



ST. JOSEPH'S COLLEGE (AUTONOMOUS) JAKHAMA-NAGALAND

SYLLABUS (Outcome Based Education)

CURRICULUM AND CREDIT FRAMEWORK FOR UNDERGRADUATE PROGRAMMES (NEP-2020)



DEPARTMENT OF ECONOMICS

*With effect from the Academic Year 2023-2024
(1st to 4th FYUGP)*

ST. JOSEPH'S COLLEGE (AUTONOMOUS), JAKHAMA

**NATIONAL EDUCATION POLICY 2020 ON CURRICULUM AND CREDIT
FRAMEWORK FOR UNDERGRADUATE PROGRAMME**

Sem	Major or Core (4 credits each)	Inter- Disciplinary Minor (IDM) 4 credits each	Muti- Disciplinary/ 3 introductory course (4 credits each)	Ability Enhancement Course (AEC) (2 credits each)	Skill Enhancemen t Course (SEC) (2 credits each)	Internship/A pprenticeshi p/ Project/ Community Outreach (2)	Value Addition Course (VAC) (2 credits each)	Total Credits
I	ECC 1.1: Introductory Microeconomics	ECM 1: Introductory Microeconomic s	MDC 1: Environmen tal Studies	AEC 1: English Communicati on	ECS 1: Basic Computer Applications in Banking Services		VAC 1: Constitutional Values	22
	ECC 1.2: Mathematical Methods for Economics-I							
II	ECC 2.1: Introductory Macroeconomics	ECM 2: Introductory Macroeconomic s	MDC 2: Life Science	AEC 2: Basic Functional English	ECS 2: Desktop Publishing (DTP)		VAC 2: Consumer Rights	22
	ECC 2.2: Mathematical Methods for Economics – II							
<i>Students on exit shall be awarded Undergraduate Certificate</i>								Total=44 credits
III	ECC 3.1: Intermediate Microeconomics-I	ECM 3: Intermediate Microeconomic s	MDC 3: Intellectual Property Rights		ECS 3: Industrial Economics			22
	ECC 3.2: Intermediate Macroeconomics-1							
	ECC 3.3: Statistical Methods for Economics							
IV	ECC 4.1: Intermediate Microeconomics-II	ECM 4: Intermediate Macroeconomic s		AEC 3: Poetry, Prose and Short Stories	ECS 4: Soft Skill Development		VAC 3: Work Ethics	22
	ECC 4.2: Intermediate Macroeconomics-II							
	ECC 4.3: Introductory Econometrics							
<i>Students on exit shall be awarded Undergraduate Diploma</i>								Total=44 credits
V	ECC 5.1: Indian Economy-I	ECM 5: Indian Economy-I		AEC 4: Novel and Drama	ECS (2) OR Internship/Apprenticeshi p/ Project/Community Outreach (2)		VAC 4: India Through the Ages	22
	ECC 5.2: Development Economics							
	ECC 5.3: Public Economics							
VI	ECC 6.1: Indian Economy-II	ECM 6: Indian Economy-II			ECS (2) OR Internship/Apprenticeshi p/ Project/Community Outreach (2)			22
	ECC 6.2: International Economics							
	ECC 6.3: Environmental Economics							
	ECC 6.4: Money and Financial Markets							

<i>Students on exit shall be awarded UG Degree</i>							Total=44 credits
VII	ECC 7.1: Advanced Econometrics	ECM 7: Monetary Economics ECM 8: Agricultural Economics				Research Dissertation will start (No credits)	20
	ECC 7.2: Industrial Economics						
	RM: Research Methodology (4)						
VIII	ECC 8.1: Monetary Economics	ECM 9: Industrial Economics				Dissertation (12) Or ECC 8.2: Welfare Economics ECC 8.3: Economics of Gender ECC 8.4: Human Resource Development and Management	20
							Total=40 credits
<i>Students on exit shall be awarded UG Degree (Honours with Research)</i>							Total Credits= 172

- 1) Major Course (20×4) =80 credits
- (2) Minor Course (9×4) =36 credits
- (3) Research Methodology= 4 credits
- (4) Multi-disciplinary (3×4) =12 credits
- (5) Ability Enhancement Course (4*2) =8 credits
- (6) Skill Enhancement Course (6×2) =12 credits
- (7) Value Added Course (4*2) =8 Credits
- (8) Dissertation or 3 Major paper=12 credits

***Note: Honours Students not undertaking research project will do three theory courses for 12 credits in lieu of a research project/dissertation.**

Course Structure for Economics

There are a total of 20 major courses and that students are required to take across eight semesters. All the major courses are compulsory. In addition to major courses, a student of B.A. (Hons.) from other Departments can take Economics paper as a minor course or paper. The nine minor courses are offered till 8th semester. The syllabi for the multidisciplinary courses are provisional and subject to revision.

Contact Hours: Each major and minor course has 4 credits with sixty lectures, Skill Enhancement Course and Value-Added Course with thirty lectures of 2 credits.

Note on Course Readings: The nature of several courses is such that only selected readings can be specified in advance. Reading lists will be updated and topic-wise readings should be specified at regular intervals, ideally on an annual basis.

Eligibility for admission to B.A. (Hons) Economics: Given the quantitative requirements of the programme, only students who studied Economics with quantitative paper at the Class XII level are eligible for admission.

***Note: Honours Students not undertaking research project will do three theory courses for 12 credits in lieu of a research project/dissertation.**

Programme: BA/ MA Economics
Programme Outcome
FYUGP Economics, 2023

PROGRAMME OUTCOMES (PO)

i. PO 1: Programme Outcome for UG Certificate

Upon completion of the two semesters for UG Certificate, the students will be able to adopt and inculcate the ability to explain core economics terms, concepts and theories.

ii. PO 2: Programme Outcome for UG Diploma

Upon completion of the four semesters for UG Diploma, the students will be able to understand and evaluate the data to access economic variables by using statistical tools and techniques in addition to what they have learnt in the certificate course.

iii. PO 3: Programme Outcome for 3-year UG Degree

Upon completion of the sixth semesters for UG Degree, the students will be able to understand the impact of public economic policies on the performance of the country, acquire awareness on regional, national and international trade and analyze critically about economic matters and recommend policy measures for the development of the economy and learn about the system of Agriculture.

iv. PO 4: Programme Outcome for 4-year UG Degree (Honours)

Upon completion of the seventh semesters for UG Degree with Honors, the students will be able to understand the functions of monetary system in the economy. They will also learn about the industrial relations, various approaches and problems; the students will be able to understand the basic concepts of scientific research in economics and testing of hypothesis. Furthermore, it will expose on welfare, human resource and economics based on gender.

v. PO 5: Programme Outcome for 4-year UG Degree (Honours with Research)

Upon completion of the eight semesters for UG Degree with Honors and Research, the students will be able to acquire research skills to explore economic development issues, analyze data, and draw evidence-based conclusions.

Contents

Semester	SL. No	Name of the Course
Core Course 20*4)		
I	DSC-1/ECC 1.1	Introductory Microeconomics
	DSC-2/ECC 1.2	Mathematical Methods for Economics-I
II	DSC-3/ECC 2.1	Introductory Macro Economics
	DSC-4/ECC 2.2	Mathematical Methods for Economics-II
III	DSC-5/ECC 3.1	Intermediate Microeconomics- I
	DSC-6/ECC 3.2	Intermediate Macroeconomics-I
	DSC-7/ECC 3.3	Statistical Methods for Economics
IV	DSC-8/ECC 4.1	Intermediate Microeconomics- II
	DSC-9/ECC 4.2	Intermediate Macroeconomics-II
	DSC-10/ECC 4.3	Introductory Econometrics
V	DSC-11/ECC 5.1	Indian Economy-I
	DSC-12/ECC 5.2	Development Economics
	DSC-13/ECC 5.3	Public Economics
VI	DSC-14/ECC 6.1	Indian Economy-II
	DSC-15/ECC 6.2	International Economics
	DSC-16/ECC 6.3	Environmental Economics
	DSC-17/ECC 6.4	Money and Financial Markets
VII	DSC-18/ECC 7.1	Advanced Econometrics
	DSC-19/ECC 7.2	Industrial Economics
	RM	Research Methodology
VIII	DSC-20/ECC 8.1	Monetary Economics
		Optional
		Dissertation or three major papers
	ECC 8.2	Welfare Economics
	ECC 8.3	Economics of Gender
	ECC 8.4	Human Resource Development and Management
Generic Elective/ Minor Paper (9*4)		
I	ECM 1	Introductory Microeconomics
II	ECM 2	Introductory Macroeconomics
III	ECM 3	Intermediate Microeconomics
IV	ECM 4	Intermediate Macroeconomics
V	ECM 5	Indian Economy-1
VI	ECM 6	Indian Economy – II
VII	ECM 7	Monetary Economics
VII	ECM 8	Agricultural Economics
VIII	ECM 9	Industrial Economics
Skill Enhancement Course (6*2)		
I	ECS 1	Basic Computer Applications in Banking Services
II	ECS 2	Desktop Publishing (DTP)
III	ECS 3	Industrial Economics
IV	ECS 4	Soft Skill Development
V	ECS 5	Working with Advanced Excel
VI	ECS 6	Agricultural Economics
Multi-Disciplinary		
I	MDC 1	Environmental Studies
II	MDC 2	Life Science
III	MDC 3	Intellectual Property Rights

Ability Enhancement Course		
I	AEC 1	English Communication
II	AEC 2	Basic Functional English
IV	AEC 3	Poetry, Prose and Short Stories
V	AEC 4	Novel and Drama
Value Addition Course		
I	VAC 1	Constitutional Values
II	VAC 2	Consumer Rights
IV	VAC 3	Work Ethics
V	VAC 4	India Through the Ages

Core Course 1

Course Name: INTRODUCTORY MICROECONOMICS

Course Code: ECC 1.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

COURSE OUTCOMES

Students should be able to define economics, comprehend the nature and scope of the subject, and distinguish between microeconomics and macroeconomics. Students should also have a clear understanding of demand and comprehend the Law of Demand, factors influencing demand, exceptions to the law, and be able to analyze changes in demand and shifts in the demand curve. They should also comprehend the concept of elasticity of demand, types of price elasticity of demand, methods of measuring price elasticity, determinants of price elasticity, indifference curves and market structure.

COURSE OBJECTIVES:

The following are the Course Objectives (CO's) for the paper **INTRODUCTORY MICROECONOMICS:**

CO 1:	To make the students understand the subject matter of economics.
CO 2:	To enable the students, understand the demand and elasticity of demand.
CO 3:	To make the students understand the indifference curves analysis.
CO 4:	To make the students understand the market structure.
CO 5:	To make the students understand the monopolistic competition market.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective	Lecture Hours	Marks	LO's
UNIT 1 Exploring the Subject Matter of Economics	Definition; Scope and nature of economics; methods of economics; economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output. Science of Economics; Economic system of India; Economic system of India.	CSO-1.1: To define economics. (K) CSO 1.2: To understand the scope and nature of economics. (U) CSO 1.3: To understand the various economic concepts and thoughts. (U). CSO 1.4: To identify the economic problems. (K) CSO 1.5: To define the questions of economic problems. (K) CSO 1.6: To learn the economic system of in India. (U) CSO 1.7: To understand the science of economics. (U)	12	20	
UNIT 2 Demand and Elasticity of Demand	Demand; individual and market demand; Law of demand; why does the demand curve slop downward? Exceptions to the law of demand. Factors determining demand. Elasticity of demand; meaning and types of price elasticity of demand, measurement of price elasticity of demand; determinants of price elasticity of demand. Income elasticity of demand: meaning and types. Cross elasticity of demand.	CSO: 2.1: To define demand. (K) CSO: 2.2: To learn individual and market demand. (U) CSO: 2.3: To understand and define Law of demand. (U, K) CSO: 2.4: To understand the meaning of elasticity demand. (U) CSO: 2.5: To understand the meaning of price elasticity demand and its determinants. (U) CSO: 2.6: To understand the meaning of income elasticity demand and its determinants. (U) CSO: 2.7: To understand the meaning of cross elasticity demand and its determinants. (U)	12	20	

UNIT 3 Indifference Curve Analysis	Indifference curve: meaning; assumptions; marginal rate of substitution; properties of indifference curve. budget line, changes in price and budget line. Consumers equilibrium under indifference curve analysis.	CSO 3.1: To understand the meaning of Indifference curve. (U) CSO 3.2: To learn the assumptions of indifference curves. (U) CSO 3.3: To define the marginal rate of substitution. (K) CSO 3.4: To understand the properties of indifference curve. (U) CSO 3.5: To define budget line. (K) CSO 3.6: To understand changes in price and budget line. (U) CSO 3.7: To understand and define Consumers equilibrium under indifference curve analysis. (U, K)	12	20	
UNIT 4 Market Structure	Types of Market; perfect and Imperfect competition; price and output determination under perfect competition market. Monopoly: price and output determination; Degree of Price Determination; 1 st price discrimination, 2 nd price discrimination and 3 rd price discrimination.	CSO 4.1: To know the meaning of market and types of market. (U) CSO 4.2: To understand and define perfect and Imperfect competition. (U, K) CSO 4.3: To understand and demonstrate price and output determination under perfect competition market. (U, A) CSO 4.4: To understand the meaning of monopoly. (U) CSO 4.5: To understand and demonstrate price and output determination. (U, A) CSO 4.6: To define (K) Price Determination CSO 4.7: To analyze the different types of Price Determination. (A)	12	20	
UNIT 5 Monopolistic Competition Market	Concept; features; assumptions; product differentiation; short run and long run equilibrium of a firm; monopolistic competition and economic efficiency.	CSO 5.1: To understand the concept of monopolistic competition market. (U) CSO 5.2: To understand the features of monopolistic competition market. (U) CSO 5.3: To define product differentiation. (K) CSO 5.4: To analyze short run and long run equilibrium of a firm. (A) CSO 5.5: To understand monopolistic competition and economic efficiency. (U)	12	20	

Course Outline

Unit 1

20 marks/ 12 lectures

Exploring the Subject Matter of Economics

Definition; Scope and nature of economics; methods of economics; economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output. Science of Economics; Economic system of India.

Unit2

20 marks/ 12 lectures

Demand and Elasticity of Demand

Demand; individual and market demand; Law of demand; why does the demand curve slope downward? Exceptions to the law of demand. Factors determining demand. Elasticity of demand; meaning and types of price elasticity of demand, measurement of price elasticity of demand; determinants of price elasticity of demand. Income elasticity of demand: meaning and types. Cross elasticity of demand.

