

Meaning of Exchange Rate – Currency Depreciation and Appreciation – Devaluation and Revaluation – Demand and Supply of Foreign Exchange – Determinants of Equilibrium Exchange Rate – Change in Exchange Rate - Causes of Changes in Exchange Rate – Types of Exchange Rates – Foreign Exchange Market.

### UNIT - V: TARIFFS AND IMPORT QUOTAS

(12 hrs)

Tariffs: Meaning – Types– Effects – Import Quotas: Meaning – Objectives – Types – Effects – Import Quotas versus Tariffs – Free Trade and Protection.

### Text Books

1. Bosodersten and Geoffrey Read, (2013) 'International Economics', Macmillian Press Ltd., Hampshire, London.
2. Rana K.C and Verma K.N. (2008) 'International Economics', Vishal Publishing Company, Jalandhar, India.
3. Salvatore D (2014) 'International Economics', John Wiley & Sons, Singapore.

### References

1. Bhagwati. J (1981), International Trade, The MIT Press; second edition.
2. Dana. M.S (2000), International Economics, Rout ledge Publications, London.
3. Feenstra. R. (2009) Advanced International Trade: Theory and Evidence, Princeton University Press.
4. Mannur, H.G (2000) 'International Economics', Vikas Publishing, Delhi.
5. Paul Krugman, Maurice Obstfeld and Marc Melitz (2018) 'International Economics: Theory and Policy', Pearson India Education Services Limited, United Kingdom.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	3	2	3	3
C02	3	3	2	3	3
C03	3	3	2	3	3
C04	3	3	2	3	3
C05	3	3	2	3	3

## INDIAN ECONOMY

Semester : V  
Course Code : 24ECUC3108

No .of Credits: 4  
No. of Hours: 64

### Objective:

1. To make students acquire knowledge about Indian Economy and its dynamics.

### Specific Course Objectives of Learning

1. To learn major issues in Indian demographic dimensions.
2. To understand and evaluate Economic planning in India.
3. To understand the role of agriculture sector in Economic Development.
4. To explore the importance of industrial and service sectors development in India.
5. To study the development programmes and policies for economic growth of a nation.

### Specific Course Outcomes

1. Identifying the major social economic problems of the country and developing strategies to address them.
2. Realizing the importance of effective planning and gaining skills to evaluate planning.
3. Examining the contribution and trends of sectors of Indian Economy.
4. Understanding the development programmes and policies for an economy.

### UNIT - I: ECONOMIC AND HUMANRESOURCES DEVELOPMENT (12 hrs)

Basic Characteristics of Indian Economy – Determinants and Obstacles of Development – Indian Demographic Profile and Features – Causes and Impact of Population Explosion – Theories of Population: Malthusian and Demographic Transition.

### UNIT – II PLANNING AND ECONOMIC DEVELOPMENT (12 hrs)

Meaning - Objectives of Economic Planning in India – Evaluation of Five Year Plans in India– NITI Aayog: Structure – Objectives – New Economic Reforms: Liberalization, Privatization and Globalization.

### UNIT - III: AGRICULTUREIN INDIA (15 hrs)

Role of Agriculture in the National Economy – Production and Productivity – Green Revolution and Organic Farming – India’s Food Security – Agricultural Price: Fluctuations and Need for Stability – CACP - MSPs– Agriculture Marketing.

### UNIT – IV: INDUSTRY AND SERVICE SECTORS (13hrs)

The Role of Industrialization – Trends and Growth – Large Scale Industries – MSMEs – Industrial Sickness – Service Sector - Broader Classification – Contribution to Economic Development -Role of Transport – Importance – Problems – Transport Co-ordination.

### UNIT - V: DEVELOPMENT PROGRAMMES AND POLICIES (12 hrs)

Employment and Poverty Alleviation Programmes- Infrastructure and Housing – Rural Development – New Economic Reforms (LPG) – Digital Economy.

### Text Books

1. Puri V.K and Misra S.K (2014) ‘Indian Economy’, Himalaya, Mumbai.
2. Ruddar Datt & K.P.M.Sundharam (2016) ‘Indian Economy’, S. Chand & Company Ltd, Delhi.

### References

1. Agarwal. A.N. (1990) ‘Indian Economy’, Wiley Eastern Ltd, Delhi.
2. Dhingra, I C (2014) ‘Indian Economy’, Sultan Chand & Sons, Delhi.
3. Government of India ‘Economic Survey’, Department of Finance, Delhi (various years).
4. Jhingan M.L (2014) ‘Economics of Development and Planning’, Vikas Publishing House, Bangalore.
5. Joshi, V. and I.M.D. Little (1996) ‘India’s Economic Reforms: 1991-2001’, Oxford University Press, Delhi.
6. Kausik Basu (Ed.) (2012) ‘Oxford Companion to Indian Economy’, 3rd Edition, OUP, Delhi.
7. Uma Kapila (Ed.) (2017-18) ‘Indian Economy since Independence (Ed.)’, Academic Foundation, Delhi.
8. Economy Survey (Various Years), Government of India.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	2	3	3	2
CO2	2	2	3	3	3
CO3	3	3	2	2	2
CO4	3	3	3	3	3

## MONEY AND BANKING

Semester : V  
Course Code : 24ECUC3109

No. of Credits: 4  
No. of Hours: 64

### Objectives:

1. To enable the students understand the operations of money and banking systems and their interaction with the rest of the economy.

### Specific Course Objectives of Learning

1. To learn the concepts of money, banking and its role
2. To understand the theories of money, inflation and index numbers
3. To understand the functions of banking of system.
4. To comprehend the operations of central banking system
5. To gain skills in handling and analyzing monetary and fiscal variables and their interaction

### Specific Course Outcomes

1. The students would be able to explain the concepts of money and its role.
2. They would become conversant with theories of money, inflation and index numbers.
3. They would recognize the working of banking system.
4. The students would be able to explain the operations of central bank.
5. They would be able to handle and analyze monetary and fiscal variables

### UNIT – I: INTRODUCTION TO MONEY

(12 hrs)

Evolution of money – Money: definitions and functions; Classification of money: Money and Near Money, RBI classification – Role of money in an economy – Gresham's Law

### UNIT – II: THEORIES OF MONEY, INFLATION AND INDEX NUMBERS

(14 hrs)

Quantity theory of money: cash transaction and cash balance approaches; The Keynesian approach. Inflation: definition, types, causes, effects and measures - Philips curve – Index numbers: meaning, types and its construction and practical difficulties.

### UNIT – III: COMMERCIAL BANKING

(14 hrs)

Meaning, types and Functions of commercial banks. The process of Credit Creation - Evolution of commercial banking in India after independence- Recent reforms in banking sector.

### UNIT - IV: CENTRAL BANKING

(12 hrs)

Functions of a central bank; quantitative and qualitative methods of credit Control- Role of central bank in a developing economy – Objectives and functions of the Reserve Bank of India.

### UNIT - V MONETARY AND FISCAL POLICIES

(12 hrs)

Monetary and fiscal policy: Meaning– Role of Monetary and Fiscal policies in developing countries. Effects of Monetary Policy on Demand, investment, Effects of fiscal policy on demand, investment – Interaction of Monetary and Fiscal policies.

### Text Book

1. Seth, M.L (2019) 'Money, Banking, International Trade and Public Finance', 34<sup>th</sup> Edn., Lakshmi Narain Agarwal, Agra.
2. Mithani, D.M.( 2018) 'Money, Banking, International Trade and Public Finance', 20<sup>th</sup> Edn., Himalaya Publishing House, Mumbai.
3. Jhingan, M.L (2002) Monetary Economics, 5<sup>th</sup> Revised and Enlarged edition, Vrinda Publications (P) Ltd., Delhi+

### References

1. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan Publishing Co., New York.
2. Gupta, S.B. (1994), Monetary Economics, S. Chand & Co., New Delhi.
3. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	2	2	3	2
C02	3	3	3	3	2
C03	3	2	2	3	3
C04	3	2	2	3	2
C05	3	3	3	3	2

## RESEARCH METHODOLOGY

Semester: V  
Course Code: 24ECUC3110

No. of Credits: 4  
No. of Hours: 64

### Objective

1. To apply the principles of research methodology in conducting research and writing the research reports.

### Specific Course Objective

1. To understand the basic ingredients of Social Science Research;
2. To explore the different data sources and methods of data collection;
3. To know about the Sampling Techniques and Design;
4. To apply qualitative and quantitative techniques to test hypotheses; and
5. To gain skills in conducting research.

### Specific Course Outcomes

1. Developing scientific outlook towards a holistic view of research and its process.
2. Gaining skills in the Sampling and Research Design
3. Classifying and validating data in research
4. Corroborating and formulating testable hypotheses; and
5. Acquiring skills / preparing an outline of a Project Report.

### UNIT - I: INTRODUCTION TO RESEARCH

(13 hrs)

Meaning – Objectives - Types - Research Approaches – Scientific Research: Definition, Principles, and Steps - Social Science Research: Objectives, functions, ethics - Research Process – Formulating the Research Problem Research problem –Review of Literature – Criteria in Selection of a Topic.

### UNIT - II: RESEARCH DESIGN AND COLLECTION OF DATA

(14 hrs)

Data: Meaning – Need – Features - types - sources: Primary Data, SecondaryData - Methods of Data Collection – Interview Schedule – Questionnaire – Check List – Pilot Study – Introduction to PRA - Data reliability and Validity.

### UNIT- III: SAMPLING DESIGN

(13 hrs)

Census and Sample Survey - Steps in Sampling Design - Types of Sample Designs - Criteria for Selecting a Sampling Design - Characteristics of a Good Sample Design.

### UNIT - IV: TESTING OF HYPOTHESES

(12 hrs)

Meaning and Types - Characteristics and Importance of a Good Hypothesis – Formulation - Testing of Hypothesis – Procedure for Hypothesis Testing – Tests of Hypotheses.

### UNIT - V: INTERPRETATION AND REPORT WRITING

(12 hrs)

Interpretation: Meaning – Need – Technique – Precautions - Report Writing: Meaning - Significance – Steps – Types – Mechanics of Writing Research Report – Model Reporting – Bibliography - Foot Notes – Glossary - Appendix.

### Text Books

1. Kothari, C.R, (2013), '**Research Methodology: Methods and Techniques**', Wiley Eastern Limited, Delhi.
2. Thanulingam, N., (2012), '**Research Methodology**', Himalaya Publishing House, Mumbai.
3. Narayanasamy N (2013), '**Participatory Rural Appraisal: Text and Cases**' Sage Publication, New Delhi.

### References

1. Diwivedi, R.S., (1997), '**Research Methods in Behavioral Sciences**', Macmillan, Delhi.
2. Goode, William J. and Hatt, Paul K (1987), '**Methods in Social Research**', Mc Graw Hill, London.
3. Kurein, C.T., (1973), '**A Guide to Research in Economics**', Sangam Books, Madras.
4. Shajahan S (2005), '**Research Methods of Research in Social Science**', Himalaya, Bombay.
5. Wilkinson and Pandarkar, (1984), '**Methodology and Techniques of Social Research**', Himalaya Publishing House, Mumbai

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	2	3	2
CO2	2	3	2	3	2
CO3	2	3	2	3	2
CO4	3	3	2	3	2
CO5	3	3	3	3	2

## DATA ANALYTICS

**Semester** : V  
**Course Code** : 24ECUB3101  
**Objective**

**No. of Credits: 4**  
**No. of Hours: 64**

1. To familiarize the students on the application of computer in data analysis.

### Specific Course Objectives of Learning

1. To gain skill in the statistical data analysis for economics subject;
2. To familiarize with economic data application is MS-Office;
3. To gain skill in the statistical data analysis for economics subject;
4. To become familiar with analysis of economic data with models through SPSS; and
5. To gain skills in application of data analytics in economics.