Unit 3

20 marks/ 12 lectures

Indifference Curve Analysis

Indifference curve: meaning; assumptions; marginal rate of substitution; properties of indifference curve. budget line, changes in price and budget line. Consumers equilibrium under indifference curve analysis.

Unit 4

20 marks/ 12 lectures

Market Structure

Types of Market; perfect and Imperfect competition; price and output determination under perfect competition market. Monopoly: price and output determination; Degree of Price Determination; 1st price discrimination, 2nd price discrimination and 3rd price discrimination.

Unit 5

20 marks/ 12 lectures

Monopolistic Competition Market

Concept; features; assumptions; product differentiation; short run and long run equilibrium of a firm; monopolistic competition and economic efficiency.

Suggested Readings:

1. Karl E. Case and Ray C. Fair. (2007). Principles of Economics, 8th Edition, Pearson Education Inc.
2. N. Gregory Mankiw (2007). Economics: Principles and Applications, 4th edition, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited.
3. Verma, K.N. (2002). Introductory microeconomics, second edition, Vishal Publishing co. Delhi.
4. Ahuja, H.L., (2012). Advanced Economic theory. New Delhi: S. Chand & Company Ltd.
5. Jhingan, M.L. (2009). Microeconomic Theory (7th ed.) Vrinda Publications (P) LTD.

Core Course 2
Course Name: MATHEMATICAL METHODS FOR ECONOMICS – I
Course Code: ECC 1.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is the first part of a compulsory two – course sequence. The objective of this course is to enable the students learn basic mathematics that can help them to understand and study economic theory, specifically courses on microeconomic and macroeconomic theories, statistics and econometrics set out in the syllabus.

COURSE OUTCOME

Students should be able to understand basic mathematical tools and concepts. They should be able to apply mathematical tools to economic problems, understand matrix and its determinants, solution of equations through Cramer’s rule and matrix models. Students should be able to formulate and solve Linear programming problems graphically for economic problems.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **MATHEMATICAL METHODS FOR ECONOMICS – I (ECC 1.2)**:

CO 1:	To introduce students to the preliminaries of sets and number systems.
CO 2:	To equip students to understand and analyse relations and functions of one variable.
CO 3:	To aid students to have a comprehensive understanding and practical application in analytical geometry
CO 4:	To help students understand and work with matrices and determinants in different mathematical situations.
CO 5:	To facilitate students in comprehending Linear Programming and Input-Output analysis, fostering an understanding of their practical applications in decision-making and optimizing resource allocation.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Preliminaries	Sets: Types and Operations; Economic Application of Sets. Number System: Types; Axioms of Real Numbers.	CSO 1.1: To define various types of sets. (K) CSO 1.2: To explain various set operations. (U) CSO 1.3: To apply set theory concepts to solve economic	12	20	

		<p>problems. (A)</p> <p>CSO 1.4: To formulate and solve economic problems using set operations and relationships. (A)</p> <p>CSO 1.5: To classify and explain different types of number systems. (U)</p> <p>CSO 1.6: To understand the axioms that define the real number system. (K)</p> <p>CSO 1.7: To understand the properties of real numbers. (U)</p>			
UNIT 2 Relations and Functions of one variable	<p>Relations: Binary relations and their properties. Graph of a function; types of functions – linear, polynomial (including quadratic), exponential, logarithmic, periodic functions, demand, and supply functions.</p>	<p>CSO 2.1: To define Relations. (K)</p> <p>CSO 2.2: To understand the properties of binary relations. (U)</p> <p>CSO 2.3: To create graphs of various functions, including linear, polynomial (including quadratic), exponential, logarithmic, periodic functions, demand and supply functions. (A)</p> <p>CSO 2.4: To distinguish between different types of functions. (U)</p> <p>CSO 2.5: To analyse economic scenarios using appropriate function types. (A)</p>	12	20	
UNIT 3 Analytical Geometry	<p>Points and Lines: Distance and Section formula; Division of a line; Equations of a line. Conic Section: The Circle.</p>	<p>CSO 3.1: To understand the Distance and Section formula for points and lines. (U)</p> <p>CSO 3.2: To apply the Distance and Section formula for points and lines. (A)</p> <p>CSO 3.3: To utilize various methods to accurately divide a line and solve problems related to line division (A).</p> <p>CSO 3.4: To derive and apply equations of lines in different contexts. (A)</p> <p>CSO 3.5: To apply mathematical techniques to analyse and solve problems related to circles in analytical geometry. (A)</p>	12	20	
UNIT 4 Matrix and Determinants	<p>Matrix- meaning, types of matrices, operation of matrices. Determinants- meaning and its properties. Solution of simultaneous</p>	<p>CSO 4.1: To define Matrix. (K)</p> <p>CSO 4.2: To understand the types of matrices. (U)</p> <p>CSO 4.3: To perform</p>	12	20	

	equation through Cramer's rule and Matrix Inversion methods.	<p>operations on matrices. (U)</p> <p>CSO 4.4: To apply matrix operations to solve mathematical problems. (A)</p> <p>CSO 4.5: To define Determinants. (K)</p> <p>CSO 4.6: To understand the properties of determinants. (U)</p> <p>CSO 4.7: To apply the properties of Determinants to solve mathematical problems. (A)</p> <p>CSO 4.8: To apply Cramer's rule to solve systems of simultaneous equations. (A)</p> <p>CSO 4.9: To apply matrix inversion method to solve systems of simultaneous equations. (A)</p> <p>CSO 4.10: To distinguish between Matrix and Determinants. (U)</p>			
UNIT 5 Linear Programming	Concepts and formulation. Solution of linear programming through graphs. Input- output analysis, Solution of input-output analysis through matrix.	<p>CSO 5.1: To define Linear Programming. (K)</p> <p>CSO 5.2: To formulate Linear Programming problems. (U)</p> <p>CSO 5.3: To understand the fundamental concepts of linear programming. (U)</p> <p>CSO 5.4: To apply graphical methods to solve linear programming problems. (A)</p> <p>CSO 5.5: To analyse and interpret solutions obtained for linear programming problems.</p> <p>CSO 5.6: To understand Input–Output analysis. (U)</p> <p>CSO 5.7: To utilize matrix methods to formulate and solve input-output analysis problems. (A)</p> <p>CSO 5.8: To apply input-output analysis to optimize resource allocation in various economic scenarios. (A)</p>	12	20	

Course Outline

Unit-1

20 marks/ 12 lectures

Preliminaries

Sets: Types and operations; Economic Applications of Sets. Number System; Types; Axioms of Real numbers.

Unit 2

20 marks/ 12 lectures

Relations and Functions of one variable: Relations: Binary relations and their properties.

Graph of a function; types of functions – linear, polynomial (including quadratic), exponential, logarithmic, periodic functions, demand and supply functions.

Unit 3

20 marks/ 12 lectures

Analytical Geometry

Points and Lines: Distance and Section formula; Division of a line; Equations of a line. Conic section: The Circle.

Unit 4

20 marks/ 12 lectures

Matrix and Determinants

Matrix- meaning, types of matrices, operation of matrices. Determinants- meaning and its properties. Solution of simultaneous equation through Cramer's rule and Matrix Inversion method.

Unit 5

20 marks/ 12 lectures

Linear Programming

Concepts and formulation. Solution of linear programming through graphs. Input-output analysis; Solution of input-output analysis through matrix.

Suggested Readings:

1. Chiang, A. C. (2000). Fundamental Methods of Mathematical Economics, McGraw-Hill, New Delhi.
2. Monga, G. S. (2009). Mathematics and Statistics for Economics, Vikas Publishing House Pvt. Ltd.
3. Sydsaeter, K. And P. Hammod (2002), Mathematics for Economic Analysis, Pearson Educational Asia, Delhi.
4. Yamane, T. (2011) 2nd edition, Mathematics for Economists: An Elementary Survey, PHI Learning Private Limited, New Delhi.

Core Course 2

Course Name: Introductory Macroeconomics

Course Code: ECC 2.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation and the balance of payments.

COURSE OUTCOMES

Students should be able to understand the meaning, measurement and difficulties of national

income and comprehend the factors determining national income, emphasizing its importance in economic analysis. They should understand the various definitions of money, including near money, and the functions of money. They should be able to analyze the quantity theory of money, Keynes's reformulated quantity theory, determinants of money supply, high powered money, money multiplier, and measures of money supply in India.

Students should understand the concepts of inflation, deflation, reflation, and disinflation. They should analyze the types, causes, and effects of inflation, as well as measures to control inflation, inflationary gaps, and the social costs associated with inflation. Students should understand Say's Law of Market and the classical theory of employment. They should also be able to analyze Keynes's criticism of the classical theory, aggregate demand and aggregate supply functions, the principle of effective demand, and the importance of effective demand in Keynesian theory of income, output, and employment.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTRODUCTORY MACROECONOMICS**:

CO 1:	To explore the students to Introduction of Macroeconomics.
CO 2:	To understand the National Income Accounting
CO 3:	To explore the functions of Money in the economy.
CO 4:	To analyze the types, causes and effects of Inflation.
CO 5:	To comprehend the determination of Output and Employment in the economy.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction to Macroeconomics	Meaning, concepts and Scope of Macroeconomics; nature of macroeconomic system; the role of government in the macroeconomy; macroeconomic policies and limitations.	CSO 1.1: To be able to Understand the meaning and scope of macroeconomics. (U) CSO 1.2: To learn about the scope of macroeconomics. (K) CSO 1.3: To describe the macroeconomic policies. (K) CSO 1.4: To analyse the role of government in macroeconomy. (A) CSO 1.5: To understand the limitations of macroeconomics. (U)	12	20	
UNIT 2 National Income Accounting	Concepts and Measurement of National Income. Difficulties in the measurement of national income;	CSO 2.1: To understand the concepts and measurement of national income. (U) CSO 2.1: To determine the difficulties in the measurement of national			

	Factors determining national income. Importance of national income. Circular Flow of Income-Two sector economy, Three Sector closed economy, four sector open economy.	income. (K) CSO 2.3: to describe the Factors determining national income. (K) CSO 2.4: To understand the Importance of national income. (U) CSO 2.5: To describe the circular flow of Income-Two sector economy, Three Sector closed economy, four sector open economy. (K)			
UNIT 3 Money	Money-Definitions of Money, Functions of money; quantity theory of money-cash transaction and cash balance approach; Keynes's Reformulated quantity theory of money; determinants of money supply; High powered money and money multiplier; Measures of money supply in India.	CSO-3.1: To be able to define Money. (K) CSO-3.2: To be able to differentiate between money and near money and inside and outside money. (U) CSO-3.3: To be able to illustrate the functions of money. (A) CSO-3.4: To be able to explain the functions of money. (U) CSO-3.5: To be able to state the cash transaction and cash balance approach to the quantity theories of money. (K) CSO-3.6: To be able to demonstrate Keynes's Reformulated quantity theory of money. (A) CSO-3.7: To be able to state the determinants of money supply. (K) CSO-3.8: To be able to describe the High-powered money and money multiplier. (K) CSO-3.8: To be able to evaluate the different measures of money supply in India. (A)	12	20	
UNIT 4 Inflation	Concept of Inflation, Deflation & Reflation and disinflation; types of inflation, Causes and effects of inflation, measures to control inflation, inflationary gap, social costs of inflation	CSO-3.1: To be able to define the concepts of inflation, deflation & reflation and disinflation. (K) CSO-3.2: To be able to explain the types of inflation. (U) CSO-3.3: To be able to analyse the cause and effects of inflation. (A) CSO-3.4: To be able to	12	20	

		elaborate the measures to control inflation. (U) CSO-3.5: To be able to describe the social costs of inflation. (K)			
UNIT 5 Output and Employment	Say's Law of Market and classical theory of employment; Keynes's criticism of classical theory; aggregate demand and aggregate supply functions; the principle of effective demand, importance of effective demand; Keynesian theory of income, output and employment.	CSO-5.1: To be able to explain the Say's Law of Market. (U) CSO-5.2: To be able to analyse the classical theory of employment. (A) CSO-5.3: To be able to elaborate Keynes's criticism of classical theory. (U) CSO-5.4: To describe aggregate demand and aggregate supply functions and the principle of effective demand. (K) CSO-5.5: To be able to state the Keynesian theory of income, output and employment. (U)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Introduction to Macroeconomics

Meaning, concepts and Scope of Macroeconomics; nature of macroeconomic system; the role of government in the macroeconomy; macroeconomic policies and limitations.

Unit 2

20 marks/ 12 lectures

National income Accounting

Concepts and Measurement of National Income. Difficulties in the measurement of national income; Factors determining national income. Importance of national income. Circular Flow of Income-Two sector economy, Three Sector closed economy, four sector open economy.

Unit3

20 marks/ 12 lectures

Money

Money-Definitions of Money, Functions of money; quantity theory of money- cash transaction and cash balance approach; Keynes's Reformulated quantity theory of money; determinants of money supply; High powered money and money multiplier; Measures of money supply in India.

Unit 4

20 marks/ 12 lectures

Inflation

Concept of Inflation, Deflation & Reflation and disinflation; types of inflation, Causes and effects of inflation, measures to control inflation, inflationary gap, social costs of inflation.

Unit 5

20 marks/ 12 lectures

Output and Employment

Say's Law of Market and classical theory of employment; Keynes's criticism of classical

theory; aggregate demand and aggregate supply functions; the principle of effective demand, importance of effective demand; Keynesian theory of income, output and employment.

Suggested Readings:

1. Dornbusch, F. and Startz, (2010). Macroeconomics (11th ed.). McGraw Hill.
2. Mankiw, N.G. (2010). Macroeconomics (7th ed.). Worth Publishers.
3. Olivier Blanchard, B. (2009), Macroeconomics (5th ed.). Pearson Education, Inc.
4. Froyen, R.T. (2005). Macroeconomics (2nd ed.). Pearson Education Asia,
5. Abel, A.B and Bernanke B.S. (2011). Macroeconomics (7th ed.). Pearson Education, Inc.
6. Jhingan, M.L, (2010) Macroeconomic Theory, 12th edition. Delhi: Vrinda Publications Ltd.

Core Course 4

Course Name: MATHEMATICAL METHODS FOR ECONOMICS – II

Course Code: ECC 2.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is the second part of a compulsory two – course sequence. The goal of this course is to enable the students learn basic mathematics that can help them to understand and study economic theory, specifically courses on microeconomic and macroeconomic theories, statistics and econometrics set out in the syllabus.

COURSE OUTCOME

Students should be able to understand and learn the rules of differentiation and integral calculus. They should be able apply the rules of calculus to economic problems and acquire knowledge on differential and difference equations and find their solutions. Students should be able to comprehend optimization technique, economic applications and apply them in economic and business problems.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **MATHEMATICAL METHODS FOR ECONOMICS – II (ECC 2.2)**:

CO 1:	To enable students to comprehend and apply principles of differential calculus to functions of a single variable.
CO 2:	To enable students to comprehend and apply principles of differential calculus to functions of two or more variables.
CO 3:	To foster students to demonstrate proficiency in applying rules of integral calculus and related techniques.

CO 4:	To equip students to identify and solve various types of differential and difference equations.
CO 5:	To aid students to understand and apply single variable optimization techniques.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Differential Calculus: Functions of one variable	Rules of differentiation; Application of derivatives: Marginal Revenue, Average Revenue, Marginal Cost, Average Cost.	CSO 1.1: To define the term Differentiation. (K) CSO 1.2: To understand the rules of differentiation. (U) CSO 1.3: To apply the rules of differentiation. (A) CSO 1.4: To apply derivatives to analyse Marginal Revenue. (A) CSO 1.5: To use derivatives to find Average Revenue. (A) CSO 1.6: To use derivatives to find Marginal Cost. (A) CSO 1.7: To use derivatives to find Average Cost. (A)	12	20	
UNIT 2 Differential Calculus: Functions of two or more variables	Techniques of Partial differentiation; Application of partial derivatives in Economics; Total differential; Euler's theorem or Adding-up theorem.	CSO 2.1: To define Partial differentiation. (K) CSO 2.2: To understand the application of partial differentiation. (U) CSO 2.3: To understand total differential. (U) CSO 2.4: To define Euler's theorem. (K) CSO 2.5: To derive Euler's theorem. (A)	12	20	
UNIT 3 Integral Calculus	Rules of integration; Techniques of Integration: integration by substitution, integration by parts, and integration by partial fractions; Definite Integral; Application of Integration: producer's and consumer's surplus.	CSO 3.1: To define Integration. (K) CSO 3.2: To understand the rules of Integration. (U) CSO 3.3: To apply the technique of integration by substitution. (A) CSO 3.4: To apply technique of integration by parts. (A) CSO 3.5: To apply technique of integration by partial fractions. (A) CSO 3.6: To define Definite Integral. (K) CSO 3.7: To utilize Integration to find producer's surplus. (A) CSO 3.8: To apply Integration to find consumer's surplus. (A)	12	20	

UNIT 4 Differential and Difference Equations	Types of differential equation: direct integration, separable, exact, homogeneous, linear differential equations of first order. Difference equation. Solution of first order difference equation: iterative and general methods.	CSO 4.1: To define Differential Equation. (K) CSO 4.2: To explain different types of differential equations. (U) CSO 4.3: To solve different kinds of first-order differential equations, including direct integration, separable, exact, homogeneous, and linear equations. (A) CSO 4.4: To define Difference equation. (K) CSO 4.5: To find solution of first-order difference Equation using iterative method. (A) CSO 4.6: To find solution of first-order difference Equation using general method. (A)	12	20	
UNIT 5 Single-variable Optimization	Optimization techniques: Unconstrained maxima and minima: Meaning, relative and absolute extreme. Economic applications of unconstrained maxima and minima with single explanatory variable: cost Minimization, profit maximization, revenue maximization, maximization of tax revenue, and production behaviour.	CSO 5.1: To define Optimization. (K) CSO 5.2: To explain the types of optimization techniques. (U) CSO 5.3: To define maxima. (K) CSO 5.4: To define minima. (K) CSO 5.5: To define extrema. (K) CSO 5.6: To explain relative extrema. (U) CSO 5.7: To explain absolute extrema. (U) CSO 5.8: To apply unconstrained maxima and minima to solve economic problems with a single explanatory variable, including cost minimization, profit maximization, revenue maximization, maximization of tax revenue, and analysing production behaviour. (A)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Differential Calculus: Functions of one variable

Rules of differentiation; Application of derivatives: Marginal Revenue, Average Revenue, Marginal Cost, Average Cost.

Unit II **20 marks/ 12 lectures**

Differential Calculus: Functions of two or more variables

Techniques of Partial differentiation; Application of partial derivatives in Economics; Total differential; Euler's theorem or Adding-up theorem.

Unit III **20 marks/ 12 lectures**

Integral Calculus

Rules of integration; Techniques of Integration: integration by substitution, integration by parts and integration by partial fractions; Definite Integral; Application of Integration: producer's and consumer's surplus

Unit IV **20 marks/ 12 lectures**

Differential and Difference Equations

Types of differential equation: direct integration, separable, exact, homogeneous, linear differential equations of first order. Difference equation. Solution of first order difference equation: iterative and general methods.

Unit V **20 marks/ 12 lectures**

Single-variable Optimization

Optimization techniques: Unconstrained maxima and minima: Meaning, relative and absolute extreme. Economic applications of unconstrained maxima and minima with single explanatory variable: cost minimization, profit maximization, revenue maximization, maximization of tax revenue, production behaviour.

Suggested Readings

1. Baruah, S. (2008). Basic Mathematics and its Application in Economics. Macmillan India Ltd., New Delhi.
2. Chiang, A. C. (2000). Fundamental Methods of Mathematical Economics. MsGraw-Hill, New Delhi.
3. Monga, G. S. (2009). Mathematics and Statistics for Economics. Vikas Publishing House Pvt. Ltd.
4. Sydsaeter, K. and Hammod, P. (2002). Mathematics for Economic Analysis. Pearson Educational Asia, Delhi.
5. Yamane, T. (2011). Mathematics for Economists: An Elementary Survey (2nd edition. PHI Learning Private Limited, New Delhi.

Core Course 5

Course Name: INTERMEDIATE MICROECONOMICS– I

Course Code: ECC 3.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

The course is designed to provide a sound training in microeconomic theory to formally analyse the behaviour of individual agents. This course looks at the behaviour of the consumer and the producer. It also focuses on the theory of factor determinations.

COURSE OUTCOME

it is designed in such a way that Students should understand the concept of utility, assumptions of cardinal utility analysis, marginal utility, total utility, and the Law of Diminishing Marginal Utility. Students should be able to understand the production function and the different laws under production function. Students should be able to understand the cost curves in the short and long run. They should be able to understand the factor price determinations viz. Theory of wages and Rent.

COURSE OBJECTIVES:

The following are the Course Objectives (CO's) for the paper **INTERMEDIATE MICROECONOMICS– I**

CO 1:	To make the students comprehend the consumer theory.
CO 2:	To make the students understand the production function.
CO 3:	To make the students understand the costs and cost curves.
CO 4:	To make the students understand the theory of wages.
CO 5:	To make the students understand the theory of rent.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective	Lecture Hours	Marks	LO's
UNIT 1 Consumer Theory	Utility: Cardinal utility approach and ordinal utility approach; Total utility, Marginal utility, Law of diminishing marginal utility. Consumers equilibrium: principle of equi-marginal utility and its limitations.	CSO 1.1: To define utility. (K) CSO 1.2: To understand the Cardinal utility approach and ordinal utility approach. (U) CSO 1.3: To define Law of diminishing marginal utility. (K) CSO 1.4: To understand and define Consumers equilibrium. (U, K) CSO 1.5: To explain principle of equi-marginal utility. (U). CSO 1.6: To learn the limitations. (U)	12	20	
UNIT 2 Production Function	Concepts of production function; returns to scale; law of variable proportion; law of returns to scale; isoquants, isoquant map, expansion path,	CSO 2.1: To learn the concepts of production function. (U) CSO 2.2: To learn and identify law of returns to scale. (U, K) CSO 2.3: To learn and identify law of variable proportion. (U, K)	12	20	

	economic region	<p>CSO 2.4: To know the meaning and define isoquants. (U, K)</p> <p>CSO 2.5: To apply isoquant curves to isoquant map. (A)</p> <p>CSO 2.6: To apply isoquant curves to expansion path. (A)</p> <p>CSO 2.7: To apply isoquant curves to economic region. (A)</p>			
UNIT 3 Costs and Cost Curves	Meaning of costs; cost curves, derivation of short run cost curves and long run curves and their relationships, traditional cost theory and modern cost theory.	<p>CSO 3.1: To understand the meaning of costs. (U)</p> <p>CSO 3.2: To define cost curves. (K)</p> <p>CSO 3.3: To apply cost curves to derive short run cost curves. (A)</p> <p>CSO 3.4: To apply cost curves to derive long run cost curves. (A)</p> <p>CSO 3.5: To understand the relationships between the short and long cost curves.</p> <p>CSO 3.6: To understand the traditional cost theory. (U)</p> <p>CSO 3.7: To understand modern cost theory. (U)</p>	12	20	
UNIT 4 Factor Price Determination: Theory of Wages	Marginal productivity theory, Wages and Collective bargaining. Modern theories of wages; Determination of Wages in a Perfect Competitive Market	<p>CSO 4.1: To discuss the meaning of Marginal productivity theory. (U)</p> <p>CSO 4.2: To know the meaning of Wages. (U)</p> <p>CSO 4.3: To understand the meaning of Collective bargaining. (U)</p> <p>CSO 4.4: To discuss the meaning of Modern theories of wages. (U)</p> <p>CSO 4.5: To determine and illustrate wages in a Perfect Competitive Market.</p>	12	20	
UNIT 5 Factor Price Determination: Theory of Rent	Rent- Concepts, Scarcity Rent, Differential rent, quasi rent, rent as surplus; Ricardian and Modern theory of rent.	<p>CSO 5.1: To define the meaning of Rent. (K)</p> <p>CSO 5.2: To clarify the concepts of rent. (U)</p> <p>CSO 5.3: To classify the meaning of scarcity rent. (U)</p> <p>CSO 5.4: To define the</p>	12	20	

		<p>meaning of Differential rent. (K)</p> <p>CSO 5.5: To define the meaning of quasi rent. (K)</p> <p>CSO 5.6: To define the meaning of Ricardian theory of rent. (K)</p> <p>CSO 5.7: To justify Modern theory of rent with Ricardian theory of rent. (A)</p>			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Consumer Theory

Utility: Cardinal utility approach and ordinal utility approach; Total utility, Marginal utility, Law of diminishing marginal utility. Consumers equilibrium: principle of equi-marginal utility and its limitations.

Unit 2

20 marks/ 12 lectures

Production Function

Concepts of production function; returns to scale; law of variable proportion; law of returns to scale; isoquants, isoquant map, expansion path, economic region.

Unit 3

20 marks/ 12 lectures

Costs and Cost Curves

Meaning of costs; cost curves, derivation of short run cost curves and long run curves and their relationships, traditional cost theory and modern cost theory.

Unit 4

20 marks/ 12 lectures

Factor Price Determination: Theory of Wages

Marginal productivity theory, Wages and Collective bargaining. Modern theories of wages; Determination of Wages in a Perfect Competitive Market

Unit 5

20 marks/ 12 lectures

Factor Price Determination: Theory of Rent

Rent- Concepts, Scarcity Rent, Differential rent, quasi rent, rent as surplus; Ricardian and Modern theory of rent.

Suggested Readings:

1. Karl E. Case and Ray C. Fair. (2007). Principles of Economics, 8th Edition, Pearson Education Inc.
2. N. Gregory Mankiw. (2007). Economics: Principles and Applications, 4th edition, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited.
3. Verma, K.N. (2002). Introductory microeconomics, second edition, Vishal Publishing Co. Delhi.
4. Hal R. Varian. (2010). Intermediate Microeconomics, a Modern Approach, 8th edition, W.W. Norton and Company/Affiliated East-West Press, India.
5. Snyder. C. & Nicholson. W. (2010). Fundamentals of Microeconomics, Cengage

- Learning (India).
6. B. Douglas Bernheim and Michael D. Whinston. (2009). Microeconomics, Tata McGraw Hill (India).
 7. Ahuja, Hl. (1990) Advance economic Theory, S. Chand and Co, New Delhi.

Core Course 6

Course Name: INTERMEDIATE MACROECONOMICS-I

Course Code: ECC 3.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course introduces the students to formal modelling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

COURSE OUTCOME

Students should be able to explain the concept of the consumption function, comprehend Keynes' Psychological Law of Consumption, and analyze the determinants of the consumption function. They should also understand the Relative Income Hypothesis, the Permanent Income Hypothesis, and the Life Cycle Hypothesis. They should be able to evaluate the Philips curve, understand the relationship between inflation and unemployment, and analyze the Long Run Philips curve from the perspectives of Friedman, Tobin, and Solow. Students should understand the meaning, types, and characteristics of the business cycle, analyze the phases of the business cycle, and evaluate various theories of the business cycle, including Hawtrey's Monetary Theory, Keynes' view on the trade cycle, and Schumpeter's Innovation Theory. Students should comprehend the meaning and theory of the investment multiplier, analyze its effectiveness in Less Developed Countries (LDCs), and understand leakages to the multiplier process. They should understand the meaning of investment, differentiate between autonomous and induced investment, and analyze the concept of the marginal efficiency of capital.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTERMEDIATE MACROECONOMICS – I**:

CO 1:	To create understanding among the students about Consumption function.
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CO 2:	To explore the relation between Inflation, Unemployment and Expectations
CO 3:	To analyze the Business Cycle
CO 4:	To describe the Theories of Multiplier and Accelerator
CO 5:	To illustrate the Investment Theory

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Consumption Function	Meaning of Consumption Function; Keynes Psychological Law of Consumption; Determinants of Consumption function; Relative income hypothesis; The Permanent Income Hypothesis; the Life Cycle hypothesis	CSO-1.1: To be able to state the meaning of consumption function CSO-1.2: To be able to explain the Keynes Psychological Law of Consumption. (U) CSO-1.3: To be able to list out the determinants of consumption function. CSO-1.4: To be able to illustrate the Relative income hypothesis (A) CSO-1.5: To be able to elaborate the Permanent Income Hypothesis. (U) CSO-1.6: To be able to enumerate the Life Cycle hypothesis (K)	12	20	
UNIT 2 Inflation, Unemployment and Expectations	Philips curve; The relation between inflation and unemployment; Long run Philips curve-Friedman's view, Tobin's view and Solow's view; Rational expectation and long run Philips curve; Policy implications of the Philips Curve; Stabilization policy and Ratex hypothesis	CSO-2.1: To be able to explain the Philips curve. (U) CSO-2.2: To be able to determine the relation between inflation and unemployment. (A) CSO-2.3: To be able to elaborate Friedman's view, Tobin's view, and Solow's view on long run Phillips curve (U) CSO-2.4: To be able to state the relation between Rational expectation and long run Philips curve CSO-2.5: To be able to explain the Policy implications of the Philips Curve. (U) CSO-2.6: To be able to analyse the relation between the Stabilization policy and Ratex hypothesis	12	20	
UNIT 3 Business Cycle	Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle-Hawtrey's	CSO-4.1: To be able to define the meaning of inflation. (K) CSO-4.2: To be able to analyse the types and characteristics of business cycle. (A) CSO-4.3: To be describe the different phases of business cycle. (K)	12	20	