### Specific Course Outcomes

1. Developing skills in computer application in economics data;
2. Enabling students to prepare graphical representation;
3. Developing skills in computer application in economics data;
4. Applying the statistics tools using SPSS in the solution of economic problems; and
5. Applying the data analytics in economics.

### UNIT - I: DATA SET

**(12 hrs)**

Data - Meaning, Types, Primary, Secondary-Time Series Data, Cross Section, Pooled Data And Illustrations of Data Sources- ASI, Census Reports, FAO, World Bank, RBI, NSSO- Transfer of Data Among Different Softwares – Data Ethics – Ethical Issues of Data Collection – Data Management.

### UNIT - II: CREATION OF TABLES, GRAPHS AND DIAGRAMS IN MS OFFICE

**(14 hrs)**

MS Office: MS-Word Opening, Saving And Printing Document Files, Editing and Formatting of Documents, Table Creation- Short Cut Keys, MS Power Point: Preparation of Power Point Using Design Template and Text Structure Layouts - Animation Effects, Table, Pictures and Presentation- Creating and Modifying Graphs and Diagrams.

### UNIT - III: ANALYSIS OF DATA WITH EXCEL

**(12 hrs)**

Microsoft Excel: functions of Excel, Creation of worksheets; Data entry - Entering data and processing Using Excel - Mathematical and statistical calculations - Applications of Excel in economics - computing Descriptive Statistics, Coefficient of Variance, Trend (AGR and CAGR) – Forecast.

### UNIT - IV: ANALYSIS OF DATA WITH SPSS

**(14 hrs)**

Introduction to SPSS: Creation of Data Files, Assigning Names and Labels to Variables, Sort Cases, Import/Export Of Files, Computing Variable, Data Steps In Processing Data In SPSS: Descriptive Statistics, Comparing Means, Correlation Analysis, Regression Analysis, Chi-Square – ANOVA.

**(12hrs)**

### UNIT – V APPLICATION OF DATA ANALYTICS IN ECONOMICS

Introduction to Eviews and STATA –Forecasting Economic Indicators – Analyzing Labour Market Data – Consumer Analytics - Pricing Analytics – Retail Analytics.

### Text Books

1. George, Darren Mallery Paul (2011) 'SPSS for Windows step by step: A simple guide and reference 15.0', Pearson Education, Delhi.
2. Sabine Landau and Brian S.Everitt (2004) 'A handbook of Statistical Analyses Using SPSS' Chapman & Hall/CRC Press, London, Newyork, Washington.D.C.
3. Dhanasekaran. K. Computer Applications in Economics, Vrinda Publication (P) Ltd, New Delhi.

### References

1. Bhattacharjee Dibyojyoti (2010) 'Practical Statistics: Using Microsoft Excel', Asian Books, Asian Books Private Limited, New Deli.
2. Damodar Gujarati (2006) 'Basic Econometrics' Tata Mcgraw Hill, Delhi.
3. Gupta S.P., (2009) 'Statistical Methods', S.Chand and Company, Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	2	2	2
C02	3	2	3	2	2
C03	2	3	2	3	3
C04	3	3	3	3	3
C05	3	3	3	3	3

## AGRICULTURAL ECONOMICS

Semester : VI  
Course Code : 24ECUC3212

No. of Credits: 4  
No. of Hours: 64

### Objective:

1. To equip the students with the basics of agricultural Economics with special reference to Indian context and build knowledge on relationship patterns in the subject.

### Specific Course Objectives of Learning

1. To make the students understand role of agricultural economics and factors in agriculture.
2. To expose them to the theory and application of production and cost relationship in agriculture.
3. To introduce them to the concepts of agricultural holding patterns, farm size, productivity and agrarian Relations
4. To expose the students to the concepts and context of agricultural marketing particularly in Indian context
5. To make them understand the sources and agencies of agricultural finance and issues in them

### Specific Course Outcomes

After completion of the course the student would be able to:

1. Explain the role of agricultural economics and factors in agriculture.
2. Apply and analyze production and cost relationship in agricultural economics.
3. Classify landholding, understand the dynamics of mechanization and land reform measures.
4. Develop a clear picture on agricultural marketing in the Indian context.
5. Explain the sources and agencies of Indian agricultural finance

### UNIT I: INTRODUCTION THE AGRICULTURAL ECONOMICS

(12 hrs)

Agricultural Economics –Origin – Meaning – definition – Nature – Scope. Role of Agriculture in Economic Development- Land – Labour- Capital in agriculture.

### UNIT II: THEORY OF PRODUCTION

(12hrs)

Production Function – Production Relationship: factor-product, factor-factor – product-Product relationship – cost relationship and profit maximization.

### UNIT III: FARM SIZE AND AGRARIAN RELATION

(14 hrs)

Agricultural holding classification - Farm size and productivity – Mechanization – Advantages and limitations – Land reforms – Measures –Suggestion for improvement – New agricultural strategy.

### UNIT IV: AGRICULTURAL MARKETING

(14 hrs)

Agricultural Marketing: meaning, classification – Defects of agricultural marketing and measures to improve – concepts of marketed and marketable surplus – Agricultural prices - Regulated Markets - Co-operative Marketing – Agricultural commodity Procurement and Public Distribution.

### UNIT V: AGRICULTURAL FINANCE AND AGENCIES

(12 hrs)

Need for agricultural finance – Sources of Agricultural Finance- Rural Indebtedness – Causes and effects – Role of Rural Credit Institutions in addressing it.

### Text Books

1. Sadhu, and Singh (2014) **Fundamentals of Agricultural Economics**, Himalaya Publication, Delhi.
2. Cramer and Jevsen (1994) **Agricultural Economics and Agri Business**, John Wiley, New York.
3. Sankaran,S (2010) **Agricultural Economics**, Margham, Chennai.
4. Sethuraman, K. (2000), **Agricultural Marketing**, Margham Publications, Chennai.
5. Amutha, D (2016) **A Text Book of Agricultural Economics**, Mangalam Publications, Delhi.

### References

1. Sankaran, S.(2010), **Indian Economy**, Margham Publications, Chennai.
2. Deepashree, (2011), **Indian Economy**, Ane Books Pvt Ltd, Delhi.
3. Cohen (2001) **The Economics of Agriculture Mohit**, Delhi.
4. Memoria, C.B., & Badri Bishal Tripathi (2003), **Agricultural Problems of India**, Kitab Mahal Agencies, Patna.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	2	3	3
C02	3	3	2	3	3
C03	3	3	3	3	2
C04	3	3	3	3	2
C05	3	3	3	3	2

## INDUSTRIAL ECONOMICS

Semester : VI  
Course Code : 24ECUC3213

No. of Credits: 4  
No. of Hours: 64

### Objective

To make the students gain the knowledge of concepts and theories of industrial economics.

### Specific Course Objective

1. To study the basic concepts of industrial economics.
2. To learn the methods of assessing industrial efficiency.
3. To understand the theories of industrial location.
4. To know the sources of industrial finance.
5. To learn the industrial policy and to study causes and remedies of industrial sickness.

### Specific Course Outcomes

1. Understanding the behavior of industries.
2. Developing the decision making skill for business.
3. Gaining the theoretical knowledge for industry development.
4. Assessing the financial organization for industries.
5. Identifying suitable industrial policy and solving the problems of industrial sickness.

### UNIT - I: INTRODUCTION TO INDUSTRIAL ECONOMICS

(10 Hrs)

Meaning and History of Industrial Economics - Role of Industries in Economic Development - Factor Determining Industrialization - Types of Organizational Form - Business Motives - Problems of Industrial Development in Fast-Growing Country.

### UNIT - II: INDUSTRIAL EFFICIENCY

(14 Hrs)

Meaning - Determinants - Measurement of Efficiency Levels - Efficiency Conditions in the Theory of Production - Efficiency and Decision Making Process.

### UNIT - III: THEORIES OF INDUSTRIAL LOCATION

(12 Hrs)

Concept of Optimum Firm - Factors Determining Optimum Size of a Firm - Industrial Location: Determinants- Alfred Weber's Theory - Sargant Florence's Theory - Industrial Location Trends in India.

### UNIT - IV: INDUSTRIAL FINANCE

(12 Hrs)

Need - Types - Sources - Industrial Financial Institutions - Problems - Analysis of Financial Ratios: Introduction - Classification of Ratios - Limitations of Ratio Analysis.

### UNIT - V: INDUSTRIAL POLICY AND INDUSTRIAL SICKNESS

(10 Hrs)

Programmes of Industrial Development in India - Industrial Policy prior to 1991 - New Industrial Policy - Impact of Globalization on Industrial Sector in India - Industrial Sickness and Industrial Disputes: Causes - Remedial Measures.

### Text Books

1. Barthwal, R. R. (2010), Industrial Economics: An Introductory Text Book, Wiley Eastern Ltd. New Delhi.
2. Cherunilam. F. (1994), Industrial Economics: Indian Perspective, Himalaya Publishing House, Mumbai.
3. Desai. S.S.M. and Bhalerao.N. (2010), Industrial Economy of India, Himalaya Publication House, Mumbai.

### References

1. Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Desai, B (1989), Industrial Economy in India, Himalaya Publishing House, Mumbai.
3. Kuchhal, S.C.(1978), Industrial Economics, Himalaya Publishing House, Mumbai.
4. Gaurav Datt and Ashwin Mahajan (2016), Indian Economy, S. Chand and Company Pvt. Ltd, New Delhi.
5. Puri V.K. and Misra S.K. (2018) Indian Economy, Himalaya Publishing, Mumbai.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	1	3	3
C02	3	3	3	3	3
C03	2	2	3	3	3
C04	3	3	2	3	3
C05	3	3	3	3	3



## ECONOMICS OF GROWTH AND DEVELOPMENT

Semester : VI  
Course Code : 24ECUC3214

No. of Credits: 4  
No. of Hours: 64

### Objective

To facilitate students to study the mainstream theories of development and growth.

### Specific Course Objectives of Learning

1. To understand the determinants of economic growth and techniques of development.
2. To formulate theoretical framework for economic development.
3. To understand theories of balanced growth.
4. To apply and analyze the growth theories.
5. To gain skills in examining the international and domestic issues.

### Specific Course Outcomes

1. Explaining the determinants of economic development.
2. Identifying economic theories for promoting sustainable development
3. Understanding the issues of balanced growth.
4. Utilizing suitable growth models for Indian economic planning
5. Examining the issues of economic development.

### UNIT- I: DETERMINANTS OF ECONOMIC GROWTH

(10hrs)

Economic Development and Growth: Meaning - Concepts - Measurement – Factors Influencing Economic Development and Growth - Modern Economic Growth – Human Development Index (HDI) – Physical Quality of Life Index (PQLI) – Indian Economic Growth – A Critic.

### UNIT - II: THEORIES OF ECONOMIC DEVELOPMENT

(15 hrs)

Adam smith – Keynes – Rostow – Nurkse's Disguised Unemployment – Lewis' Theory.

### UNIT – III: THEORIES OF BALANCED GROWTH

(13 hrs)

Balanced Growth Doctrine – Big Push Theory – Critical Minimum Effort Thesis – Concepts of Unbalanced Growth.

### UNIT - IV: THEORIES GROWTH MODELS

(15 hrs)

Harrod-Domar – Kaldor – Joan Robinson – Meades – Solow Model of Long Run Growth.

### UNIT - V: REQUISITES FOR ECONOMIC DEVELOPMENT

(9 hrs)

Capital formation – Human capital formation – India's Foreign Trade – Composition and Direction – India's Balance of Payment Problems – FDI.