	Monetary Theory, Keynes view on trade cycle, Schumpeter's Innovation Theory.	<p>CSO-4.4: To be able to describe Hawtrey's Monetary Theory of trade cycle. (K)</p> <p>CSO-4.5: To be able to explain Keynes view on trade cycle. (U)</p> <p>CSO-4.6: To be able to elaborate Schumpeter's Innovation Theory of trade cycle. (U)</p>			
UNIT 4 Theory of Multiplier and Accelerator	Investment multiplier: meaning, theory of investment multiplier and its effectiveness in LDCs, Leakages to the multiplier process. Paradox of thrift. Theory of Accelerator; Samuelson and Hicks multiplier and accelerator interaction model, Control of trade cycle.	<p>CSO-4.1: To be able to write the meaning of Investment multiplier. (K)</p> <p>CSO-4.2: To be able to explain the theory of Investment multiplier and its effectiveness in LDCs. (U)</p> <p>CSO-4.3: To be able to demonstrate the Leakages to the multiplier process. (A)</p> <p>CSO-4.4: To be able to interpret the Paradox of thrift. (U)</p> <p>CSO-4.5: To be able to elaborate the theory of Accelerator. (U)</p> <p>CSO-4.6: To be able to illustrate the theory of Accelerator. (U)</p> <p>CSO-4.7: To be able to analyse the Samuelson and Hicks multiplier and accelerator interaction model. (A)</p> <p>CSO-4.8: To be able to state the measures to Control of trade cycle. (K)</p>	12	20	
UNIT 5 Investment Theory	Investment: meaning; types of Investment- Autonomous and induced investment, Marginal efficiency of capital, general equilibrium- IS and LM curves.	<p>CSO-5.1: To be able to write the meaning of Investment. (K)</p> <p>CSO-5.2: To be able to distinguish between Autonomous and induced investment. (A)</p> <p>CSO-5.3: To be able to explain the theory of Marginal efficiency of capital. (U)</p> <p>CSO-5.4: To be able to examine the general equilibrium- IS and LM curves. (A)</p>	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Consumption Function

Meaning of Consumption Function; Keynes Psychological Law of Consumption; Determinants of Consumption function; Relative income hypothesis; The Permanent Income Hypothesis; the Life Cycle hypothesis

Unit 2

20 marks/ 12 lectures

Unemployment and Inflation

Philips curve; The relation between inflation and unemployment; Long run Philips curve- Friedman's view, Tobin's view and Solow's view; Rational expectation and long run Philips curve; Policy implications of the Philips Curve; Stabilization policy and Ratex hypothesis.

Unit3

20 marks/ 12 lectures

Business Cycle

Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle- Hawtrey's Monetary Theory,' Keynes view on trade cycle, Schumpeter's Innovation Theory;

Unit 4

20 marks/ 12 lectures

Theory of Multiplier and Accelerator

Investment multiplier: meaning, theory of investment multiplier and its effectiveness in LDCs, Leakages to the multiplier process. Paradox of thrift. Theory of Accelerator; Samuelson and Hicks multiplier and accelerator interaction model, Control of trade cycle.

Unit 5

20 marks/ 12 lectures

Investment Theory

Investment: meaning; types of Investment- Autonomous and induced investment, Marginal efficiency of capital, general equilibrium IS and LM curves.

Suggested Readings:

1. Abel, A.B. and Bernanke, B. S. (2011). Macroeconomics (7th. ed.), Pearson Education, Inc.
2. Blanchard, O. (2009). Macroeconomics, (5th ed.). Pearson Education, Inc.
3. D 'Souza, E. (2009) Macroeconomics, Pearson Education
4. Krugman, P. R, Obstfeld, M. & Melitz, M. (2012). International Economics, Pearson Education Asia.
5. Mankiw, N.G. (2010). Macroeconomics, (7th ed.). Worth Publishers.
6. Steven M. Sheffrin, S.M. (1996). Rational Expectations, (2nd ed.). Cambridge University Press, 2nd edition, 1996.

Core Course 7

Course Name: STATISTICAL METHODS FOR ECONOMICS

Course Code: ECC 3.3

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course provides a foundational understanding of essential statistical concepts and also offers a comprehensive exploration of statistical principles essential for the accurate analysis of numerical data.

COURSE OUTCOME

Upon successful completion of this course, students will be able to demonstrate a solid understanding of key statistical concepts and principles. They should master measures of central tendency, correlation coefficients, regression analysis, and statistical tools for accurate data analysis. Students should apply knowledge to effectively represent data, employ various sampling methods, and communicate statistical findings.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **STATISTICAL METHODS FOR ECONOMICS**

CO 1:	To introduce students to basic concepts of statistics and data representation.
CO 2:	To enable students to apply measures of central tendency effectively, allowing them to analyse and summarize datasets across diverse fields.
CO 3:	To aid students to proficiently apply correlation and regression analysis to real-world datasets.
CO 4:	To acquaint students with an understanding of the principles of sampling.
CO 5:	To assist students in developing a robust understanding of fundamental probability concepts and applying various theorems in probability.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction to Statistics	Fundamental Concepts. Significance and Limitations. Data Representation: Classification and Tabulation of data. Diagrammatic and Graphic Representation.	CSO 1.1: To define the term Statistics. (K) CSO 1.2: To understand fundamental concepts in Statistics. (U) CSO 1.3: To evaluate the significance and limitations of data representation methods. (A) CSO 1.4: To analyse and interpret data representations. (U) CSO 1.5: To discuss classification of data. (U) CSO 1.6: To explain the process of tabulating data, emphasizing its role in organizing and summarizing information. (U) CSO 1.7: To discuss techniques of diagrammatic representation of data. (U) CSO 1.8: To discuss techniques of graphic representation of data. (U)	12	20	

<p>UNIT 2 Central Tendency and Dispersion</p>	<p>Measures of Central Tendency: Mean, Median, and Mode. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation.</p>	<p>CSO 2.1: To define Central tendency. (K) CSO 2.2: To explain Mean. (U) CSO 2.3: To explain Median. (U) CSO 2.4: To explain Mode. (U) CSO 2.5: To calculate and interpret the mean. (A) CSO 2.6: To calculate and interpret the median. (A) CSO 2.7: To calculate and interpret the mode. (A) CSO 2.8: To explain dispersion. (U) CSO 2.9: To explain the measures of dispersion. (U) CSO 2.10: To calculate and interpret Range. (A) CSO 2.11: To calculate and interpret Quartile Deviation. (A) CSO 2.12: To calculate and interpret Mean Deviation. (A) CSO 2.13: To calculate and interpret Standard Deviation. (A)</p>	<p>12</p>	<p>20</p>	
<p>UNIT 3 Correlation and Regression</p>	<p>Coefficient of Correlation: Karl Pearson and Rank correlation. Regression Analysis: Linear Regression and Least Squares method.</p>	<p>CSO 3.1: To define Correlation. (K) CSO 3.2: To explain Coefficient of correlation. (U) CSO 3.3: To explain Karl Pearson correlation coefficient. (U) CSO 3.4: To apply Karl Pearson method to find coefficient of correlation. (A) CSO 3.5: To explain Rank correlation. (U) CSO 3.6: To apply rank correlation method to solve for coefficient of correlation CSO 3.7: To explain linear regression. (U) CSO 3.8: To apply linear regression analysis to model the relationship between variables. (A) CSO 3.9: To explain Least Squares method. (U) CSO 3.10: To utilize the</p>	<p>12</p>	<p>20</p>	

		Least Squares method for estimating the parameters of a regression model and interpret the results. (A)			
UNIT 4 Sampling	Sampling Principles: Distinction between Population (Universe) and Sampling. Sampling Methods: Probability and Non-Probability Sampling Techniques.	CSO 4.1: To define Sampling. (K) CSO 4.2: To define Population (Universe). (K) CSO 4.3: To distinguish between Population and Sampling. (U) CSO 4.4: To explain various sampling methods. (U) CSO 4.5: To explain probability Sampling techniques. (U) CSO 4.6: To explain non - probability sampling techniques. (U)	12	20	
UNIT 5 Elementary Probability Theory	Probability basic concepts. Probability Theorems: Addition and Multiplication theorems. Conditional Probability. Bayes' Theorem. Mathematical Expectation.	CSO 5.1: To define Probability. (K) CSO 5.2: To explain basic concepts of probability. (U) CSO 5.3: To explain probability theorems. (U) CSO 5.4: To apply the addition theorem to solve probability problems. (A) CSO 5.5: To apply the multiplication theorem to solve probability problems. (A) CSO 5.6: To explain conditional probability (U) CSO 5.7: To apply conditional probability to solve probability problems. (A) CSO 5.8: To explain Bayes' Theorem. (U) CSO 5.9: To apply Bayes' Theorem to solve probability problems. (A) CSO 5.10: To explain Mathematical Expectation. (U) CSO 5.11: To apply Mathematical Expectation. to solve probability problems. (A)	12	20	

Course Outline:

Unit 1

Introduction to Statistics

20 marks/ 12 lectures

Fundamental Concepts. Significance and Limitations. Data Representation: Classification and Tabulation of data. Diagrammatic and Graphic Representation.

Unit 2

20 marks/ 12 lectures

Central Tendency and Dispersion

Measures of Central Tendency: Mean, Median, and Mode.

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation.

Unit 3

20 marks/ 12 lectures

Correlation and Regression

Coefficient of Correlation: Karl Pearson and Rank correlation.

Regression Analysis: Linear Regression, and Least Squares method.

Unit 4

20 marks/ 12 lectures

Sampling

Sampling Principles: Distinction between Population (Universe) and Sampling. Sampling

Methods: Probability Sampling and Non-Probability and Techniques.

Unit 5

20 marks/ 12 lectures

Elementary Probability Theory

Probability basic concepts. Probability Theorems: Addition and Multiplication theorems.

Conditional Probability. Bayes' Theorem. Mathematical Expectation.

Suggested Readings:

1. Gupta, S. P. (2005). Statistical Methods. Sultan Chand and Sons.
2. Monga, G. S. (2009). Mathematics and Statistics for Economics. Vikas Publishing House Pvt. Ltd.
3. Devore, J. L. (2010). Probability and Statistics for Engineers. Cengage Learning.
4. Sydsaeter, K. and Hammod, P. (2002). Mathematics for Economic Analysis, Pearson Educational Asia, Delhi.
5. Yamane, T. (2011). Mathematics for Economists: An Elementary Survey (2nd edition). PHI Learning Private Limited, New Delhi.

Core Course: 8

Course Name: INTERMEDIATE MICROECONOMICS-II

Course Code: ECC 4.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is a sequel to Intermediate Microeconomics-I. The emphasis will be on giving concepts clarity to the students coupled with the use of mathematical tools and reasoning. It

covers general equilibrium and welfare; imperfect markets and topics under information economics.

COURSE OUTCOME

Upon completion of this course the students will understand better the consumer welfare, types of market, strategic action and behaviour in the economy and better information on microeconomics. The students will be able to demonstrate better on the microeconomic paradigms and be able to conduct analyses on the microeconomics theories, making strategic actions towards it.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTERMEDIATE MICROECONOMICS-II**:

CO 1:	To introduce to the students, the concepts of general equilibrium and welfare.
CO 2:	To address the concepts of imperfect market competition.
CO 3:	To discuss on the theories of profit.
CO 4:	To analyse the concepts and theories on game theory.
CO 5:	To look at the aspects of market failure and give an explanation on welfare economics.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 General Equilibrium, Efficiency and Welfare	Equilibrium and efficiency under pure exchange and production, overall efficiency and welfare economics.	CSO 1.1: To discuss the efficiency under pure and production. (U) CSO 1.2: To recall the concepts of general equilibrium. (K) CSO 1.3: To examine the concepts, nature and scope of welfare economics. (A) CSO 1.4: To discuss on the role of measuring welfare. (U)	12	20	
UNIT 2 Imperfect Market Competition	Monopolistic Competition; Oligopoly classical Model, Kinked Demand Curve, non-collusive and collusive oligopoly, cartel and price leadership, pricing with market power, price discrimination.	CSO 2.1: To define monopolistic competition. (K) CSO 2.2: To discuss on the oligopoly completion. (U) CSO 2.3: To elaborate on kinked demand curve. (U) CSO 2.4: To contrast between cartel and price leadership. (U) CSO 2.5: To examine various models of collusive oligopoly. (A) CSO 2.6: To discuss on price discrimination in the market. (U)	12	20	

UNIT 3 Theory of Profits	Profit as a dynamic surplus. Innovations and profit. Risk, uncertainty and profits. Monopoly and profits.	CSO 3.1: To define profit as a dynamic surplus. (K) CSO 3.2: To explain Innovation and profit. (U) CSO 3.3: To elaborate risk, uncertainty. (U) CSO 3.4: To explain the relationship between monopoly and profit. (U) CSO 3.5: To explain the theories of profit. (U)	12	20	Not to be filled-in
UNIT 4 Game Theory and Strategic Behaviour	Cooperative and non-cooperative Game, Dominant Strategy, Choice of an Optimal strategy in the absence of dominant strategy, Neumann- Morgenstern Game Theory, The Prisoners Dilemma and oligopoly theory.	CSO 4.1: To define game in economics. (K) CSO 4.2: To explain different types of game in economics. (U) CSO 4.3: To explain making optimal choices in the presence and absence of dominant strategy. (U) CSO 4.4: To explain Neumann-Morgenstern theory. (U) CSO 4.5: To enumerate prisoner's dilemma. (K)	12	20	
UNIT 5 Market Failure and Welfare Economics	Externalities; public goods and market: welfare Economics- Pareto Optimality, Kaldor, Hicks Welfare Criterion, Scitovsky paradox.	CSO 5.1: To define externalities. (K) CSO 5.2: To explain public goods. (U) CSO 5.3: To discuss on the different types of public goods. CSO 5.4: To examine Pareto Optimality theorem. (A) CSO 5.5: To interpret Kaldor Hicks welfare criterion. (U) CSO 5.6: To explain Scitovsky paradox. (U)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

General Equilibrium, Efficiency and Welfare

Equilibrium and efficiency under pure exchange and production, overall efficiency and welfare economics.