### Text Books

1. Chakraverti, S. (1982) 'Alternative Approaches to the Theory of Economic Growth', Oxford University Press, Delhi.
2. Jhingan M.L (2014) 'Economics of Growth and Development', Himalaya Publishing House, Delhi.
3. Kindleberger, C.P. (1977) 'Economic Development', McGraw Hill, New York.
4. Meier, G.M. (1995) 'Leading Issues in Economic Development', Oxford University Press, New York.
5. Todaro, M.P. (1996) 'Economic Development', Longman, London.

### References

1. Adelman, I. (1961) 'Theories of Economic Growth and Development', Stanford University Press, Stanford.
2. Behrman, S and T.N.Srinivasan (1995) 'Handbook of Development Economics' Vol.3, Elsevier, Amsterdam.
3. Dasgupta, P. (1993) 'An Enquiry into Well-being and Destitution', Clarendon Press, Oxford.
4. Sen, A.K. (Ed.) (1990) 'Growth Economics', Penguin, Harmondsworth.
5. Solow, R.M. (2000) 'Growth Theory: An Exposition', Oxford University Press, New Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	2	3	2
CO2	3	3	2	3	3
CO3	3	3	2	2	3
CO4	2	2	2	3	3
CO5	3	3	2	3	3

## PUBLIC ECONOMICS

Semester : VI  
Course Code : 24ECUC3215

No. of Credits: 4  
No. of Hours: 64

### Objective

1. To enable the students to understand the fundamentals of Public Economics with special reference to fiscal operations of Indian Government.

### Specific Course Objectives of Learning

1. To understand the nature, scope and role of public economics.
2. To get exposure to the concepts of public revenue particularly taxation.
3. To understand the concepts and theories of public expenditure and analyze its causes and effects.
4. To gain knowledge on types, role and trends in public debt in Indian context
5. To become familiar with budgetary procedures and fiscal federalism in India.

### Specific Course Outcomes

After the completion of the course the students would be able to:

1. Gain knowledge on the scope and role of public economics..
2. Understand the source of public revenues and types of taxation.
3. Explain the significance of public expenditure and analyze the growth of public expenditure.
4. Examine the causes and growth of public debt.
5. Narrate the budgetary procedures and understood the importance and working of fiscal Federalism in India.

### UNIT - I: NATURE AND SCOPE OF PUBLIC ECONOMICS (10 hrs)

Public Economics – Importance– Principle of Maximum Social Advantage – Public Choice and Collective decision making – Role of Public Finance in a developing economy.

### UNIT - II: PUBLIC REVENUE (15 hrs)

Sources of Revenue – Classification of taxes – Canons of taxation –Characteristics of good taxation system –Theories of taxation –Proportional Vs Progressive taxation – Taxable capacity – Incidence of Taxation –Effects of taxation – GST and its impact on Indian Economy.

### UNIT - III: PUBLIC EXPENDITURE (12 hrs)

Meaning – Components – Principles of Public Expenditure – Pure Theory of Public Expenditure – Effects of Public Expenditure –Causes for growth of Public Expenditure in India.

### UNIT - IV: PUBLIC DEBT (12 hrs)

Meaning – Classification – Types of debt instruments –Methods of debt redemption – Role of public borrowing in a developing economy –Growth of Public Debt in India.

### UNIT - V: INDIAN BUDGETARY PROCEDURES AND FISCAL FEDERALISM (15 hrs)

Budget types – Budgetary Procedures - Structure of the Central Government Budget – Deficit finance: significance and measures – Fiscal Federalism; Financial relations under the Constitution – Finance Commission and NITI Aayog.

### Text Books

1. Musgrave, R.A. (1959) 'The Theory of Public Finance', McGraw Hill, Kogakhusa, Tokyo.
2. Musgrave, R.A. and P.B. Musgrave (1976) 'Public Finance in Theory and Practice', McGraw Hill Kogakusja, Tokyo.
3. Tyagi, BP and Singh, HP (2019) 'Public Finance' Jai Prakash Nath & Co, Delhi.
4. Gupta, J.K(2014) Public Economics in India; Theory and Practica, Atlantic, New Delhi.
5. Lakhi, R.K and J. Singh (2022) Public Finance, Kalyani Publishers, Ludhiana.

### References

1. Atkinson, A.B. and J.E.Stiglitz (1980) 'Lectures on Public Economics', Tata MaGraw Hill, New York.
2. Buchanan, J.M. (1970) 'The Public Finances', Richard D. Irwin, Homewood.
3. Sury M.M., (2003) 'India: Central Government Budgets 1947-48 to 2003-04', Indian Tax Foundation, Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	2	3	3
C02	3	3	3	3	2
C03	3	3	2	3	2
C04	3	2	2	3	3
C05	3	3	3	3	2

## DEMOGRAPHY

Semester : VI  
Course Code : 24ECUB3202

No. of Credits: 4  
No. of Hours: 64

### Objective:

To enlighten the students in various aspects of demography with reference to India.

### Specific Course Objectives of Learning

1. To get exposed to various concepts of demography.
2. To gain understanding on the population policy of India.
3. To acquire skills in techniques of demographic analysis,

### Specific Course Outcomes

1. Understanding various concepts of demography.
2. Searching and accessing demographic data from various sources.
3. Gaining skills to take up demographic studies.

### UNIT I: INTRODUCTION

(12 hrs)

Population Study and Demography; its relation with other disciplines Theories of Population: Malthus, Optimum theory of population, and Theory of Demographic Transition - Trends in Population Growth in Developed and Developing Countries.

### UNIT II: SOURCES OF DEMOGRAPHIC DATA IN INDIA

(12 hrs)

Sources of Demographic data in India: Census Civil Registration System and Demographic Surveys, National Family Health Survey (4 and 5) - their relative merits and demerits.

### UNIT III: TECHNIQUES OF ANALYSIS

(14 hrs)

Crude Birth and Death Rates, Age specific Birth and Death Rates, Standardized Birth and Death Rates-Study of Fertility; Total Fertility Rate - Mortality - Measures - Infant and Child Mortality- Factor Influencing Mortality Study of Marital Status - Life Table and its uses -Temporal and Spatial Variation in Sex Ratios.

### UNIT IV: STRUCTURAL CHANGES IN POPULATION

(12 hrs)

Techniques of population Projection - Concept of Stationary, stable and Quasi-stationary Population -Methods of forecasting - Problems of demographic forecasting -Aging of population in India - Structural changes in Indian population.

### UNIT V: POPULATION POLICY

(14 hrs)

Salient features of Census Analysis 1971 to 2011 - Evolution and Changes of Population policy in India- Demographic status and household behaviour - Education Women's Autonomy and Fertility- Population, Health, Poverty and Environment Linkage in India -Migration - Urbanization The New population Policy.

### Text book

1. Agarwal, S.N. (1985), India's Population Problem, Tata McGraw-Hill, Bombay.
2. Bhende, A. and T.R. Kanitkar (1982), Principles of Population Studies, Himalaya Publishing House, Bombay.
3. Agarwala, U.D. (1999), Population Projections and their Accuracy, B.R. Publishing Corporation, New Delhi.
4. Bogue, D. J. (1971), Principles of Demography, John Wiley, New York.

### References

1. Bose, A. (1996), India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
2. Census of India, Government of India, Various Reports, New Delhi.
3. Choubey, P.K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
4. Misra, B.D. (1980), An Introduction to the Study of Population, South Asian Publishers, New Delhi.
5. Srinivasan, K. (Ed.) (1999), Population Policy and Reproductive Health, Hindustan Publishing Corporation, New Delhi.
- 6.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	2	3	3
CO2	3	3	3	3	2
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	3	3	3	3	2

## ENVIRONMENTAL ECONOMICS

Semester : VI  
Course Code : 24ECUC3216

No. of Credits: 4  
No. of Hours: 64

### Objective

- To provide theoretical orientation to the students in the area of Environmental Economics.

### Specific Course objectives of Learning

- To gain clarity in the concepts in environmental economics.
- To understand anatomy of environmental resources and economic development.
- To identify global environmental problems and their impact on society.
- To become conversant with the environmental regulations.

### Specific Course Outcomes

- Gaining knowledge of environmental economics.
- Understanding the nexus between environmental resources and population growth
- Studying global environmental issues and their impact on society
- Assessing the environmental pollution using valuation technique of environmental resources
- Narrating the environmental regulation for creating environmental ethics.

### UNIT - I: THEORY AND CONCEPT OF ENVIRONMENTAL ECONOMICS (12 hrs)

Basics of Environment – Components and Functions – Environment and Development - Ecology and it's Types – Definition, Nature and Scope of Environmental Economics – Environment and Economy: Material Balance model - Basic Theories – Market failure and Externality- Environmental Quality as a Public Good – Pareto Optimality.

### UNIT - II: ANATOMY OF ENVIRONMENTAL RESOURCES (14 hrs)

Anatomy of resources – Common Property Resources: Definition, Types, Characteristics and Functions – Resource Depletion: Causes and consequences Natural Resource Accounting and Sustainable Development for protecting environmental resources.

### UNIT - III: ENVIRONMENTAL ISSUES AND PROBLEMS (14 hrs)

Environmental Problems – Air pollution – water pollution – noise pollution – Land pollution Causes and effects - Global Warming, Climate Change, Ozone Layer Depletion, Desertification, Acid Rain – Global Environmental issues and problems - Strategies.

### UNIT - IV: POLLUTION CONTROL (12 hrs)

Environmental Policy instruments for controlling water and air pollution and forest policy -Environment Laws, Acts, Rules and Regulations – Sustainable Development – Objectives, Approaches and Indicators.

### UNIT - V: POLICY MEASURES FOR PROTECTING ENVIRONMENT (12 hrs)

Environmental Protection Instruments- Economic, Fiscal and Legal instruments-Environmental Policy – Functions of Ministry of Environment Forests and Climate Change – Function of State and Central Pollution Control Boards- the Institutions of Joint forest management and the joint protected area management, social forestry – rational and benefits

### Text Books

- Dutt, A., Dutta, S and Pandey (2005) 'Environmental Economics' APH Publishing, Delhi.
- Anil Agarwal (1997) "The Challenges of the Balance: Environmental Economics in India" New Delhi, CSE.
- Karpagam. M (1993) 'Environmental Economics', Sterling Publishers, Delhi.
- Sankar. U (2000) 'Environment Economics', Oxford University Press, Delhi.
- Sankaran. S (1994), 'Environmental Economics', Margham, Madras
- Varadarajan S. and Elangovan S. (1992) 'Environmental Economics', SPEED, Madurai.

### References

- Bhattacharya N. Rabindra (Ed.) (2001) 'Environmental Economics: An Indian Perspective', Oxford University Press, Delhi.
- Rajalakshmi. N and Dhulasi Birundha (1994) 'Economic Analysis of Environment', Allied Publishers, Ahmedabad.
- Singh G.N (Ed.) (1991) 'Environmental Economics', Mittal Publications, Delhi.
- Tom Tietenberg (2003) 'Environmental and Natural Resource Economics', Pearson, Education', Delhi.
- Sir Partha Dasgupta (2014) "Environment Development Economics" edited by Scott Barrett, Karl Goran Maler, and Eric S.Maskin Published by Oxford University press, United Kingdom.
- World Bank, World Development Report Various years, New Delhi, Published by Oxford University press, United Kingdom.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	1	3	3
C02	2	2	2	3	3
C03	3	3	2	2	3
C04	3	3	2	3	3
C05	2	2	3	3	3

## ADVANCED MICROECONOMIC THEORY

Semester : VII  
Course Code : 24ECUC4117

No. of Credits: 4  
No. of Hours: 64

### Objectives

1. To provide for a theoretical background of the study of Microeconomics the Theory of Value, production and firm to the students.
2. To give exposure to the advancements in the study of Value, production and firm.

### Specific Course Objectives of Learning

1. To gain clarity in with conceptual and theoretical framework in microeconomics.
2. To discuss about divisions and components of microeconomics.
3. To apply microeconomics concepts for solving macroeconomic problems.
4. To utilize theories in economics for improving the welfare of the society.
5. To prepare the learners as micro planers and micro enterprises as well.