Unit 2

20 marks/ 12 lectures

Imperfect Market Competition

Oligopoly classical Model, Kinked Demand Curve, non-collusive and collusive oligopoly, cartel and price leadership, pricing with market power, price discrimination.

Unit 3

20 marks/ 12 lectures

Theory of Profits

Profit as a dynamic surplus. Innovations and profit. Risk, uncertainty and profits. Monopoly and profits.

Unit 4

20 marks/ 12 lectur

Game Theory and Strategic Behaviour

Cooperative and non-cooperative Game, Dominant Strategy, Choice of an Optimal strategy in the absence of dominant strategy, Neumann- Morgenstern Game Theory, The Prisoners Dilemma and oligopoly theory.

Unit 5

20 marks/ 12 lectures

Market Failure and Welfare Economics

Externalities; public goods and market: welfare economics -Pareto Optimality, Kaldor, Hicks Welfare Criterion, Scitovsky paradox.

Suggested Readings:

1. Hal, V. R. (2010). Intermediate Microeconomics, a Modern Approach (8th Ed). W.W Norton and Company/Affiliated East-West Press (India).
2. Snyder, C. and Nicholson, W. (2010). Fundamentals of Microeconomics, Cengage Learning (India).
3. Ahuja, H. L. (2012) Advance Economics Theory (8th Ed).S. Chand & Company Ltd. New Delhi.

Core Course 9

Course Name: INTERMEDIATE MACROECONOMICS – II

Course Code: ECC 4.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is as equal to Intermediate Macroeconomics. In this course, the students are introduced to the long-run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

COURSE OUTCOME

Upon successful completion of this course, students will know the meaning of Balance of Payments and foreign exchange market. They will be able to define the component of Balance of Balance of Payments. They should describe the structure and functions of foreign

exchange and evaluate the economic policies. They should understand classical and Keynes theory approaches to macroeconomics.

COURSE OBJECTIVES

The following are the Course Objectives (CO's) for the paper **INTERMEDIATE MACROECONOMICS – II:**

CO 1:	To let the students understand the concepts of Balance of payment and Balance of Trade.
CO 2:	To enable the students understand the working of foreign exchange.
CO 3:	To foster the students understand the working of monetary policy.
CO 4:	To make the students understand the Banking sector.
CO 5:	To let the students understand the Schools of Macroeconomic Thoughts.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective	Lecture Hours	Marks	LO's
UNIT 1 Balance of Payment	Meaning and components of Balance of payments; Balance of payments equilibrium; Causes of Disequilibrium in the balance of payments; measures to control deficit in balance of payments; Balance of payments and Balance of trade; Adjustment mechanisms of balance of payments.	CSO 1.1: To explain meaning and components of Balance of payments. (K). CSO 1.2: To analyze the Balance of payments equilibrium. (A) CSO 1.3: To analyze the Causes of Disequilibrium in the balance of payments. (A) CSO 1.4: To learn about the measures to control deficit in balance of payments. (U) CSO 1.5: To understand Adjustment mechanisms of balance of payments. (U)	12	20	
UNIT 2 Foreign Exchange	Meaning of foreign exchange rate; Determination of equilibrium exchange rate; theories of	CSO 2.1: To understand the meaning of Meaning of foreign exchange rate. (U) CSO 2.2: To identify the determination of equilibrium exchange rate. (K) CSO 2.3: To understand the	12	20	

	foreign exchange-the mint parity theory, The purchasing power parity theory, The Balance of payments theory. Causes of changes in the exchange rate	theories of foreign exchange-the mint parity theory. (U) CSO 2.4: To understand the purchasing power parity theory. (U) CSO 2.4: To comprehend the Balance of payments theory. (U) CSO 2.5: To analyze the causes of changes in the exchange rate. (A)			
UNIT 3 Monetary Policy	Monetary policy-objectives, tools, targets and role. monetary management in an open economy; current monetary policy of India	CSO 3.1: To understand the meaning of Monetary policy. (U) CSO 3.2: To describe the objectives, tools, targets of monetary policy. (K) CSO 3.3: To define the role of monetary policy. (K) CSO 3.4: To analyze the current monetary policy of India. (A)	12	20	
UNIT 4 Banking Sector	Commercial Banks, Regional Rural Banks (RRB) and Cooperative Banks	CSO 4.1: To explain the Meaning and functions of Commercial Banks. (U) CSO 4.2: To understand the working of Regional Rural Banks (RRB). (U) CSO 4.3: To understand the working and functions of Cooperative Banks. (U)	12	20	
UNIT 5 Schools of Macroeconomic Thoughts	Classicals; Keynesians; New-Classicals and New-Keynesians.	CSO 5.1: To analyze the works of classicals. (A) CSO 5.2: To analyze the works of Keynesians. (A) CSO 5.3: To analyze the works of new classicals. (A) CSO 5.4: To analyse the works of new keynesians. (A)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Balance of Payment

Meaning and components of Balance of payments; Balance of payments equilibrium;

Causes of Disequilibrium in the balance of payments; measures to control deficit in balance of payments; Balance of payments and Balance of trade; Adjustment mechanisms of balance of payments.

Unit 2

20 marks/ 12 lectures

Foreign Exchange

Meaning of foreign exchange rate; Determination of equilibrium exchange rate; theories of foreign exchange-the mint parity theory, The purchasing power parity theory, The Balance of payments theory. Causes of changes in the exchange rate

Unit 3

20 marks/ 12 lectures

Monetary Policy

Monetary policy-objectives, tools, targets and role. monetary management in an open economy; current monetary policy of India.

Unit 4

20 marks/ 12 lectures

Banking Sector

Commercial Banks, Regional Rural Banks (RRB) and Cooperative Banks

Unit 5

20 marks/ 12 lectures

Schools of Macroeconomic Thoughts

Classicals; Keynesians; New-Classicals and New-Keynesians.

Suggested Readings:

1. Dornbusch, Fischer and Startz. (2010). Macroeconomics, 11th edition, McGraw Hill.
2. N. Gregory Mankiw. (2010). Macroeconomics, 7th edition, Worth Publishers.
3. Olivier Blanchard (2009). Macroeconomics, 5th edition, Pearson Education, Inc.
4. Charles I. Jones. (2002). Introduction to Economic Growth, 2nd edition, W.W. Norton & Company,
5. Andrew B. Abel and Ben S. Bernanke. (2011). Macroeconomics, 7th edition, Pearson Education, Inc.
6. Errol D'Souza. (2009). Macroeconomics, Pearson Education.

Core Course 10

Course Name: INTRODUCTORY ECONOMETRICS

Course Code: ECC 4.3

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course provides introduction to basic econometric concepts and essential statistical techniques required to understand the econometric concepts. It covers simple and multiple

regression models and the problems in violation of their assumptions.

COURSE OUTCOME

Upon successful completion of this course, students will be able to develop a solid grasp of fundamental econometric concepts and principles. They will acquire essential statistical skills necessary for econometric analysis and also acquire knowledge of both simple and multiple linear regression models. They will develop the ability to identify and address challenges that may arise in the context of regression analysis.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTRODUCTORY ECONOMETRICS**.

CO 1:	To foster students in developing a clear understanding of the fundamentals of econometrics.
CO 2:	To foster the development of students' clear understanding of prerequisite statistical concepts.
CO 3:	To aid students gain a practical understanding of the Simple Linear Regression Model.
CO 4:	To aid students gain a practical understanding of the Multiple Regression Model.
CO 5:	To equip students with the ability to recognize and address problems in regression analysis.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Basic Econometrics	Introduction to Econometrics: Nature, Objectives, Scope and Limitations of Econometrics. Methodology of econometrics. Variables in Econometrics: Stochastic and non-stochastic variables, dummy and proxy variables. Nature and sources of data: time series, cross-section, pooled and panel data; Accuracy of data.	CSO 1.1: To define the term Econometrics. (K) CSO 1.2: To explain the nature of Econometrics. (U) CSO 1.3: To explain the scope of Econometrics. (U) CSO 1.4: To understand the limitations of Econometrics. (U) CSO 1.5: To explain the methodology of Econometrics. (U) CSO 1.6: To identify and differentiate between stochastic and non-stochastic variables. (U) CSO 1.7: To understand the use of dummy and proxy variables in econometric	12	20	

		<p>models (U)</p> <p>CSO 1.8: To understand the nature and sources of data in econometrics, including time series, cross-section, pooled, and panel data. (U)</p> <p>CSO 1.9: To understand the importance of the accuracy of data for practical analysis. (U)</p>			
UNIT 2 Statistical Concepts	<p>Probability Distributions: Normal distribution; Chi-square distribution, F-distribution, t - distribution. Estimation of parameters; properties of estimators. Testing of hypotheses. Type I and Type II errors. Power of a test and significance level. Confidence interval and limits. Degrees of freedom.</p>	<p>CSO 2.1: To understand probability distributions. (U)</p> <p>CSO 2.2: To explain normal distribution. (U)</p> <p>CSO 2.3: To explain chi-square distribution. (U)</p> <p>CSO 2.4: To explain F - distribution. (U)</p> <p>CSO 2.5: To explain t – distribution. (U)</p> <p>CSO 2.6: To explain the estimation of parameters. (U)</p> <p>CSO 2.7: To explain the properties of estimators. (U)</p> <p>CSO 2.8: To apply hypothesis testing methodologies. (A)</p> <p>CSO 2.9: To explain the types of errors. (U)</p> <p>CSO 2.10: To analyse Type I and Type II Errors. (A)</p> <p>CSO 2.11: To assess the power of test and significance level. (A)</p> <p>CSO 2.12: To interpret the meaning and relevance of confidence interval and limits.</p> <p>CSO 2.13: To understand degrees of freedom and its relevance in statistical analysis. (U)</p>	12	20	
UNIT 3 Simple Linear Regression Model	<p>Simple Linear Regression Model – Assumptions. Estimation of model by method of Ordinary Least Squares (OLS). Gauss- Markov Theorem. Goodness of fit. Measurement scales of variables. Forecasting.</p>	<p>CSO 3.1: To understand Simple linear regression model. (U)</p> <p>CSO 3.2: To understand and articulate the assumptions underlying the Simple Linear Regression Model. (U)</p> <p>CSO 3.3: To apply the method of Ordinary Least Squares (OLS) to estimate parameters in a Simple Linear Regression Model. (A)</p> <p>CSO 3.4: To understand Gauss- Markov Theorem. (U)</p> <p>CSO 3.5: To recognize the conditions under which OLS</p>	12	20	

		<p>estimators become (BLUE). (U)</p> <p>CSO 3.6: To evaluate the goodness of fit of a Simple Linear Regression Model using appropriate measures. (A)</p> <p>CSO 3.7: To understand Measurement Scales of Variables and Forecasting. (U)</p>			
UNIT 4 Multiple Regression Model	<p>Estimation and properties of Ordinary Least Squares Estimators. Concept and derivation of R² and Adjusted R². Partial Regression Coefficients. Testing Hypothesis: Individual and Joint. Functional forms of regression models.</p>	<p>CSO 4.1: To understand the concept of Ordinary Least Squares (OLS) estimation. (U)</p> <p>CSO 4.2: To understand the properties of OLS estimators. (U)</p> <p>CSO 4.3: To analyse the assumptions underlying OLS estimators and recognize scenarios where these assumptions may be violated. (A)</p> <p>CSO 4.4: To derive and comprehend the concept of R-squared in the context of regression analysis. (A)</p> <p>CSO 4.5: To derive and comprehend the concept of Adjusted R-squared in the context of regression analysis. (A)</p> <p>CSO 4.6: To understand Partial Regression Coefficients. (U)</p> <p>CSO 4.7: To interpret partial regression coefficients. (A)</p> <p>CSO 4.8: To understand hypothesis testing techniques to assess the significance of individual regression coefficients and conduct joint hypothesis tests. (U)</p> <p>CSO 4.9: To understand the concept of functional forms in regression models. (U)</p>	12	20	
UNIT 5 Problems in Regression Analysis	<p>Nature, tests, consequences and remedial steps of problems of Heteroscedasticity, Multicollinearity and Autocorrelation.</p>	<p>CSO 5.1: To identify the problems in regression analysis. (A)</p> <p>CSO 5.2: To understand the nature and characteristics of heteroscedasticity, multicollinearity, and autocorrelation in the context of regression analysis. (U)</p> <p>CSO 5.3: To distinguish</p>	10	20	

		<p>between these three problems and recognize their potential impact on the reliability of regression results. (U)</p> <p>CSO 5.4: To apply appropriate statistical tests to detect the presence of heteroscedasticity, multicollinearity, and autocorrelation in regression models. (A)</p> <p>CSO 5.5: To analyze consequences of Heteroscedasticity, Multicollinearity, and Autocorrelation. (A)</p> <p>CSO 5.6: To formulate and propose remedial steps for Heteroscedasticity, Multicollinearity, and Autocorrelation. (A)</p>			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Basic Econometrics

Introduction to Econometrics: Nature, Objectives, Scope and Limitations of Econometrics. Methodology of econometrics. Variables in Econometrics: Stochastic and non-stochastic variables, dummy and proxy variables. Nature and sources of data: time series, cross-section, pooled and panel data; Accuracy of data.

Unit 2

20 marks/ 12 lectures

Statistical Concepts

Probability Distributions: Normal distribution; Chi-square distribution, F-distribution, t – distribution. Estimation of parameters; properties of estimators. Testing of hypotheses. Type I and Type II errors. Power of a test and significance level. Confidence interval and limits. Degrees of freedom.

Unit 3

20 marks/ 12 lectures

Simple Linear Regression Model: Two Variable Case

Simple Linear Regression Model – Assumptions. Estimation of model by method of Ordinary Least Squares (OLS). Gauss- Markov Theorem. Goodness of fit. Measurement scales of variables. Forecasting.

Unit 4

20 marks/ 12 lectures

Multiple Regression Model

Estimation and properties of Ordinary Least Squares Estimators. Concept and derivation of R^2 and Adjusted R^2 . Partial Regression Coefficients. Testing Hypothesis: Individual and Joint. Functional forms of regression models.

Unit 5

20 marks/ 12 lectures

Problems in Regression Analysis

Nature, tests, consequences and remedial steps of problems of Heteroscedasticity,

Multicollinearity and Autocorrelation.

Suggested Readings:

1. Gujarati, D. N. (2007). Basic Econometrics. Tata McGraw-Hill, New Delhi.
2. Dougherry, C. (2007). Introduction to Econometrics (3rd Edition). Oxford University Press, Indian Edition.
3. Kmenta, J. (2008). Elements of Econometrics (2nd Edition). Indian Reprint, Khosla Publishing House.

Core Course 11
Course Name: INDIAN ECONOMY-I
Course Code: ECC 5.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post -Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

COURSE OUTCOME

On completion of the course the students will be able to understand issues relating to the evolution and performance on all the aspects of the Indian economy. It will allow the students to learn the major policy regime poverty, inequality and unemployment and also provide suitable policies to resolves those problems in the form of government intervention or suggestive measures. It will help the students to understand better the demographic characteristics of the country, discuss on the infrastructure in the country and its contribution towards the growth of the economy. The course will address to contemporary issues which propels the economy, it will emphasis on the planning mechanism in the country so as to enlighten the students on the evolvment, transition and achievement of planning in the country.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **ENVIRONMENTAL ECONOMICS**:

CO 1:	To make the students learn about economic development since Independence.
CO 2:	To inculcate the students to understand Population and Human Development.
CO 3:	To make the students to understand infrastructure in Indian economy.
CO 4:	To create and understanding among the students on growth and distribution in Indian economy.
CO 5:	To assist the students know about planning in Indian economy.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Economic Development since Independence	Major features of the Economy at Independence; major issues and development; characteristics of the Indian Economy as a developing economy; Occupational distribution.	CSO 1.1: To explain the features of Indian economy at Independence. (U) CSO 1.2: To recall the major issues in Indian economy. (K) CSO 1.3: To examine the characteristics of Indian economy as a developing economy. (A) CSO 1.4: To discuss on occupational distribution in India. (U) CSO 1.5: To explore on major development in Indian economy. (A)	12	20	
UNIT 2 Population and Human Development	Demographic trends and issues; population issues; Human Development in India; health and malnutrition.	CSO 2.1: To define demography. (K) CSO 2.2: To explain demographic trends and issues. (U) CSO 2.3: To elaborate on human development in India. (U) CSO 2.4: To discuss on health in India. (U) CSO 2.5: To examine malnutrition in India. (A)	12	20	
UNIT 3 Infrastructure in Indian Economy	Infrastructure and economic development; energy; power; rail-road coordination; water transport in India; Civil aviation; urban infrastructure; science and technology.	CSO 3.1: To enumerate the importance of infrastructure in economic development. (K) CSO 3.2: To explain energy sector in India. (U) CSO 3.3: To explore on railroads in India. (A) CSO 3.4: To explain water transport in India. (U) CSO 3.5: To explore civil aviation in India. CSO 3.6: To discuss on urban infrastructure in India. CSO 3.7: To explain on science and technology in India.	12	20	
UNIT 4 Growth and Distribution	Trends and Policies in Poverty; Inequality and Unemployment	CSO 4.1: To define Poverty and types of poverty. (K) CSO 4.2: To explain inequalities and types of inequalities. (U) CSO 4.3: To explain unemployment and types of unemployment. (U) CSO 4.4: To analyse the trend and polices in poverty. (U) CSO 4.5: To determine the trend	12	20	

		and polices inequalities. (A) CSO 4.6: To explain the trend and polices in unemployment. (U)			
UNIT 5 Planning in India	Objectives, achievements and failures, NITI Aayog- Objectives, allocation and targets. Economic Reforms	CSO 5.1: To explain objectives of planning in India. (K) CSO 5.2: To list out the achievements and failures of planning in India. (K) CSO 5.3: To discuss on NITI Aayog and its objectives. (U) CSO 5.4: To examine the allocation of resources in NITI Aayog. (A) CSO 5.5: To explain the targets and goals of NITI Aayog. (U) CSO 5.6: To interpret economic reforms in India. (U)		20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Economic Development since Independence

Major features of the Economy at Independence; major issues and development; characteristics of the Indian Economy as a developing economy; Occupational distribution.

Unit 2

20 marks/ 12 lectures

Population and Human Development

Demographic trends and issues; population issues; Human Development in India; health and malnutrition.

Unit 3

20 marks/ 12 lectures

Infrastructure in Indian Economy

Infrastructure and economic development; energy; power; rail-road coordination; water transport in India; Civil aviation; urban infrastructure; science and technology.

Unit4

20 marks/ 12 lectures

Growth and Distribution

Trends and Policies in Poverty; Inequality and Unemployment.

Unit 5

20 marks/ 12 lectures

Planning in India

Objectives, achievements and failures, NITI Aayog- Objectives, allocation and targets. Economic Reforms.

Suggested Readings:

1. Dreze. J. and Sen, A. (2013). An Uncertain Glory: India and its Contradictions, Princeton University Press.
2. Puri. V.K and Misra, S.K. (2008). Indian Economy, Himalaya Publishing House.
3. Datt. R. (1989). Indian Economy, S.Chand & Company (Pvt) Ltd.
4. Balakrishnan. P. (2007). The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.

5. Mohan. R. (2008). Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
6. Shetty. S.L. (2007). India's Savings Performance since the Advent of Planning.
7. Himanshu (2010). Towards New Poverty Lines for India, Economic and Political Weekly, January.
8. Dreze. J. and Deaton. A. (2009). Food and Nutrition in India: Facts and Interpretations, Economic and Political Weekly, February.
9. Himanshu (2011). Employment Trends in India: A Re-examination, Economic and Political Weekly, September.
10. Rama Baru et al. (2010). Inequities in Access to Health Services in India: Caste, Class and Region, Economic and Political Weekly, September.
11. Kingdon. G. (2007). The Progress of School Education in India, Oxford Review of Economic Policy.

Core Course-12

Course Name: DEVELOPMENT ECONOMICS

Course Code: ECC- 5.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is designed to provide students with a comprehensive understanding of the concepts, theories, and issues related to economic development. The course will cover key topics such as the meaning of economic development, theories of development and growth, partial theories of growth and development, and the relationship between economic activity and environmental sustainability. Emphasis will be placed on both historical and contemporary perspectives, allowing students to develop a critical and nuanced understanding of the challenges and opportunities associated with economic development.

COURSE OUTCOMES

On completion of the course the students will be able to define and distinguish economic development from underdevelopment, and comprehend the various indicators used to measure economic development. Students should grasp the difference between economic growth and development, understanding the factors influencing both concepts and gain insights into the factors that affect economic growth, with a specific focus on the roles of agriculture, industry, and infrastructure in the development process. They will develop a deep understanding of classical development theories by economists such as Adam Smith, Ricardo, Malthus, Karl Marx, and Schumpeter, and analyze their contributions to the field. They will be able to analyze and compare key economic growth theories, including Harrod-Domar, Solow, Joan Robinson, and Romar, to comprehend their implications for economic development. They will also be able to understand partial theories such as circular causation, stages of growth, big push theory, and balanced and unbalanced growth theory, and evaluate

their relevance in the context of economic development.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **Development Economics**:

CO 1:	To create understanding among the students about the Concepts of Growth and Development.
CO 2:	To explore the theories of Economic Development.
CO 3:	To analyze the theories of Economic Growth.
CO 4:	To describe the Partial Theories of Growth and Development.
CO 5:	To examine the environment and sustainable Development.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1: Concepts of Growth and Development	Meaning of economic development and underdevelopment; distinction between economic growth and development; measurement and indicators of economic development; factors affecting growth; importance of agriculture; industry and infrastructure in economic development	CSO-1.1: To be able to define the economic development. (K) CSO-1.2: To be able to distinguish between economic growth and development. (A) CSO-1.3: To be able to explain the measurement and indicators of economic development. (U) CSO-1.4: to be able to state the factors affecting growth. (K) CSO-1.5: To be able to enumerate the importance of agriculture; industry and infrastructure in economic development	12	20	
UNIT 2 Theories of Economic Development	Classical theory of development – Adam Smith, Ricardo, and Malthus; Karl Marx and Schumpeter.	CSO-2.1: To be able to analyze Adam Smith theory of development. (A) CSO-2.2: To be able to explain Ricardo's theory of development. (U) CSO-2.3: To be able to	12	20	

		<p>state Malthusian theory of development. (K)</p> <p>CSO-2.4: To be able to elaborate Karl Marx theory of development. (U)</p> <p>CSO-2.5: To be able to explore Schumpeter's theory of development. (A)</p>			
UNIT 3 Theories of Economic Growth	Harrod- Domar, Solow, Joan Robinson, and Romar.	<p>CSO-3.1: To be able to elaborate Harrod- Domar model of economic growth. (U)</p> <p>CSO-3.2: To be able to explore Solow model of economic growth. (A)</p> <p>CSO-3.3: To be able to state Joan Robinson model of economic growth. (K)</p> <p>CSO-3.4: To be able to analyze Romar model of economic growth. (A)</p> <p>CSO-3.5:</p>	12	20	
UNIT 4 Partial Theories of Growth and Development	Circular causation; Stages of growth; Big push theory; Balanced and Unbalanced growth theory.	<p>CSO-4.1: To be able to state the meaning of Circular causation. (K)</p> <p>CSO-4.2: To be able to elaborate the Stages of growth (U)</p> <p>CSO-4.3: To be able to analyze Big Push Theory of growth and development. (A)</p> <p>CSO-4.4: To be able to elaborate the balanced growth theory. (U)</p> <p>CSO-4.5: To be able to assess the Unbalanced growth theory. (A)</p>	12	20	
UNIT 5 Environment and Sustainable Development	Defining sustainability for renewable resources; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change.	<p>CSO-5.1: To be able to define the meaning of sustainability of renewable resources. (K)</p> <p>CSO-5.2: To be able to state the meaning of common-pool resources. (K)</p> <p>CSO-5.3: to be able to elaborate the meaning of and impact of environmental externalities and state regulation of the environment (U)</p> <p>CSO-5.4: To be able to analyse the impact of economic activity and climate</p>	12	20	

		change. (A)			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Concepts of Growth and Development

Meaning of economic development and underdevelopment; distinction between economic growth and development; measurement and indicators of economic development; factors affecting growth; importance of agriculture; industry and infrastructure in economic development

Unit 2

20 marks/ 12 lectures

Theories of Economic Development

Classical theory of development – Adam Smith, Ricardo, and Malthus; Karl Marx and Schumpeter.

Unit 3

20 marks/ 12 lectures

Theories of Economic Growth

Harrod- Domar, Solow, Joan Robinson, and Romar.

Unit 4

20 marks/ 12 lectures

Partial Theories of Growth and Development

Circular causation; Stages of growth; Big push theory; Balanced and Unbalanced growth theory.

Unit 5

20 marks/ 12 lectures

Environment and Sustainable Development

Defining sustainability for renewable resources; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change.

Suggested Readings:

1. Ray, D. (2009). Development Economics, Oxford University Press.
2. Dasgupta, P. (2007). Economics, A Very Short Introduction, Oxford University Press.
3. Banerjee, A., Benabou, R.& Mookerjee, D. (2006). Understanding Poverty, Oxford University Press.
4. Basu, K. (2007). The Oxford Companion to Economics in India, OUP.
5. Sen, A (2000). Development as Freedom, OUP, 2000.
6. Acemoglu, D. & Robinson, J. (2006). Economic Origins of Dictatorship and Democracy. Cambridge University Press.
7. Putnam, R. (1994). Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press.

Core Course: 13

Course Name: PUBLIC ECONOMICS

Course Code: ECC 5.3

Total Lectures: 60 (12*5)

Total Credits: 4
Total Marks: 100

COURSE DESCRIPTION

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The paper is divided into two sections, one dealing with the theory of public economics and the other with the Indian public finance.

COURSE OUTCOME

The course looks into discussing the most important aspect of public economics including fiscal policy. It also seeks to look into the role of public expenditure as a tool to break-through from underdeveloped country, it will also expose the students to taxation and different types of it. It will bring more understanding and analysing the impact of public policy on the allocation of resources and distribution of income in the economy. It will further help the students to analyse the public expenditure, taxation, budgetary procedures, stabilization instruments and debt issues. It will also develop to understand various aspects of fiscal federalism and understand the rationale for the existence of modern governments and phenomenon of externality with the micro and macro aspects of public expenditure.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **PUBLIC ECONOMICS**:

CO 1:	To make the students to learn about the public economic theory.
CO 2:	To inculcate the students to understand on public expenditure.
CO 3:	To make the students learn about the Indian public finance.
CO 4:	To make the students learn about public debt.
CO 5:	To make the students know about the budget.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Public Economic Theory	Fiscal Policy: meaning and scope, objectives and roles. Public Goods: definition, models of efficient allocation, pure and impure public goods.	CSO 1.1: To discuss on fiscal policy, its meaning, objectives and role. (U) CSO 1.2: To recall the concepts of public goods. (K) CSO 1.3: To examine the models of allocation of resources. (A) CSO 1.4: To discuss on pure and impure public goods.	12	20	

		(U)			
UNIT 2 Public Expenditure	Public Expenditure in India: Introduction, classification of Public Expenditure- expenditure on revenue account, expenditure on capital account. Role of Public Expenditure in UDC's.	CSO 2.1: To define public expenditure. (K) CSO 2.2: To explain public expenditure in India. (U) CSO 2.3: To elaborate on the classification of public expenditure. (U) CSO 2.4: To discuss on the types of public expenditure. (U) CSO 2.5: To examine the role of public expenditure in UDC's. (A)	12	20	
UNIT 3 Indian Public Finances	a. Tax System: structure and reforms b. Cannons of Taxation	CSO 3.1: To define tax system. (K) CSO 3.2: To explain the structure of tax system in India. (U) CSO 3.3: To explore the reforms in tax system in India. (A) CSO 3.4: To explain the cannons of taxation. (U)	12	20	
UNIT 4 Public Debt	Meaning; difference between public and private debt, Objectives of Public Debt, sources of public borrowings, growth and burden of public debt in India, safe limit of public debt, Effects of public debt, burden of debt.	CSO 4.1: To define public debts. (K) CSO 4.2: To explain difference between public and private debt. (U) CSO 4.3: To explain objectives of public debt. (U) CSO 4.4: To explain sources and growth of public debt in India. (U) CSO 4.5: To enumerate public debt in India. (K) CSO 4.6: To list out the burden of public debt. (K)	12	20	
UNIT 5 Budget	a. Budget, Deficits, Budgetary policy in India. b. Fiscal Federalism in India	CSO 5.1: To define budget. (K) CSO 5.2: To explain deficits. (U) CSO 5.3: To discuss on budgetary policies in India. (U) CSO 5.4: To write fiscal federalism in India. (K) CSO 5.5: To explain centre-state financial relationship. (U)	12	20	

Course Outline:

Unit 1 **20 marks/ 12 lectures**

Public Economic Theory

Fiscal Policy: meaning and scope, objectives and roles. Public Goods: definition, models of efficient allocation, pure and impure public goods.