### Specific Course Outcomes

1. Recognizing the behaviour of various economic actors.
2. Examining critically the application of theory and the microeconomic events taking place around us.
3. Applying techniques and tools of microeconomics in real life situations.
4. Evaluating gross root level markets and market structure for effective understanding of market techniques.
5. Implementing the micro level planning.

### UNIT – I THEORY OF DEMAND

(14 hrs)

Cardinal Utility Theory – Ordinal Utility Theory – Revealed Preference Theory – Market Demand – Determinants of market demand function – Elasticity of demand – Applications of Indifference Curve Analysis – Engle Curve analysis – Engle Curve and Income elasticity of demand – Statistical Demand curve – Demand Revenue relationships.

### UNIT – II RECENT DEVELOPMENTS IN THE THEORY OF DEMAND

(12 hrs)

Revision of Demand theorem – Linear Expenditure System – Constants Elasticity Demand Function – Dynamic Demand Function – Lag models – Probabilistic Theory of Demand Neumann – Morgenstern Hypothesis, Friedman – Savage Hypothesis.

### UNIT – III THEORY OF PRODUCTION

(14 hrs)

Production function for single product – Laws of production – Technological progress and Production function – Equilibrium of firm – Isoquants – Expansion path – Optimal Combination of factors of production – Derivation of cost functions from Production function – Production Possibility Curve.

### UNIT – IV COST FUNCTIONS

(12 hrs)

Traditional theory of Costs – Modern Theory of costs – Engineering cost Curve – Economics of scale – Empirical Cost Curves – Derivation of supply function from cost function – Cost Elasticity – Revenue Functions - relevance of cost curves in production decisions.

### UNIT – V THEORY OF FIRM

(12 hrs)

Equilibrium of the firm and industry – Perfect Competition – Equilibrium of firm and industry under Perfect Competition – Applications – Monopoly – equilibrium of the Monopolists – Bilateral Monopoly – price determination – Effects of monopolistic competition-Oligopoly- Product differentiation – Equilibrium under Monopolistic market – Analysis on Selling Cost.

### Text Books

1. Ahuja, H.L (2014) '**Advanced Micro Economic Theory**', Sultan Chand & Co., Delhi.
2. Jhingam M.L., (2014) '**Advanced Economic Theory**', Allied, Madras.
3. Mishan E.J., (1969) '**Welfare Economics: An Assessment**', North Holland, Amsterdam.
4. Koutsoyiannis, A (1979) '**Modern Microeconomics**', Macmillan Press, London.

### References

1. Baumol, W.J. (1982) '**Economic Theory and Operations Analysis**', Prentice Hall of India, Delhi.
2. Ferguson C.E., (1972) '**Principles of Economics**', Oxford & IBH, Calcutta.
3. Gravelle H and Rees R (2004) '**Micro Economics**', Pearson Education, Delhi.
4. Henderson, J.M. and Quandt (1980) '**Micro Economic Theory: A Mathematical Approach**', McGraw Hill, Delhi.
5. Salvatore, Dominic (2012) '**Micro Economic Theory**', Tata McGraw Hill, Delhi.
6. Gregory Mankiv (2016) '**Principles of Microeconomics**', CBS Publishers, Delhi.
7. Sen, A.(1999) '**Microeconomics : Theory and Application**', Oxford University Press, Delhi.

Outcomes	PS01	PS02	PS03	PS04
C01	2	2	2	2
C02	3	2	3	2
C03	3	3	3	2
C04	2	3	3	2
C05	2	3	3	2

## ADVANCED MACROECONOMIC THEORY

Semester: VII  
Course Code: 24ECUC4118

No. of Credits: 4  
No. of Hours: 64

### Objective

To make the students understand the basic macroeconomics concepts and theories for economic growth.

### Specific Course Objective of Learning

1. To understand the basic concepts of national income.
2. To know about the theories of income and employment.
3. To learn the theories of consumption.
4. To study the theoretical knowledge of investment for economy.
5. To gain the knowledge of inflation.

### Specific Course Outcomes

1. Evaluating the accounting of national income for economy.
2. Examining the generation of income and employment of economy growth.
3. Assimilating the consumption for economic growth in a nation.
4. Efficiently using the investment for economic growth.
5. Identifying the inflation problem and control mechanism.

### UNIT-I: MACRO ECONOMICS AND NATIONAL INCOME (14 Hrs.)

Macroeconomics - Definition- Nature- Scope-Importance- Distinction between Micro and Macro Economics- Circular flow of Income- National Income – Concepts and Measurements- National Income Accounting: Social Accounting- Input- Output Accounting – Factors Determining National Income.

### UNIT-II: CLASSICAL AND KEYNESIAN THEORY OF EMPLOYMENT AND INCOME (14 Hrs.)

Concept and Types of Unemployment – Full employment –classical theory of Employment and Income Assumptions – Say's law of market – Wage – Price Flexibility Theory – Keynesian Criticism of Classical Theory- Keynesian Theory of Employment –Aggregate Demand and Aggregate Supply – Effective Demand. Classical Theory of Interest Rate – Neo Classical Theory of Interest Rate – Indeterminacy of Classical, Neo Classical and Keynes's Theory of Interest Rate

### UNIT- III: CONSUMPTION FUNCTION AND SAVING FUNCTION INVESTMENT FUNCTION (14 Hrs.)

Meaning and properties – concepts OF APC and MPC - Keynes's Psychological Law of Consumption - Theories of Consumption Function – Absolute Income Hypothesis – Relative Income Hypothesis – Life Cycle Hypothesis – Permanent Income Hypothesis – Saving function –APS and MPS. Investment – meaning – types – determinants – Marginal efficiency of capital – Factors affecting MEC – Principle of Acceleration – Multiplier – Meaning – Concepts – Assumptions – Impotence - Derivations – Working – Leakage – Super Multiplier.

### UNIT –IV:THE IS – LM MODEL AND BUSINESS CYCLE (12 Hrs.)

Product Market Equilibrium: Derivation, Slope, Shifting of IS Curve – Money Market Equilibrium: Derivation, slope and shift of LM curve – general equilibrium of product and money market- changes in the equilibrium- business cycle – meaning – characteristics- types and phases – models of business cycle- theories of business cycle: Samuelson – Hicks –Kaldor.

### UNIT – V: INFLATION AND EXCHANGE RATE (10 Hrs.)

Meaning – Types – Causes Of Inflation - Inflationary Gap – Demand Pull And Cost Push Inflation – Measures To Control Inflation – Phillips Curve – Deflation – Stagflation – Rational Expectation Hypothesis. Meaning – Types – Determination of Equilibrium Exchange Rate – Theories of Exchange Rate: Mint Parity Theory – Purchasing Power Parity Theory.

### Text Books

1. David Romer (1996), Advanced Macroeconomics, McGraw-Hill, New Delhi.
2. Dwivedi D.N. (2010), 'Macro Economics: Theory and Policy', Tata McGraw Hill, Delhi.
3. Gregory Mankiw (2016), 'Macroeconomics', CBS Publishers, Delhi.
4. Richard T.Froyen (2013), Macroeconomics: Theories and Policies, Pearson Education, New Delhi.

### References

1. Abel A.B and Bernanke B.S., (2001), 'Macroeconomics', Pearson Education, Delhi.
2. Ackley G. (1978), 'Macroeconomics: Theory and Policy', Macmillian, New York.
3. Branson W.A. (1989), 'Macroeconomic Theory and Policy', Harper and Row, New York.
4. Dornbusch, Fischer and Startz (2010), 'Macroeconomics', McGraw Hill, New Delhi,
5. Olivier Blanchard (2009), 'Macroeconomics', Pearson Education, Inc, New Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	2	2	3	3
CO2	3	3	3	3	2
CO3	3	3	2	3	2
CO4	3	2	2	3	3
CO5	3	3	3	3	2

## FINANCIAL INSTITUTIONS AND MARKETS

Semester : VII  
Course Code : 24ECUC4119

No. of Credits: 4  
No. of Hours: 64

### Objectives

1. To impart the structure of financial system and markets to the students.

### Specific Course Objective of Learning

1. To understand financial Institutions and markets.
2. To examine the functions of non-banking financial intermediaries.
3. To analyze the working of development and specialized banks.
4. To understand the functions and management of financial markets.
5. To comprehend role and functions of international financial markets.

### Specific Course Outcomes

1. Appraising the role of financial institutions and markets in the context of Globalization.
2. Assessing financial sector reforms in India.
3. Evaluating the growth performance of financial markets.
4. Explaining nexus of international financial markets, and development.

### UNIT – I: NATURE AND ROLE OF FINANCIAL SYSTEM (12 hrs)

Money and Finance – Financial Intermediation and Financial Intermediaries – The Structure of the Financial System- Functions of the Financial Sector - Financial System and Economic Development –Risk and Financial Assets, Types of Risk, Return on Assets, Risk- Return Trade off.

### UNIT –II : NON – BANKING FINANCIAL INTERMEDIARIES (12 hrs)

Definition and Types of Non – Bank Financial Institutions: Their Growth and Impact on India's Economic Development - Measures Taken to Control their Operations.

### UNIT – III: DEVELOPMENT BANKS (12 hrs)

Development Banks – IFCl, IDBI, NHB, SIDBI, EXIM, NABARD, Co-operative Banks - Role and Functions of Investment Banking and Merchant Banking.

### UNIT – IV: FINANCIAL MARKETS (14 hrs)

Role and Structure of Money Market and Capital Market - Markets for Derivatives: Futures and Options, and other Derivatives: Types - Uses and Pricing of Derivatives – Primary and Secondary Market for Securities; SEBI: its role in Capital Market in India; IRDA and its Role.

### UNIT – V: INTERNATIONAL FINANCIAL MARKETS (14 hrs)

Organization and Participants – Exchange Rates – Devaluation and Depreciation – International Financial Flows,–Reforms in International Monetary System for Developing Countries – Lending Operation of World Bank and its Affiliates – Working of IDA and IFC. Asian Development Bank and its Lending Activities; Euro – Dollar and Euro- Currency Markets: their Developmental Role and Regulation at the International Level.

### Text Books

1. Bhole, L.M.(1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
2. Bhole .L.M.(2000), Indian Financial System, Chugh Publications, Allahabad

### References

1. Edminster, R.O.(1986), Financial Institutions, Markets and Management, McGraw Hill, New Delhi
2. Goldsmith, R.W.(1969), Financial Structure and Development, Yale, London
3. . Hanson, J.A. and S.Karthuria (Eds.)(1999), India: A Financial Sector for the Twenty – First Century, Oxford University Press, New Delhi

Outcomes	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2
CO2	3	3	3	2
CO3	3	2	3	2
CO4	3	2	2	1

## DEVELOPMENT AND SOCIAL DYNAMISM

**Semester: VII**  
**Course Code: 24ECUB4103**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objective

To acquire knowledge about the development and social dynamism.

### Specific course objectives of learning

1. Students would have learned social dynamism of development.
2. The students understand various conceptual framework on social dynamism.
3. To examine the social responsibility.
4. To know about the issues in development and social dynamism.
5. To understand the related policy issues on development and social dynamism.

### Specific Course Outcomes

1. Integrating the relationship between developments of social dynamism.
2. Rendering knowledge on theories and concept on social dynamism.
3. Recognizing the social responsibility.
4. Gaining knowledge on challenges in development of social dynamism.
5. Designing he policy framework for social dynamism of development.

### UNIT - I INTRODUCTION

(12 hrs)

Development: Meaning – Indicators - Determinants – Social Dynamism: Definition– Types - Importance – Relationship between Development and Social Dynamism.

### UNIT II CONCEPTS AND THEORIES

(12 hrs)

Social Dynamism: Culture, Leadership, Power and Social Relations within Households, Community and Across Societal Groups – Community Action Theory and Social Network Theory.

### UNIT – III SOCIAL RESPONSIBILITY

(12 hrs)

Objectives - Scope - Need and Significance –Environmental Aspects of Social Responsibility – Sustainable Development - Corporate Social Responsibility and Development.

### UNIT – IV CHALLENGES OF DEVELOPMENT AND SOCIAL DYNAMISM

(14 hrs)

Unemployment – Poverty – Social Conflicts – Political Flux–Social Evil Habits: Alcoholism, Drug Addiction and Crimes - Social Disadvantages and Impact on Economic Development – Remedial Measures.

### UNIT - V POLICIES FOR DEVELOPMENT AND SOCIAL DYNAMISM

(14 hrs)

Health Care, Education, Family welfare Service – Youth Development - Rural Development Programmes – Objectives – Strategies – MGNREGS – NRHM – SGSY And PMRY.

### Text Books

1. Appadurai and Arjun (1997), Modernity At Large: Cultural Dimensions of Globalization. Oxford University Press, New Delhi.
2. De Souza, P.R (2000), Contemporary India-Transitions, Sage publication, New Delhi.

### Reference Books

1. Alexander K.C. and Kumaran, K.P (1992), Culture and Development, Sage publication, New Delhi.
2. Pais and Richard (2010), Social Problems in India, Mangala Publications, Mangalore.

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	2	2	2	3	2
C02	3	2	3	3	3
C03	2	2	2	3	3
C04	3	3	3	2	3
C05	3	3	3	2	3



**PARTICIPATORY LEARNING METHODS**

**Semester : VII**  
**Course Code : 24ECUB4104**

**No. of Credits: 4**  
**No. of Hours: 64**

**Objective**

- To enable the students for understanding a novel method for data collection

**Specific Course Objective of learning**

- To understand the dimensions of participation and the top down approach.
- To internalize the concept principles and features of PRA.
- To gain skills in mapping and trend exercises in PRA.
- To gets skills in conducting ranking and relational exercises.
- To get exposure to Participatory modeling and latest developments in PRA.

**Specific Course Outcomes**

- Understand the dimensions of participation.
- Know and internalize the principles of PRA.
- Become able to conduct mapping and trend exercises in PRA.
- Acquire skills in conducting ranking and relational exercises.
- Get exposed to Participatory modeling and latest developments in PRA

**(12hrs)**

**UNIT - I:** Participation meaning - why Participation? Ladder of People's Participation - Advantages and disadvantages of Participation -Survey - Rural Development Tourism

**(12hrs)**

**UNIT - II:** PRA Genesis and Sources of PRA -- definition and principles PRA - Features and limitation of PRA- Dos and Don'ts of PRA.

**(14hrs)**

**UNIT - III:** Methods of PRA: : Transect- DIY - social mappings - time line - trend analysis - mobility map- Resource mapping - seasonal calendar - Venn diagram.

**(14hrs)**

**UNIT - IV:** Methods of PRA - Daily schedule/ routine- Flow diagram- Wealth Ranking - Pair wise ranking - Matrix ranking - problem analysis, Impact Digram.

**(12 hrs)**

**UNIT - V:** Participatory modeling - meaning - Participants - Procedure - Application - Latest developments in PRA.

**Text Books**

- Narayanasamy.N (2013) '**Participatory Rural Appraisal: Text and Cases**', Sage Publications, Delhi.
- Chambers Robert( 1992)' **Rural Appraisal: rapid, relaxed and participatory** ' Institute of Development Studies, University of Sussex, The Brighton.

**Reference Books**

- Luigi Cavestro (2010) '**P.R.A.Participatory Rural Appraisal Concepts Methodologies and Techniques**'Universita' DelgliStudi di Padova Facolta' Agraria, Dipartimentoterritorio E SistemiAgro-Forestali.
- World Bank (2003) '**Participatory Rural Appraisal**', Washington.
- Simon Adebo (2000) '**Training Manual on Participatory Rural Appraisal**'.
- Peace Corps (2005) '**PACA - Using Participatory Analysis for Community Action**', Idea Book, Information Collection and Exchange Publication no.M0086.

<b>Outcomes</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>
<b>CO1</b>	3	3	3	3
<b>CO2</b>	2	2	2	2
<b>CO3</b>	3	3	2	1
<b>CO4</b>	3	2	3	2

## INTERNATIONAL TRADE AND FINANCE

**Semester : VIII**  
**Course Code : 24ECUC4220**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objective

- To impart the principles and theories of international trade to the students.

### Specific Course Objectives of Learning

- To understand theories of international trade.
- To examine the gains from trade.
- To analyze the components of balance of payment.
- To narrate the functions and management of foreign exchange market.
- To comprehend the role and functions of international financial institutions.

### Specific Course Outcomes

- Applying theories of international trade in the context of globalization.
- Assessing the role of tariffs and quotas in International Trade.
- Examining the balance of payments.
- Evaluating the theories of exchange and foreign exchange management.
- Narrating the role and functions of International Financial Institutions.

### UNIT – I: THEORIES OF INTERNATIONAL TRADE (14 hrs)

Mercantilist View on Trade – Absolute Advantage – Comparative Cost Advantage – Reciprocal Demand – Opportunity Cost Theory – Factor Endowment Theory – Leontief Paradox – Stolper–Samuelson Theorem – Ricardian Theory – Concept and Policy Implications of Immigrant Growth – Causes of Emergence and Measurement of Intra–Industry Trade and Its Impact on Developing Economies.

### UNIT – II: MEASUREMENT OF GAINS AND THEORY OF INTERVENTION (12 hrs)

Measurement of Gains from Trade and their Distribution: Concept of Terms of Trade – Uses – Limitations – Theory of Interventions – Tariffs, Quotas and Non-Tariff Barriers – Effects of Tariffs and Quotas – Partial and General Equilibrium Analysis – Optimum Rates of Tariffs.

### UNIT – III: BALANCE OF PAYMENTS (14 hrs)

Meaning - Balance of Trade and Balance of Payments - Components of BOP – Causes of Disequilibrium in BOP - Adjustment Mechanism – Under Gold Standard – Adjustment Under Flexible Exchange Rate (Price effect)- Foreign Trade Multiplier - The Elasticity Approach – The Monetary and Fiscal Approaches.

### UNIT - IV: THEORIES OF FOREIGN EXCHANGE (14 hrs)

Foreign Exchange Market – Functions - Exchange Rate – Types of Exchange Rate - Theory of Exchange Rate: Purchasing Power Parity Theory- Mint Parity Theory - Modern Theory of Exchange Rate - Determination of Exchange Rates - Exchange Control ; Objectives, Methods and Forms – Foreign Exchange Management Act (FEMA).

### UNIT - V: INTERNATIONAL FINANCIAL INSTITUTIONS (10 hrs)

IMF and IBRD – UNCTAD – GATT - WTO - ADB ITC - IFC - EU – SAARC – ASEAN - BRICS - G8 - G20 – OPEC.

### Text Books:

- Bosodersten and Geoffrey Read, (2013) 'International Economics', Macmillan Press Ltd, Hampshire, London.
- Cherunilam, Francis (2004) '**International Economics**', Tata McGraw Hill Publishing Company Limited, Delhi.
- Mannur, H.G, (2010), '**International Economics**', Vikas Publishing House, Delhi.
- Rana K.C and Verma K.N. (2008) 'International Economics', Vishal Publishing Company, Jalandhar, India.
- Salvatore D (2014) 'International Economics', John Wiley & Sons, Singapore.

### References

- Bhagwati. J (1981), International Trade, The MIT Press; second edition.
- Paul Krugman, Maurice Obstfeld and Marc Melitz (2018) 'International Economics: Theory and Policy', Pearson India
- Education Services Limited, 11th edition, United Kingdom.
- Mundell, R., (1968) '**International Economics**', Macmillan, New York.

Outcomes	PS01	PS02	PS03	PS04
CO1	3	2	3	2
CO2	3	2	2	2
CO3	3	2	2	2
CO4	3	2	2	2
CO5	3	2	3	2

## QUANTITATIVE TECHNIQUES IN ECONOMICS

Semester : VIII  
Course Code : 24ECUC4221

No. of Credits: 4  
No. of Hours : 64

### Objective

1. To train the students in the core areas of Quantitative Techniques and their application in economic analysis

### Specific Course Objectives of learning

1. To gain skills in the core concepts of quantitative techniques.
2. To take a rigorous, quantitative approach to the economic problems.
3. To apply quantitative techniques in economic research.
4. To demonstrate Quantitative Techniques in solving economic issues.

### Specific Course Outcomes

1. Applying Mathematical models in economics
2. Identifying and simplifying complex issues.
3. Designing and conducting experiments, analyzing and interpreting data
4. Projecting the economic growth and development.
5. Utilizing appropriate technical tools for economic planning

### UNIT-I: ELEMENTS OF ALGEBRA AND GEOMETRY

(12 hrs)

Relations and Functions: Functions with One and Two Variables – Straight Line – Parabola – Rectangular Hyperbola – Exponential and Logarithmic – Concave and Convex Functions. Equations: Solutions of Linear and Quadratic Equations.

### UNIT – II DIFFERENTIATION AND INTEGRATION

(12 hrs)

Differentiation – Meaning – Rules of differentiation – Partial Derivatives – Total Derivatives – Maxima and Minima – one variable, Two or More variables -Higher order differentiation – Application of derivatives in economics – profit maximization, cost minimization and sales maximization - consumer behavior, Producer behavior. Integration – meaning – Rules of Integration- Applications of integration in Economics- Consumer and Producer surplus

### UNIT – III MARKET EQUILIBRIUM AND APPLICATION OF ECONOMICS

(10 Hrs)

Market Demand and Supply Functions- Commodity and factor market Equilibrium - Average and Marginal Cost – Average and Marginal Revenues –Productivity and Equilibrium - Profit and Sales Maximization.

### UNIT – IV THEORY OF PRODUCTION AND LINER PROGRAMMING

(14 hrs)

Production function – forms of production function - Homogeneous Function and their Properties – Euler’s Theorem – Application of Cobb-Douglas production function – Properties -, C.E.S. and Frontier Production Function and their Properties – Linear Programming – Formation of linear programming - Graphical and Simplex method

### UNIT – V INPUT – OUTPUT ANALYSIS AND GAME THEORY

(14 hrs)

Input-Output Analysis – Open and Closed model - Static and Dynamic Models – Game Theory - Strategies and values – Saddle Point Pure and Mixed strategy – Graphical solution - Simple Applications.

### Text Books

1. Allen, R.G.D. (1974) ‘**Mathematical Analysis for Economists**’, Macmillan Press and ELBS, London.
2. Baumol, W.J. (1984) ‘**Economic Theory and Operations Analysis**’, Prentice Hall, Englewood Cliffs, New Jersey.
3. Chiang, A.C. (1986) ‘**Fundamental Methods of Mathematical Economics**’, McGraw Hill, New York.
4. Hoog, R.V. and A.T.Craig (1970) ‘**Introduction in Mathematical Statistics**’, Macmillan Publishing Co., New York.
5. Monga, G.S. (1972) ‘**Mathematics and Statistics for Economists**’, Vikas Publishing House, Delhi.