Unit 2 **20 marks/ 12 lectures**

Public Expenditure

Public Expenditure in India: Introduction, classification of Public Expenditure- expenditure on revenue account, expenditure on capital account. Role of Public Expenditure in UDC's.

Unit 3 **20 marks/ 12 lectures**

Indian Public Finances

- a. Tax System: structure and reforms
- b. Cannons of Taxation

Unit 4 **20 marks/ 12 lectures**

Public Debt

Meaning; difference between public and private debt, Objectives of Public Debt, sources of public borrowings, growth and burden of public debt in India, safe limit of public debt, Effects of public debt, burden of debt.

Unit 5 **20 marks/ 12 lectures**

Budget

- a. Budget, Deficits, Budgetary policy in India.
- b. Fiscal Federalism in India

Suggested Readings:

1. Hindriks, J. and Myles, G. (2006). Intermediate Public Economics, MIT Press.
2. Lekhi, R.K. (2011). Public Finance. (18 Ed). Kalyani Publishers.
3. Bhatia, H.L. (2012). Public Finance. (27 Ed). Vikash Publishing House.
4. Rosen, H. and Gayer, T (2006). Public Finance, (9 Ed.). McGraw-Hill/Irwin.
5. Joseph E. Stiglitz. (2000) Economics of the Public Sector, (3 Ed.). W.W. Norton & Company.
6. Musgrave R.A. (1989). Public Finance in Theory &Practice, (5 Ed). McGraw Hill Publications.
7. Cullis,J. and Jones, P. (1988). Public Finance and Public Choice, (1 Ed). Oxford University Press.
8. Rosen, H. (2005). Public Finance, (7 Ed.). McGraw Hill Publications.
9. Purohit, M. (2007). Value Added Tax: Experiences of India and Other Countries.

Core Course: 14

Course Name: INDIAN ECONOMY-II

Course Code: ECC 6.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

COURSE OUTCOME

Upon successful completion of this course, students will be able to develop a nuanced understanding of India's agricultural, industrial, and service sectors, including the unique economic scenario of Nagaland. They will acquire skills to formulate and evaluate sector-specific policies, address challenges, and foster economic development. They will Gain insights into the interconnectedness of economic, social, and political factors in shaping trends and policies.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INDIAN ECONOMY-II:**

CO 1:	To help students understand the policies and performance in agriculture.
CO 2:	To assist students in comprehending industrial policies and performance.
CO 3:	To help students in understanding the trends and performance in Services.
CO 4:	To familiarize students with the dynamics of the External Sector in India.
CO 5:	To acquaint students with the nuances and dynamics of the economy in Nagaland.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Policies and Performance in Agriculture	Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.	CSO 1.1: To explain growth and productivity in the agricultural sector in India. (U) CSO 1.2: To understand the agrarian structure in India. (U) CSO 1.3: T understand the growth of technology in the agricultural sector with special mention of the Green Revolution. (U) CSO 1.4: To explain capital formation in the agricultural sector. (U) CSO 1.5: To understand	12	20	

		trade pricing and procurement in the agricultural sector. (U) CSO 1.6: To assess the trade pricing and procurement in the agricultural sector. (A)			
UNIT 2 Policies and Performance in Industry	Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment. Industrial Policies.	CSO 2.1: To explain growth and productivity in the industrial sector in India. (U) CSO 2.2: To explain diversification in the industrial sector. (U) CSO 2.3: To understand the significance of small scale industries. (U) CSO 2.4: To explain the importance of public sector. (U) CSO 2.5: To explain competition policy. (U) CSO 2.6: To understand the significance of foreign investment. (U) CSO 2.7: To explain various Industrial policies in India. (U) CSO 2.8: To assess the industrial policies. (A)	12	20	
UNIT 3 Trend and Performance in Services.	Role of Foreign Trade, trade in exports and imports, composition and direction of India's foreign trade.	CSO 3.1: To explain the role of foreign trade. (U) CSO 3.2: To understand the trends of trade in exports and imports. (U) CSO 3.3: To discuss the composition of trade (U) CSO 3.4: To discuss the composition of India's foreign trade. (U) CSO 3.5: To discuss the direction of India's foreign trade. (U) CSO 3.6: To assess the trend of India's foreign trade. (A) CSO 3.7: To analyse the composition and direction of India's foreign trade, (A)	12	20	
UNIT 4 External Sector in India	Meaning, Forex Reserve, Exchange rates in India: IMF and India, Special Economic Zones.	CSO 4.1: To explain the concept of external sector. (K) CSO 4.2: To explain the meaning of Forex reserve. (U) CSO 4.3: To evaluate the	12	20	

		<p>impact of Forex Reserve on the Indian economy. (A)</p> <p>CSO 4.4: To analyse Exchange Rates in India, with a focus on the relationship between India and the International Monetary Fund (IMF). (A)</p> <p>CSO 4.5: To assess the relation of IMF and India. (A)</p> <p>CSO 4.6: To understand the dynamics and implications of Special Economic Zones. (U)</p>			
UNIT 5 Economy of Nagaland.	Natural Resources; population, infrastructure and structural changes in Nagaland Economy.	<p>CSO 5.1: To acquire knowledge and understanding of the diverse natural resources in Nagaland. (K)</p> <p>CSO 5.2: To analyse the impact of natural resources on the economic dynamics of Nagaland. (A)</p> <p>CSO 5.3: To evaluate the role of population in shaping the economic landscape of Nagaland, taking into account demographic trends and their implications. (A)</p> <p>CSO 5.4: To assess the influence of infrastructure development on the economic growth. (A)</p> <p>CSO 5.5: To examine the structural changes occurring in the Nagaland economy and their implications for future development. (A)</p>	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Policies and Performance in Agriculture

Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

Unit 2

20 marks/ 12 lectures

Policies and Performance in Industry

Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment. Industrial Policies.

Unit 3

20 marks/ 12 lectures

Trend and Performance in Services.

Role of Foreign Trade, trade in exports and imports, composition and direction of India's foreign trade.

Unit 4

20 marks/ 12 lectures

External Sector in India

Meaning, Forex Reserve, Exchange rates in India: IMF and India, Special Economic Zones.

Unit 5

20 marks/ 12 lectures

Economy of Nagaland

Natural Resources; population, infrastructure and structural changes in Nagaland Economy.

Suggested Readings:

1. Dreze. J. and Sen, A. (2013). An Uncertain Glory: India and its Contradictions, Princeton University Press.
2. Puri. V.K and Misra, S.K. (2008). Indian Economy, Himalaya Publishing House.
3. Datt. R. (1989). Indian Economy, S.Chand& Company (Pvt) Ltd.
4. Balakrishnan. P. (2007). The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.
5. Mohan. R. (2008). Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
6. Shetty. S.L.(2007). India's Savings Performance since the Advent of Planning.
7. Himanshu (2010). Towards New Poverty Lines for India, Economic and Political Weekly, January.
8. Dreze. J. and Deaton. A. (2009). Food and Nutrition in India: Facts and Interpretations, Economic and Political Weekly, February.
9. Himanshu (2011). Employment Trends in India: A Re-examination, Economic and Political Weekly, September.
10. Rama Baru et al. (2010). Inequities in Access to Health Services in India: Caste, Class and Region, Economic and Political Weekly, September.
11. Kingdon. G. (2007). The Progress of School Education in India, Oxford Review of Economic Policy.
12. Singh. R. (2023). Indian Economy. (15 Ed.). McGraw Hill Publication.
13. NUTA, Economic development in Nagaland: prospectus and constraints

Core Course: 15

Course Name: INTERNATIONAL ECONOMICS

Course Code: ECC 6.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is designed to provide students with a comprehensive understanding of key theories and principles in international economics. It covers topics ranging from trade

theories, tariffs, and import quotas to the balance of payments and the international monetary system. The course will explore both theoretical frameworks and practical applications, offering students insights into the complexities of international economic relations and policies.

COURSE OUTCOMES

Upon successful completion of this course, students should be able to comprehend the concepts of absolute advantage, comparative advantage, and opportunity cost theory. They should analyze the Heckscher-Ohlin (H.O) Theorem and understand the Leontief Paradox, gaining insights into the theoretical foundations of international trade. Students should be able to evaluate the effects of tariffs using both partial and general equilibrium analysis. They should understand the theories of optimum tariff, be able to apply the optimum tariff formula, and analyze the impact of import quotas. Students should understand the meaning, objectives, and types of import quotas. They should be able to analyze the effects of import quotas and make comparisons between tariffs and quotas in the context of international trade. Students should be able to comprehend the concept and components of the Balance of Trade and Payment. They should be able to identify equilibrium and disequilibrium in the balance of payment and explore measures to correct balance of payment deficits. Students should understand the roles and functions of international organizations such as the International Monetary Fund (IMF), Asian Development Bank (ADB), International Finance Corporation (IFC), International Development Association (IDA), and the World Bank in the context of the international monetary system.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTERNATIONAL ECONOMICS**:

CO 1:	To make the students aware of the various theories of international trade.
CO 2:	To help the students to understand the concept of Tariffs and its effects.
CO 3:	To create understanding among the students about the Import Quotas and its objectives.
CO 4:	To enable the students to analyze the International Factor Movement.
CO 5:	To create understanding among the students about the International Monetary System.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Theories of Trade	Absolute advantage, Comparative advantage and	CSO-1.1: To understand the theories of absolute advantage. (U) CSO-1.2: To be able to	12	20	

	opportunity cost theory, H.O Theorem and Leontief Paradox	explain the theory of comparative advantage. (U) CSO-1.3: To be able to analyze the theory of opportunity cost. (A) CSO-1.4: To be able to describe the H.O Theorem. (K) CSO-1.5: To be able to illustrate the theory of Leontief Paradox (A)			
UNIT 2 Tariff	Effects of tariff (Partial and general equilibrium analysis); Theories of optimum tariff; Optimum tariff formula and Import Quota.	CSO-2.1: To understand the effects of tariffs under partial equilibrium analysis. (U) CSO-2.2: To be able to illustrate the effects of tariffs under general equilibrium analysis. (A) CSO-2.3: To be able to explain the theories of optimum tariff. (U) CSO-2.4: To be able to state the optimum tariff formula. (K) CSO-2.5: To be able to explain the optimum tariff on quota. (U)			
UNIT 3 Import Quotas	Meaning, objectives and types of import quotas, Effects of import quotas, Comparison between tariff and quotas	CSO-3.1: To able to define the import quota. (K) CSO-3.2: To be able to analyze the objectives of import quota. (A) CSO-3.3: To be able to elaborate the types of import quota. (U) CSO-3.4: To be able to illustrate the effects of import quota. (A) CSO-3.5: To be able to compare between tariff and quotas. (U)			
UNIT 4 International Factor Movement	Introduction, Migration of labour- positive effects of migration, welfare effects of migration, policy implications. Foreign portfolio investment-positive effects` of portfolio	CSO-4.1: To be able to give an introduction to the migration of labour force. (U) CSO-4.2: To be able to analyse the effects of migration. (A) CSO-4.3: To be able to illustrate the implication of portfolio investment. (A) CSO-4.4: To be able to explain the positive effects of			

	investment, welfare effects` of portfolio investment, policy implications.	portfolio investment. (U) CSO-4.5: To illustrate the welfare effects of portfolio investment. (A) CSO-4.5: To be able to evaluate the policy implications of portfolio investment. A)			
UNIT 5 International Monetary System	IMF, ADB, International Finance Corporation (IFC), International Development Association (IDA) and World Bank.	CSO-5.1: To be able to explain the functions, objectives of IMF. (U) CSO-5.2: To be able to understand the functions of ADB. (U) CSO-5.3: to be able to elaborate about the IFC. (U) CSO- 5.4: To be able to describe about the IDA. (K) CSO-5.5: To be able to write about the origin and functions of WTO. (K)			

Course Outline:

Unit 1

20 marks/ 12 lectures

Theories of Trade

Absolute advantage, Comparative advantage and opportunity cost theory, H.O Theorem and Leontief Paradox

Unit 2

20 marks/ 12 lectures

Tariff

Effects of tariff (Partial and general equilibrium analysis); Theories of optimum tariff; Optimum tariff formula and Import Quota.

Unit 3

20 marks/ 12 lectures

Import Quotas

Meaning, objectives and types of import quotas, Effects of import quotas, Comparison between tariff and quotas

Unit 4

20 marks/ 12 lectures

International Factor Movement

Introduction, Migration of labour- positive effects of migration, welfare effects of migration, policy implications. Foreign portfolio investment-positive effects` of portfolio investment, welfare effects` of portfolio investment, policy implications.

Unit 5

20 marks/ 12 lectures

International Monetary System

IMF, ADB, International Finance Corporation (IFC), International Development Association (IDA) and World Bank.

Suggested Readings:

1. Mannur, H.G., (2013). International Economics. Vikas publishing house, Noida.

2. Sodersten, B and Reed, G. (2013). International Economics. Macmillan Press Ltd., London.
3. Jhingan, M, L. (2009). International Economics, (6th ed.). Vrinda Publications (P) Ltd, Delhi.
4. Cherunilam, F. (2008). International Economics. Tata McGraw Hill, New Delhi.
5. Rana, K.C. & Verma K, N. (2008). International Economics. Vishal Publishing Co. Jalandhar.
6. Vaish, M.C., & Singh S. (2006). International Economics. Oxford and IBH publishing Co. Pvt. Ltd., New Delhi.