### References

1. Agarwal, H.S (1977) ‘**Introduction to Econometrics and Mathematical Economics**’, Laksminarain Agarwal Educational Publishers, Agra.
2. Hadley, G. (1962) ‘**Linear Programming**’, Addison Wesley Publishing Co., Massachusetts.
3. Mathur, P.N. and R.Bharadwaj (Eds) (1967) ‘**Economic Analysis in Input-Output Research**’, Input-Output Research Association of India, Pune.
4. Yamane, Taro (1975) ‘**Mathematics for Economists**’, Prentice Hall of India, Delhi.
5. Metha B.C. (1987) **Mathematical Economics: Microeconomics Models**, Sultan Chand and Sons, New Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4
CO1	3	3	3	3
CO2	3	3	2	3
CO3	3	3	2	3
CO4	3	2	2	3
CO5	3	2	2	3

**THE DEPARTMENT OF ECONOMICS OFFERS THE FOLLOWING MINOR AND MULTIDISCIPLINARY COURSES TO OTHER DEPARTMENTS**

**BUSINESS ECONOMICS**

**Semester: I**  
**Course Code: 24ECUB1101**

**No. of Credits: 4**  
**No. of Hours: 64**

**Objectives:**

1. To enable the students to understand the basic concepts of economics and its application in day-to-day-life.

**Specific Course Objective**

1. To learn the definition and principles of Economics.
2. To examine the theory of demand and supply.
3. To establish the functional relationship in production and cost theories.
4. To get exposed to the various market structure.
5. To analyze the various methods of national income and Macroeconomic Policy.

**Specific Course Outcomes**

1. Assimilating the fundamental concepts of economics.
2. Gaining knowledge on supply and demand to determine changes in market equilibrium.
3. Analyzing the production cost and return to scale.
4. Understanding the price determination of factors on various market structure.
5. Highlighting the concepts of national income and macroeconomic policy.

**UNIT I: INTRODUCTION TO ECONOMICS**

**(10 hrs)**

Definitions and scope of Economics: Wealth, Welfare, Scarcity and Growth – Methods of Economic Analysis - Approaches to Economic Analysis: Micro and Macro Economics – Basic Concepts of Economics.

**UNIT II: DEMAND AND SUPPLY**

**(12 hrs.)**

Utility Theory: Law of Diminishing Marginal Utility – Law of Equi-Marginal Utility - Consumer's Surplus - Indifference Curve Analysis – Demand Analysis – Elasticity of Demand – Supply Analysis – Elasticity supply.

**UNIT III: PRODUCTION**

**(14 hrs.)**

Cost and Revenue Curves – Break-Even Analysis – Production Function - Types – Law of Variable Proportions – Laws of Return to Scale.

**UNIT IV: MARKET STRUCTURES**

**(14 hrs.)**

Market – Meaning – Characteristics – Market Structure and Price Determination: Perfect Competition – Monopoly – Monopolistic and Oligopoly.

**UNIT V: NATIONAL INCOME AND MACRO ECONOMIC POLICY**

**(14 hrs.)**

Definition, Concept, Methods of Measuring National Income – Business Cycle – Inflation: Meaning, Types, Causes, Measures – Deflation – Monetary Policy – Fiscal Policy.

**Text Books**

1. Ruddar Datt & K.P.M.Sundharam–Indian Economy - S.Chand &Company Ltd, New Delhi, 2016.
2. Puri V.K and Misra S.K: Indian Economy, Himalaya, Mumbai, 2014.
3. Gregory Mankiw (2016) 'Principles of Microeconomics, CBS Publishers, Delhi.

**Reference Books:**

1. Uma Kapila (Ed.) (2017-18), Indian Economy Since Independence, Academic Foundation, New Delhi, 28th Edition.
2. Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,
3. Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
4. Dhingra, I C., (2014), Indian Economy, Sultan Chand & Sons, New Delhi.
5. Agarwal.A.N. (2012), Indian Economy, Wiley Eastern Ltd, New Delhi.
6. Government of India, Economic Survey, (various years).

## INDIAN ECONOMIC DEVELOPMENT

**Semester: II**  
**Course Code: 24ECUB1102**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objectives:

1. To facilitate the students to understand different sectors, development and planning of Indian Economy.

### Specific Course Objective

1. To understand the nature and scope of Indian Economic Development.
2. To know about planning and development in India.
3. To understand the role of agriculture sector in Economic Development.
4. To highlight the importance of industrial and service sectors development in India.
5. To learn the importance of foreign trade and economic policy.

### Specific Course Outcomes

1. Becoming clear in the basic concepts of growth and development.
2. Realizing the importance of effective planning and gaining skills to evaluate planning.
3. Examining the contribution of different sectors of economy.
4. Analyzing the relationship between the importance of foreign trade and economic policy in India.

### UNIT I: NATURE AND SCOPE OF INDIAN ECONOMY

**(14 hrs)**

Underdevelopment – Meaning – Characteristic of Indian Economy – Economic Development and Growth – Determinants and Obstacles of Economic Development – India as a mixed Economy – Sustainable Development.

### UNIT II: PLANNING AND DEVELOPMENT

**(14 HRS)**

Definition of Planning – Objectives – Planning Commission - Five Year Plans of India – Achievements and Failures of Economic Planning in India - NITI Aayog – Structure - Objectives and Role.

### UNIT III: AGRICULTURE AND ECONOMIC

**(12 hrs)**

Role of Agriculture in Indian Economy - Production and Productivity - Green Revolution and Organic Farming and Sustainable Development – Problems of Indian Agriculture – Agriculture marketing and Agriculture Finance.

### UNIT IV: INDUSTRIAL AND SERVICE SECTORS

**(12 hrs)**

Industrialization- Meaning – Problems – Role of Industrialization – Industrial Finance – Industrial Policy - Industrial Sickness – Trade Union – Service Sector - Broader Classification – Contribution to Economic Development.

### UNIT V: FOREIGN TRADE AND ECONOMIC POLICY

**(12 hrs)**

International Trade and Development - Foreign Direct Investment (FDI) – New Economic Policy (LPG) - World Trade Organization (WTO) – Special Economic Zones (SEZs) – Demonetization – Goods and Services Taxes.

### Text Books

1. Ruddar Datt & K.P.M.Sundharam–Indian Economy - S.Chand &Company Ltd, New Delhi, 2016.
2. Puri V.K and Misra S.K: Indian Economy, Himalaya, Mumbai, 2014.

### Reference Books:

1. Uma Kapila (Ed.) (2017-18), Indian Economy since Independence, Academic Foundation, New Delhi, 28th Edition.
2. Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,
3. Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
4. Dhingra, I C., (2014), Indian Economy, Sultan Chand & Sons, New Delhi.
5. Joshi, V. and I.M.D. Little (1996), “India’s Economic Reforms: 1991-2001”, Oxford University Press, New Delhi.
6. Agarwal.A.N. (1990), Indian Economy, Wiley Eastern Ltd, New Delhi.
7. Government of India, Economic Survey, (various years).

## ELEMENTS OF ECONOMICS

**Semester : III**  
**Course Code : 24ECUB2101**

**No .of Credits: 4**  
**No. of Hours: 64**

### Objective

To enable the students understand the basic concepts and theories of economics.

### Specific Course Objectives of Learning

1. To understand the basic concepts of economics.
2. To gain the knowledge on decision making process of economics actors.
3. To know the knowledge of production and market structure.
4. To learn the macroeconomic indicators of the country.
5. To study the macroeconomic policies for economic development of a nation.

### Specific Course Outcomes

1. Explaining the basic concepts of economics.
2. Analyzing the consumer behaviour.
3. Understanding the knowledge of production and marketing strategies.
4. Applying the macroeconomic indicators of the country.
5. Understanding the macroeconomic policies for an economy.

### UNIT- I: INTRODUCTION OF ECONOMICS (10 hrs)

Definitions of Economics: Wealth, Welfare, Scarcity and Growth – Distinction between Microeconomics and Macroeconomics – Basic Concepts of Economics – Production Possibility curve.

### UNIT- II: CONSUMER BEHAVIOUR (14 hrs)

Utility Theory: Law of Diminishing Marginal Utility – Law of Equi-Marginal utility – Consumer's Surplus – Indifference Curve – Demand analysis – Elasticity of Demand – Supply analysis.

### UNIT- III: PRODUCTION FUNCTION AND MARKET STRUCTURE (14 hrs)

Production Function: Meaning – Law of Variable Proportion – Laws of Returns to Scale – Cost Function – Revenue Function – Market Structure: Perfect Market – Monopoly – Monopolistic and Oligopoly.

### UNIT- IV: NATIONAL INCOME (14 hrs)

Circular Flow of Income – Concepts and Measurements of National Income – Aggregate Demand and Aggregate Supply – Effective Demand – Consumption Function – Investment Function – Multiplier – Acceleration – Super Multiplier.

### UNIT - V: MACROECONOMIC POLICY (12 hrs)

Business Cycle – Meaning of Inflation – Inflationary Gap – Types of Inflation – Causes of Inflation – Measures to Control Inflation – Deflation – Monetary Policy – Fiscal Policy – Balance of Payments – Exchange Rate.

### Text Book

1. Gregory Mankiw (2016) 'Principles of Microeconomics, CBS Publishers, Delhi.
2. Gregory Mankiw (2016) 'Macroeconomics', CBS Publishers, Delhi.
3. Koutsoyiannis A (1979) 'Modern Microeconomics', Macmillan Press, London.
4. Salvatore Dominic (2012) 'Micro Economic Theory', Tata McGraw Hill, Delhi.

### References

1. Dwivedi D.N., (2010), 'Macro Economics: Theory and Policy', Tata McGraw Hill, Delhi.
2. Gravelle H and R. Rees (2004, Microeconomics, Pearson Education, 3rd Edition.
3. Richard T. Froyen (2013) 'Macroeconomics: Theories and Policies, Pearson Education, New Delhi.
4. Sen A. (1999), Microeconomics: Theory and Application, Oxford University Press, Delhi.
5. Varian H.R. (2000), Microeconomic Analysis, W.W. Norton, New York.

# INDIAN ECONOMIC DEVELOPMENT

**Semester: IV**  
**Course Code: 24ECUB2202**

**No. of Credits: 4**  
**No. of Hours: 64**

**Objective:**

1. To make students acquire knowledge about Indian Economic Development and its dynamics.

**Specific Course Objective**

1. To understand the nature and scope of Indian Economy.
2. To know about planning and development in India.
3. To understand the role of agriculture sector in Economic Development.
4. To highlight the importance of industrial and service sectors development in India.
5. To learn the importance of foreign trade and economic policy.

**Specific Course Outcomes**

1. Recognizing the Indian Economic problems.
2. Realizing the importance of effective planning and gaining skills to evaluate planning.
3. Assessing the Agricultural Economy in India.
4. Examining the Indian Industrial Development.
5. Analyzing the relationship between the importance of foreign trade and economic policy in India.

**UNIT I: NATURE AND SCOPE OF INDIAN ECONOMY (12 hrs.)**

Underdevelopment – Meaning – Characteristic of Indian Economy – Economic Development and Growth – Determinants and Obstacles of Economic Development – India as a mixed Economy – Sustainable Development.

**UNIT II: PLANNING AND DEVELOPMENT (12 hrs.)**

Planning: Definition – Objectives – Planning Commission - Five Year Plans of India – Achievements and Failures of Economic Planning in India - NITI Aayog – Structure - Objectives and Role.

**UNIT III: AGRICULTURE AND ECONOMIC DEVELOPMENT (14 hrs.)**

Role and Status of Agriculture in Indian Economy- Production and Productivity - Green Revolution and Organic Farming – Problems of Indian Agriculture –Agriculture Marketing and Agriculture Finance.

**UNIT IV: INDUSTRIAL AND SERVICE SECTORS (12 hrs.)**

Industrialization- Meaning – Problems – Role of Industrialization– Industrial Finance- Service Sector - Broader Classification – Contribution to Economic Development – Problems and Prospects –Industrial Sickness – Trade Union - Industrial Finance and Policy.

**UNIT V: FOREIGN TRADE AND ECONOMIC POLICY (14 hrs.)**

International Trade and Development - Foreign Direct Investment (FDI) - World Trade Organization (WTO) – SAARC – BRICS – G20– New Economic Policy (LPG) - Special Economic Zones (SEZs) – Demonetization – Goods and Services Taxes.

**Text Books**

1. Rudder Datt & K.P.M.Sundharam–Indian Economy - S.Chand &Company Ltd, New Delhi, 2016.
2. Puri V.K and Misra S.K: Indian Economy, Himalaya, Mumbai, 2014.

**Reference Books:**

1. Uma Kapila (Ed.) (2017-18), Indian Economy since Independence, Academic Foundation, New Delhi, 28th Edition.
2. Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,
3. Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
4. Dhingra, I C., (2014), Indian Economy, Sultan Chand & Sons, New Delhi.
5. Joshi, V. and I.M.D. Little (1996), "India's Economic Reforms: 1991-2001", Oxford University Press, New Delhi.
6. Agarwal.A.N. (1990), Indian Economy, Wiley Eastern Ltd, New Delhi.
7. Economic Survey, Government of India, (various years).

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	2	2
CO2	3	3	3	2	2
CO3	2	2	2	3	3
CO4	2	3	3	3	3
CO5	2	2	2	3	3

## ENVIRONMENTAL ECONOMICS

**Semester : V**  
**Course Code : 24ECUB3103**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objective

1. To provide theoretical orientation to the students in the area of Environmental Economics.

### Specific Course objectives of Learning

1. To gain clarity in the concepts in environmental economics.
2. To understand anatomy of environmental resources and economic development.
3. To identify global environmental problems and their impact on society.
4. To become conversant with the environmental regulations.

### Specific Course Outcomes

1. Gaining knowledge of environmental economics.
2. Understanding the nexus between environmental resources and population growth
3. Studying global environmental issues and their impact on society
4. Assessing the environmental pollution using valuation technique of environmental resources
5. Narrating the environmental regulation for creating environmental ethics.

### **UNIT - I: THEORY AND CONCEPT (12 hrs)**

Basics of Environment – Components and Functions – Environment and Development - Ecology and it's types – Definition, Nature and Scope of Economics - Basic Theories – Market failure and Externality.

### **UNIT - II: ENVIRONMENTAL AND ECONOMICS (14 hrs)**

Environment – Economy linkage, Consumption, Production and Wastes linkage – Population and Environment linkages – Environmental as Public good – Slums and Urbanizations.

### **UNIT - III: ENVIRONMENTAL PROBLEMS (14 hrs)**

Environmental Problems – Air pollution – water pollution – noise pollution – Land pollution Causes and effects - Global Warming, Climate Change, Ozone Layer Depletion – Global Environmental issues and problems - Strategies.

### **UNIT - IV: POLICY INSTRUMENTS FOR ENVIRONMENT (12 hrs)**

Policy instruments for Environmental Protection - Laws, Acts, Rules and Regulations – Sustainable development, Objectives, Approaches.

### **UNIT - V: POLICY MEASURES FOR PROTECTING ENVIRONMENT (12 hrs)**

Environmental Policy – Functions of Ministry of Environment Forests and Climate Change – Function of State and Central Pollution Control Boards.

### Text Books

1. Dutt, A., Dutta, S and Pandey (2005) 'Environmental Economics' APH Publishing, Delhi.
2. Anil Agarwal (1997) "The Challenges of the Balance: Environmental Economics in India" New Delhi, CSE.
3. Karpagam. M (1993) 'Environmental Economics', Sterling Publishers, Delhi.
4. Sankar. U (2000) 'Environment Economics', Oxford University Press, Delhi.
5. Sankaran. S (1994), 'Environmental Economics', Margham, Madras
6. Varadarajan S. and Elangovan S. (1992) 'Environmental Economics', SPEED, Madurai.

### References

1. Bhattacharya N. Rabindra (Ed.) (2001) '**Environmental Economics: An Indian Perspective**', Oxford University Press, Delhi.
2. Rajalakshmi. N and Dhulasi Birundha (1994) '**Economic Analysis of Environment**', Allied Publishers, Ahmedabad.
3. Singh G.N (Ed.) (1991) '**Environmental Economics**', Mittal Publications, Delhi.
4. Tom Tietenberg (2003) '**Environmental and Natural Resource Economics**', Pearson, Education', Delhi.
5. Sir Partha Dasgupta (2014) "Environment Development Economics" edited by Scott Barrett, Karl Goran Maler, and Eric S.Maskin Published by Oxford University press, United Kingdom.
6. World Bank, World Development Report Various years, New Delhi, Published by Oxford University press, United Kingdom.



## ENERGY ECONOMICS

**Semester : VI**  
**Course Code : 24ECUB3204**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objective

1. To help the students to understand the basics of energy economics.

### Specific Course Objectives of learning

1. To understand the dynamics of natural resources and energy.
2. To study relationship between energy and development.
3. To examine nexus between energy and environment.
4. To gain skills energy planning and management
5. To comprehend the energy profile of India.

### Specific Course Outcomes

1. Understanding the concept of energy economics.
2. Learning the nexus between energy consumption and economic development.
3. Comparing and contrast between energy and environment
4. Realizing the significance of energy conservation and management.
5. Gaining skills to compile the profile of various energy sources in India.

### UNIT – I: INTRODUCTION TO ENERGY ECONOMICS

**(10 hrs)**

Energy Resources – Sources of energy and Classification – Properties and Forms of Energy – Energy Economics – Origin, Nature and Scope.

### UNIT – II: ENERGY AND DEVELOPMENT

**(14 hrs)**

Energy and Economic Development – Energy Indicators – Energy Intensity and Energy Elasticity – National and International Comparison – Per capita Energy and per capita Income.

### UNIT – III: ENERGY AND ENVIRONMENT

**(12 hrs)**

Energy Nexus Environment Crisis – Causes and Consequences – Remedial Measures – Impact of Energy Consumption and production on Environment - Energy policy and environmental Quality.

### UNIT – IV: ENERGY PLANNING AND MANAGEMENT

**(14 hrs)**

Energy Planning and Energy conservation – Meaning, Objectives and Importance- Energy management – Objectives and Importance – Energy Conservation – Issues and Challenges.

### UNIT – V: INDIAN ENERGY SECTOR

**(14 hrs)**

Indian Energy Sector – Energy Supply and Demand in India – Renewable energy Programmes in India- Green Energy, Scope, Opportunities and Barriers.

### Text Books

1. Agarwal, S.K. (1985) '**Environment and Natural Resources Economics**', Scott Foresman & Co., London.
2. Common, M. (1985) '**Environment and Resource Economics**', London.
3. R. Perman, Y. Ma, J. Mc Gilvray, M. Common (2003) '**Natural Resource and Environmental Economics**' Pearson, 3rd edition.

### References

1. Agarwal, M.C. and Monga, J.R. (1992) '**Economic and Commercial Geography**', National Publishing House, Delhi
2. Anandan, M. and Ramaswamy, S., (2016) '**Oil Economics**' MJP Publishers, Delhi.
3. Kneese. A.V and Sweeny, J.L, eds, (1993) '**Handbook of Natural Resource and Energy Economics**', North Holland, Amsterdam, pp.61-124.
4. Munasinghe, M. and Meier, P (1993) '**Energy Policy and Modelling**', Cambridge University Press, UK
5. Ramaswamy. S. and Anandan, M., (2019) '**Energy Development Issues and Policies**' MJP Publishers, Delhi.
6. Richard Eden (1981) '**Energy Economics – Growth, Resources and Policies**', Cambridge University Press, London.
7. TERI (2019) '**Teri Energy Data Directory and Year Book 2018 – 19**', The Energy Research Institute, Delhi.

## ECONOMICS OF GROWTH AND DEVELOPMENT

Semester : VII  
Course Code : 24ECUB4105

No .of Credits: 4  
No. of Hours: 64

### Objective

1. To help the students attain knowledge on mainstream theories of development and growth.

### Specific Course Objectives of Learning

1. To understand the determinants of Economic Growth and Techniques of Development;
2. To enrich knowledge on theories of dualistic development.
3. To develop a mental framework on growth and development models.
4. To understand theories of balanced growth; and
5. To gain skills in examining the International and Domestic Issues.

### Specific Course Outcomes

1. Explaining the determinants of economic development.
2. Analyzing the models of dualistic development.
3. Applying the modern growth theories.
4. Understanding the issues of Balanced Growth.
5. Examining the issues of economic development.

### UNIT- I: MEANING OF DEVELOPMENT AND RELEVANT CONCEPTS (12 hrs)

Distinction between growth and development, human development, Human Development Index, Gender Development Index, Sen's capabilities approach, environmental sustainability and development, Market and State as agencies of development.

### UNIT –II: CLASSICAL THEORIES OF DEVELOPMENT (14 hrs)

Adam Smith, Ricardo, Marx, Schumpeter, Rostow's stages of growth, Harrod-Domar growth model, Structural change and Lewis' model of unlimited supplies of labour, Solow's growth theory.

### UNIT – III: CONTEMPORARY MODELS OF DEVELOPMENT AND UNDERDEVELOPMENT (14 hrs)

Theories of endogenous growth with special reference to Romer's model, underdevelopment as coordination failure, multiple equilibria, the big push theory and Lebenscence Theory of Critical Minimum Efforts.

### UNIT – IV: POVERTY, INEQUALITY AND DEVELOPMENT (12 hrs)

Measurement of poverty – absolute and relative, Head-Count Index and Poverty Gap Indices, policy options for alleviation of poverty, measurement of income inequality, economic growth and income inequality – Kuznet's inverted Hypothesis, impact of inequality on development.

### UNIT – V: INTERNATIONAL ASPECTS OF DEVELOPMENT (12 hrs)

Trade strategies for development inward looking and outward looking, financing of balance of payments deficits, foreign direct investment and multinational corporations, foreign portfolio investments and developing countries, role of IMF and the World Bank – stabilization and structural adjustment programmes.

### Text Books

1. Chakraverti S (1982) '**Alternative Approach to the Theory of Economic Growth**', Oxford University Press, Delhi.
2. Jhingam M.L (2014) '**Economic of Growth and Development**', Himalaya Publishing House, Delhi.

### References

1. Behrman, S and T.N. Srinivasan (1995) '**Handbook of Development Economics**', Vol. 3A, pp: 1- 776, Elsevier, Amsterdam
2. Denis Gullet (1971) '**The Cruel Choice: A New Choice in the Theory of Development**', New York, Antheneum.
3. Hayami, Y. (1997) '**Development Economics**', Oxford University Press, New York.
4. Sen, A.K. (1990) '**Growth Economics (Ed.)**', Penguin, Harmondsworth.
5. Solow, R.M. (2000) '**Growth Theory: An Exposition**', Oxford University Press, Oxford.
6. Taneja M.L. and R.M.Myer (2013), '**Economics of Development and Planning**', Vishal Publishing Co., Delhi.

## ENERGY ECONOMICS

**Semester : V**  
**Course Code : 24REEVO537**

**No. of Credits: 4**  
**No. of Hours: 64**

### Objective

1. To help the students to understand the basics of energy economics.

### Specific Course Objectives of learning

1. To understand the dynamics of natural resources and energy.
2. To study relationship between energy and development.
3. To examine nexus between energy and environment.
4. To gain skills energy planning and management
5. To comprehend the energy profile of India.

### Specific Course Outcomes

1. Understanding the concept of energy economics.
2. Learning the nexus between energy consumption and economic development.
3. Comparing and contrast between energy and environment
4. Realizing the significance of energy conservation and management.
5. Gainingskills to compile the profile of various energy sources in India.

### UNIT – I: INTRODUCTION TO ENERGY ECONOMICS (10 hrs)

Energy Resources – Sources of energy and Classification – Properties and Forms of Energy – Energy Economics – Origin, Nature and Scope.

### UNIT – II: ENERGY AND DEVELOPMENT (14 hrs)

Energy and Economic Development – Energy Indicators – Energy Intensity and Energy Elasticity – National and International Comparison – Per capita Energy and per capita Income.

### UNIT – III: ENERGY AND ENVIRONMENT (12 hrs)

Energy Nexus Environment Crisis – Causes and Consequences – Remedial Measures – Impact of Energy Consumption and production on Environment - Energy policy and environmental Quality.

### UNIT – IV: ENERGY PLANNING AND MANAGEMENT (14 hrs)

Energy Planning and Energy conservation – Meaning, Objectives and Importance- Energy management – Objectives and Importance – Energy Conservation – Issues and Challenges.

### UNIT – V: INDIAN ENERGY SECTOR (14 hrs)

Indian Energy Sector – Energy Supply and Demand in India – Renewable energy Programmes in India- Green Energy, Scope, Opportunities and Barriers.

### Text Books

1. Agarwal, S.K. (1985) '**Environment and Natural Resources Economics**', Scott Foresman & Co., London.
2. Common, M. (1985) '**Environment and Resource Economics**', London.
3. R. Perman, Y. Ma, J. Mc Gilvray, M. Common (2003) '**Natural Resource and Environmental Economics**' Pearson, 3rd edition.

### References

1. Agarwal, M.C. and Monga, J.R. (1992) '**Economic and Commercial Geography**', National Publishing House, Delhi
2. Anandan, M. and Ramaswamy, S., (2016) '**Oil Economics**' MJP Publishers, Delhi.
3. Kneese. A.V and Sweeny, J.L, eds, (1993) '**Handbook of Natural Resource and Energy Economics**', North Holland, Amsterdam, pp.61-124.
4. Munasinghe, M. and Meier, P (1993) '**Energy Policy and Modelling**', Cambridge University Press, UK
5. Ramaswamy. S. and Anandan, M., (2019) '**Energy Development Issues and Policies**' MJP Publishers, Delhi.
6. Richard Eden (1981) '**Energy Economics – Growth, Resources and Policies**', Cambridge University Press, London.
7. TERI (2019) '**Teri Energy Data Directory and Year Book 2018 – 19**', The Energy Research Institute, Delhi.

## INDIAN ECONOMIC DEVELOPMENT

Semester: II  
Course Code: 24ECUI1201

No. of Credits: 03  
No. of Hours: 48

### Objective:

1. To make students acquire knowledge about Indian Economic Development and its dynamics.

### Specific Course Objective

1. To understand the nature and scope of Indian Economy.
2. To know about planning and development in India.
3. To understand the role of agriculture sector in Economic Development.
4. To highlight the importance of industrial and service sectors development in India.
5. To learn the importance of foreign trade and economic policy.

### Specific Course Outcomes

1. Recognizing the Indian Economic problems.
2. Realizing the importance of effective planning and gaining skills to evaluate planning.
3. Assessing the Agricultural Economy in India.
4. Examining the Indian Industrial Development.
5. Analyzing the relationship between the importance of foreign trade and economic policy in India.

### UNIT I: NATURE AND SCOPE OF INDIAN ECONOMY

(9 hrs.)

Underdevelopment – Meaning – Characteristic of Indian Economy – Economic Development and Growth – Determinants and Major Issues of Fast Growing Economy– India as a mixed Economy – HDI - Sustainable Development.

### UNIT II: PLANNING AND DEVELOPMENT

(9 hrs.)

Planning: Definition – Objectives – Exercise in India– Planning Commission - Five Year Plans of India – Achievements and Failures of Economic Planning in India - NITI Aayog – Structure - Objectives and Role.

### UNIT III: INDIAN AGRICULTURE

(10 hrs.)

Role and Status - Production and Productivity - Green Revolution and Organic Farming – Problems of Indian Agriculture – Agriculture Distress - Agriculture Finance and Subsidies – Agriculture Labour – Impact of WTO on Indian Agriculture.

### UNIT IV: INDUSTRIAL AND SERVICE SECTORS

(10 hrs.)

Industrialization- Meaning – Problems – Role of Industrialization– Service Sector - Broader Classification – Contribution to Economic Development – Problems and Prospects –Industrial Sickness – Trade Union - Industrial Finance and Policy.

### UNIT V: FOREIGN TRADE AND ECONOMIC POLICY

(10 hrs.)

International Trade and Development - Foreign Direct Investment (FDI) - World Trade Organization (WTO) – SAARC – BRICS – G20– New Economic Policy (LPG) - Special Economic Zones (SEZs) – Demonetization – Goods and Services Taxes.

### Text Books

1. Ruddar Datt & K.P.M.Sundharam–Indian Economy - S.Chand &Company Ltd, New Delhi, 2016.
2. Puri V.K and Misra S.K: Indian Economy, Himalaya, Mumbai, 2014.

### Reference Books:

1. Uma Kapila (Ed.) (2017-18), Indian Economy since Independence, Academic Foundation, New Delhi, 28th Edition.
2. Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,
3. Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
4. Dhingra, I C., (2014), Indian Economy, Sultan Chand & Sons, New Delhi.
5. Joshi, V. and I.M.D. Little (1996), "India's Economic Reforms: 1991-2001", Oxford University Press, New Delhi.
6. Agarwal.A.N. (1990), Indian Economy, Wiley Eastern Ltd, New Delhi.
7. Economic Survey, Government of India, (various years).

Outcomes	PSO1	PSO2	PSO3	PSO4	PSO5
C01	3	3	2	2	2
C02	3	3	3	2	2
C03	2	2	2	3	3
C04	2	3	3	3	3
C05	2	2	2	3	3

## NATURAL RESOURCE MANAGEMENT

**Semester : III**  
**Course Code : 24ECUI2102**

**No. of Credits: 3**  
**No. of Hours: 48**

### Objective

1. To train the students in rural resources assessment, analysis and documentation of them.

### Specific Objectives of Learning

1. To apply appropriate tools and techniques for assessing natural resources and identify livelihood opportunities/viable business.
2. To understand the concepts of natural Resources
3. To document the local resource based employment and income-Generation opportunities.
4. To know the environmental and social issues in the global context
5. To analyze the changes in the global environmental relating policy and regulation

### Specific Course Outcomes

1. Identifying the rural resources.
2. Applying the tools for resources assessment through people's participation.
3. Preparing action plan for village development based on the availability of resources.
4. Narrating the environmental regulation for creating environmental ethics.
5. Assessing the environmental management Paradigms and Environment Policy and Protection Act

### UNIT – I :INTRODUCTION TO NATURAL RESOURCES (6hrs)

Natural Resources – Meaning – Types – Importance – Common Property Resources – Meaning, features – Problems – Tragedy of common.

### UNIT – II: NATURAL RESOURCE CONSERVATION (10hrs)

Resource Conservation, Preservation, Exploitation: Perceptions of Natural Resources, Ecology, Biomass

### UNIT – III: NATURAL RESOURCE MANAGEMENT (10hrs)

Natural Resource Management- Land, Forest, Water, Air, Mineral – Wet Land- control mechanism – Regulating mechanism- Water conservation- Rainwater harvesting – Watershed management.

### UNIT –IV: SOCIAL ISSUES AND ENVIRONMENT AND FUNCTIONS (12hrs)

Social Issues and the Environment- Rural and Urban Problems Related to energy- Environmental Ethics - Resource Consumption – Equity- Functions of Environment

### UNIT –V: MANAGEMENT PARADIGMS: (10hrs)

Resource management the evolution - Resource conflicts: Resource extraction, access and control system. Resource Management Process- Planning - Organizing- Implementing, Controlling and Evaluation- Environment Policy and Protection Act

### Text Books

1. Narayanasamy.N (2013) '**Participatory Rural Appraisal: Text and Cases**', Sage Publications, Delhi
2. Francois Ramade (1984) '**Ecology of Natural Resources**' John Wiley & Sons Ltd.

### References

1. Luigi Cavestro (2010) '**P.R.A.Participatory Rural Appraisal Concepts Methodologies and Techniques**' Universita' DelgliStudi di Padova Facolta' Agraria, Dipartimentoterritorio E SistemiAgro-Forestali.
2. Peace Corps (2005) '**PACA – Using Participatory Analysis for Community Action**', Idea Book, Information Collection and Exchange Publication no.M0086.
3. Simon Adebo (2000) '**Training Manual on Participatory Rural Appraisal**'.
4. World Bank (2003) '**Participatory Rural Appraisal**', Washington.
5. Rajalakshmi. N and DhulasiBirundha (1994) '**Economic Analysis of Environment**', Allied Publishers, Ahmedabad.
6. Singh G.N (Ed.) (1991) '**Environmental Economics**', Mittal Publications, Delhi.
7. Tom Tietenberg (2003) '**Environmental and Natural Resource Economics**', Pearson, Education', Delhi.

Outcomes	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	3
C02	2	2	3	2
C03	2	3	2	3
C04	3	3	2	2
C05	3	3	3	3

## TAMIL NADU ECONOMY

**Semester : III**  
**Course Code : 24ECUI2103**

**No. of Credits: 3**  
**No. of Hours: 48**

### Objective

1. To make the students understand the growth process on Tamil Nadu economy.

### Specific Course Objectives of Learning

1. To understand the dynamics of Tamil Nadu economy;
2. To study the agriculture sector;
3. To know the industrial sector;
4. To obtain familiarity with state finance; and
5. To acquaint with the development programmes.

### Specific Course Outcomes

1. Knowing the profile of Tamil Nadu economy.
2. Identifying the agriculture issues in Tamil Nadu.
3. Knowing about the industrial performance in the state.
4. Acquiring the knowledge of state finance in Tamil Nadu.\
5. Acquainting with the development programmes in the state.

### UNIT – I: PROFILE OF TAMIL NADU (9 hrs)

Tamil Nadu Geographical Areas – Location – Physical Division - Demographic Profile of Tamil Nadu – Human Development Index - State Domestic Product – Structure – Contribution.

### UNIT – II: AGRICULTURAL SECTOR (10 hrs)

Land use and cropping patterns – Principal Crops – Sources of irrigation – Agricultural Labour Force – Agricultural Marketing – Defects, Remedial Measures – Regulated market – Agricultural Finance – Trends and Problems.

### UNIT – III: INDUSTRIAL SECTOR (10 hrs)

Industrial Development Major Industries – MSME, Cottage and Village Industries – Ancillary Industries – Handloom Industries – Government's role in Industrial Development – Industrial Financial Institutions – Labour Welfare Measures.

### UNIT – IV: STATE FINANCE (10 hrs)

State Finance – Revenue and Expenditure of the State – Tamil Nadu's Recent Budget – Health Care and other Government Schemes – Unemployment Problem.

### UNIT – V: DEVELOPMENT PROGRAMMES (9 hrs)

Development Programmes: Poverty Alleviation Programmes - Panchayat Raj Institution – Tamil Nadu Educational Policies – Public Distribution System.

### Text books

1. Leonard, A.J., (2006), '**Tamil Nadu Economy**', Macmillan India Ltd, Delhi.
2. MIDS, (1995), '**Tamil Nadu Economy**', MIDS, Chennai.

### References

1. Dhingra, I.C., (1995), '**Indian Economy with Special Reference to Tamil Nadu**', Sultan Chand and Co., Delhi.
2. GOI, (2000), '**Tamil Nadu Development Report**', Planning Commission, Government of India, Series of Academic Foundation, Delhi.
3. GoT (2000) '**Tamil Nadu Economic Appraisals**' Published by the Government of Tamil Nadu, Series.
4. Perumalsamy. S., (1998), '**Tamil Nadu Economy Performance & Issues**', Oxford & IBH, Delhi.
5. Rajalakshmi. N., (1995), '**Economic Development of Tamil Nadu**', S.Chand & Co., Delhi.
6. Veeramani, A.R., (2005), '**Tamil Nadu Agricultural Economy**', Divyasre Publication Book House, Chennai.