Core Course: 16

Course Name: ENVIRONMENTAL ECONOMICS

Course Code: ECC 6.3

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

COURSE OUTCOME

Upon successful completion of the course the students will be able to know the detailed of the discipline of environmental economics, including the key principles and methods and also able to use economic techniques to analyse environmental problems and assess environmental policies. The course also adopts both the international environmental problems and sustainable development thereby discussing more on the policy framework on environmental laws and regulations. Furthermore, it makes and intensive outlook on sustainable industrialization, trans-boundary and global pollution and bringing out policies in mitigating it. The students will also learn and examine the economic principles of choices of instruments, relative strength and weaknesses of environmental policies based on command-

and-control vis-à-vis market-based instruments. It will help the students to examine the issues of the contemporary environmental discourse from an economist point of view and also discuss various principles and approaches for valuing environmental goods and services.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **ENVIRONMENTAL ECONOMICS**:

CO 1:	To make the students to learn about the basic meaning of environmental economics and theories of externalities.
CO 2:	To inculcate the students to understand the design and implementation of environmental policy.
CO 3:	To make the students learn about sustainable industrialization.
CO 4:	To create interest among students to learn about international environmental problems.
CO 5:	To assist the students, know about measuring the benefits of environmental improvements and sustainable development.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction and the Theories of Externalities	What is Environmental Economics; review of microeconomics and welfare economics. Pareto Optimality and Market Failure in the presence of externalities; Property Rights and the Coase Theorem.	CSO 1.1: To explain the meaning of environmental economics. (U) CSO 1.2: To recall the concepts of microeconomics and welfare economics. (K) CSO 1.3: To examine the model of Pareto Optimality . (A) CSO 1.4: To discuss on market failure. (U) CSO 1.5: To explore on property rights and Coase theorem. (A)	12	20	
UNIT 2 The Design and Implementation of Environmental Policy.	Overview; Pigouvian Taxes and Effluent Fees; Prevention, control and abatement of pollution; command and control, market-based instruments, implementation of environmental Policy.	CSO 2.1: To define Pigouvian tax. (K) CSO 2.2: To explain effluent fees. (U) CSO 2.3: To elaborate on prevention and control of pollution. (U) CSO 2.4: To discuss on market-based instruments on control of polluting. (U) CSO 2.5: To examine the implementation of environmental policy. (A)	12	20	

UNIT 3 Sustainable Industrialization	Sustainable Industrialization: meaning, Green Marketing: meaning: clean technology of production and transfer of technology; basic environmental regulation.	CSO 3.1: To define sustainable industrialization. (K) CSO 3.2: To explain green marketing. (U) CSO 3.3: To explore on clean technology of production. (A) CSO 3.4: To explain transfer of technology. (U) CSO 3.5: To enumerate basic environmental regulations.	12	20	
UNIT 4 International Environmental Problems	Trans-Boundary environmental problems; economics of climate change; trade and environment.	CSO 4.1: To define trans-boundary pollutions. (K) CSO 4.2: To explain trans-boundary environmental problems. (U) CSO 4.3: To explain economics of climate change. (U) CSO 4.4: To analyse between trade and environment. (U)	12	20	
UNIT 5 Measuring the Benefits of Environmental Improvements and Sustainable Development.	Non- Market values and measurement methods; risk assessment and perception. Concepts; measurement.	CSO 5.1: To explain the benefits of environmental improvements. (K) CSO 5.2: To explain non-market values of measuring environmental goods. (U) CSO 5.3: To discuss on methods of measuring environmental goods. (U) CSO 5.4: To examine the risk and perception assessments. (A) CSO 5.5: To explain the concepts of sustainable development. (U) CSO 5.6: To interpret the methods of measuring sustainable development. (U)		20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Introduction and the Theories of Externalities

What is Environmental Economics; review of microeconomics and welfare economics. Pareto Optimality and Market Failure in the presence of externalities; Property Rights and the Coase Theorem.

Unit 2

20 marks/ 12 lectures

The Design and Implementation of Environmental Policy

Overview; Pigouvian Taxes and Effluent Fees; Prevention, control and abatement of pollution; command and control, market-based instruments, implementation of environmental Policy.

Unit 3

20 marks/ 12 lectures

Sustainable Industrialization

Sustainable Industrialization: meaning, Green Marketing: meaning: clean technology of production and transfer of technology; basic environmental regulation.

Unit 4

20 marks/ 12 lectures

International Environmental Problems

Trans-Boundary environmental problems; economics of climate change; trade and environment.

Unit-5

20 marks/ 12 lectures

Measuring the Benefits of Environmental Improvements and Sustainable Development.

Non- Market values and measurement methods; risk assessment and perception. Concepts; measurement.

Suggested Readings:

1. Kolstad, C. (2010). Intermediate Environmental Economics, (2 Ed.). Oxford University.
2. Stavins, R. (ed.), (2005). Economics of the Environment: Selected Readings, (5 Ed.) W.W. Norton.
3. Perman, R., Ma, Y., McGilvray, J and Common, M. (2003). Natural Resource and Environmental Economics (3 Ed.). Pearson Education/Addison Wesley.
4. Cropper, M and Oates, W. (1992). Environmental Economics: A Survey, Journal of Economic Literature, Volume 30:675-740.

Core Course: 17

Course Name: MONEY AND FINANCIAL MARKETS

Course Code: ECC 6.4

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control.

COURSE OUTCOME

By completion of this course, students should understand the theory and functioning of the monetary and financial sectors of the economy. They should also be able to understand the

organization, structure and role of financial markets and institutions. They will also learn the interest rates, monetary management and instruments of monetary control, financial and banking sector reforms.

Course Objectives:

The following are the Course Objectives (CO's) for the paper **MONEY AND FINANCIAL MARKETS**:

CO 1:	To make the students understand the concepts of financial instruments and markets.
CO 2:	To make the students understand the working of commercial banks.
CO 3:	To make the students understand the working of monetary policy.
CO 4:	To foster the students, understand the Central Bank.
CO 5:	To make the students understand the functions of development banks.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective	Lecture Hours	Marks	LOs
UNIT 1 Financial Institutions and Financial reforms in India	Role of financial markets and institutions; Money and capital markets: organization, structure and reforms in India.	CSO 1.1: To define the role of financial markets. (K) CSO 1.2: To define the role of financial institutions. (K) CSO 1.3: To examine the difference between money markets and capital markets. (A) CSO 1.4: To understand the organizational structure of the money and capital markets. (U) CSO 1.5: to enumerate the financial reforms in India. (K)	12	20	
UNIT 2 Banking System	Banking legislation in India: banking regulation Act, 1949; Indian banking system: Changing role and structure; banking sector reforms.	CSO 2.1: To understand the meaning of banking legislation. (U) CSO 2.2: To understand the meaning of banking legislation in India. (U) CSO 2.3: To describe the banking regulation Act, 1949. (U) CSO 2.4: To elaborate the Indian banking system. (U) CSO 2.5: To discuss the changing role and structure. (U) CSO 2.6: To learn about the banking sector reforms in India. (U)	12	20	
UNIT 3 Commercial Banks	Commercial Banks; meaning, functions, objectives, role; Nationalization of	CSO 3.1: To explain about the meaning of commercial banks. (U) CSO 3.2: to describe the functions of commercial banks. (K)	12	20	

	Commercial Banks; limitations of nationalization of Commercial Banks.	CSO 3.3: To illustrate the objectives and role of commercial banks. (A) CSO 3.4: to enumerate the Nationalization of Commercial Banks. (K) CSO 3.5: To describe the limitations of nationalization of Commercial Banks. (K)			
UNIT 4 Central Banking	Definition, functions; methods of credit control- qualitative and quantitative credit control.	CSO 4.1: To define the meaning of central banks. (K) CSO 4.2: To learn about the functions of central banks. (U) CSO 4.3: To understand the methods of credit control. (U) CSO 4.4: To illustrate the qualitative methods of credit control. (A) CSO 4.5: To illustrate the quantitative methods of credit control. (A)	12	20	
UNIT 5 Development Banks in India	Concept, features; Development Banks in India- Industrial Finance Corporation of India (IFCI), Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Small Industries Development Bank of India (SIDBI), Export-Import Bank of India (EXIM).	CSO 5.1: to understand the Concept of development banks. (U) CSO 5.2: to enumerate the features of development banks. (K) CSO 5.3: to examine the working of Industrial Finance Corporation of India (IFCI). (A) CSO 5.4: to examine Industrial Development Bank of India (IDBI). (A) CSO 5.5: To examine the working of Industrial Credit and Investment Corporation of India (ICICI). (A) CSO 5.6: To examine the working of Small Industries Development Bank of India (SIDBI). (A) CSO 5.7: To examine the working of Export-Import Bank of India (EXIM). (A)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Financial Institutions and Financial reforms in India

Role of financial markets and institutions; Money and capital markets: organization, structure and financial reforms in India.

Unit 2

20 marks/ 12 lectures

Banking System

Banking legislation in India: banking regulation Act, 1949; Indian banking system: Changing role and structure; banking sector reforms.

Unit 3

20 marks/ 12 lectures

Commercial Banks

Commercial Banks; meaning, functions, objectives, role; Nationalization of Commercial

Banks; limitations of nationalization of Commercial Banks.

Unit 4

20 marks/ 12 lectures

Central Banking

Definition, functions; methods of credit control-qualitative and quantitative credit control; limitations.

Unit 5

20 marks/ 12 lectures

Development Banks in India

Concept, features; Development Banks in India- Industrial Finance Corporation of India (IFCI), Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Small Industries Development Bank of India (SIDBI), Export-Import Bank of India (EXIM).

Suggested Readings:

1. Bhole. L. (2009). Financial Institutions and Markets. McGraw Hill, New Delhi.
2. Cauvery, R., Kruparani N. Nayak, Sudha, U.K and Manimekakai A. (2003). Monetary Economics. S. Chand publishing.
3. Seth, M. L. (2020). Money, Banking International Trade and public finance. Lakshmi Narain Agarwal.
4. Mithani. D.M. (2012). Money Banking and International Trade. Himalaya Publishing house.
5. Paul. R. (2018). Monetary Economics 12th Edition. Kalyani
6. Sundharam. K.P.M. (1976). Monetary Theory and practices. Sultan Chand, New Delhi.
7. Vaish. M. (2005). Monetary theory. Vikas publishing house, New Delhi

Core Course: 18

Course Name: ADVANCED ECONOMETRICS

Course Code: ECC 7.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

In this course, Students will explore testing linear restrictions and gain insights into modeling and testing for structural breaks. It also focuses to Models for Stability Tests, covering various stability tests such as Hansens' test, Recursive residuals, CUSUM test, predictive test, and causality tests. Unit III introduces Qualitative Response Models, where students will study models for qualitative dependent variables, including the Linear Probability Model, Maximum Likelihood Probit and Logit, Multinomial Logit, and Tobit models etc. Through this comprehensive curriculum, students will develop advanced skills in econometric modeling and analysis.

COURSE OUTCOMES

By the end of this advanced econometrics course, students will demonstrate a proficient understanding of testing linear restrictions and be able to apply inference techniques to identify structural breaks in economic models. Students will acquire the skills to perform stability tests using various methods, such as Hansens’ test, Recursive residuals, CUSUM test, predictive tests, and causality tests, enabling them to assess the stability of economic models effectively. The course will equip students with a comprehensive understanding of qualitative response models, including the Linear Probability Model, Maximum Likelihood Probit and Logit, and Multinomial Logit and Tobit models, enabling them to analyze and model qualitative dependent variables. Participants will gain expertise in panel data models, specifically in applying both fixed effects and random effects approaches, allowing them to address complex economic scenarios involving longitudinal data. By the conclusion of the course, students will have a solid grasp of key concepts in time series econometrics, including stationary stochastic processes, non-stationarity, unit roots, cointegration, and ARCH/GARCH models, providing them with the tools to analyze and forecast economic time series data effectively.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **ADVANCED ECONOMETRICS**:

CO 1:	To familiarize with the need and scope of econometrics as a subject matter.
CO 2:	To develop proficiency in testing linear restrictions and modeling structural breaks.
CO 3:	To gain advanced skills in stability testing models and explore and understand qualitative response models.
CO 4:	To acquire knowledge of panel data models and master key concepts in time series econometrics.
CO 5:	To provide students with the essential skills required for utilizing software packages designed for econometric analysis.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Testing and Inference	Inference and Structural Change: Testing linear restrictions - Modeling and testing for Structural break.	CSO 1.1: To understand the concept of testing linear restrictions in econometrics. (K) CSO 1.2: To apply statistical techniques to test linear restrictions in econometric models. (A) CSO 1.3: To identify instances where structural changes may occur in a model. (K) CSO 1.4: To explain the	12	20	

		<p>implications of structural changes on model outcomes. (K)</p> <p>CSO 1.5: To model and analyze structural breaks in econometric contexts. (U)</p> <p>CSO 1.6: To demonstrate proficiency in applying econometric tools for structural break analysis. (U)</p> <p>CSO 1.7: To evaluate the statistical significance of structural breaks. (K)</p> <p>CSO 1.8: To formulate hypotheses related to structural changes in econometric models. (U)</p> <p>CSO 1.9: To conduct hypothesis testing for structural breaks in econometric models. (A)</p> <p>CSO 1.10: To interpret the results of hypothesis tests for structural changes. (U)</p> <p>CSO 1.11: To apply knowledge gained to real-world scenarios involving structural changes in economic data (A)</p>			
UNIT 2 Models for Stability Tests	Tests of Model Stability: Hansens' test, Recursive residuals and CUSUM test, predictive test, Causality tests.	<p>CSO 2.1: To understand the concept of model stability. (U)</p> <p>CSO 2.2: To apply Hansen's test for model stability. (A)</p> <p>CSO 2.3: To analyze recursive residuals to assess model stability. (U)</p> <p>CSO 2.4: To utilize CUSUM test for detecting structural changes in time series models. (A)</p> <p>CSO 2.5: To predict model stability using predictive tests. (U)</p> <p>CSO 2.6: To evaluate causality tests to determine the relationship between variables. (A)</p> <p>CSO 2.7: To differentiate between Hansen's test and CUSUM test. (K)</p> <p>CSO 2.8: To interpret recursive residuals in the context of model stability. (K)</p> <p>CSO 2.9: To apply predictive tests to assess the future stability of econometric models. (A)</p> <p>CSO 2.10: To justify the choice of stability test based on specific modeling scenarios. (U)</p> <p>CSO 2.11: To construct and</p>	12	20	

		conduct causality tests for given econometric models. (A)			
UNIT 3 Qualitative Response Models	Qualitative Dependent Variable Models: The Linear Probability Model, Maximum Likelihood, Probit and Logit, Multinomial Logit and Tobit models.	<p>CSO 3.1: To understand the concept of Qualitative Dependent Variable Models. (U)</p> <p>CSO 3.2: To apply the Linear Probability Model for analyzing qualitative dependent variables. (A)</p> <p>CSO 3.3: To explain the Maximum Likelihood method and its application in Probit models. (K)</p> <p>CSO 3.4: To utilize Maximum Likelihood Logit models for qualitative response analysis. (A)</p> <p>CSO 3.5: To apply Multinomial Logit models to analyze multiple qualitative response categories. (A)</p> <p>CSO 3.6: To evaluate the strengths and limitations of the Tobit model in handling censored data. (U)</p> <p>CSO 3.7: To differentiate between Probit and Logit models for qualitative response analysis. (K)</p> <p>CSO 3.8: To interpret the results obtained from the Linear Probability Model. (U)</p> <p>CSO 3.9: To assess the applicability of Tobit models in specific econometric scenarios. (A)</p> <p>CSO 3.10: To compare and contrast the performance of Multinomial Logit models with other qualitative response models. (K)</p> <p>CSO 3.11: To justify the choice of a particular qualitative response model based on the characteristics of the data. (U)</p> <p>CSO 3.12: To demonstrate proficiency in estimating and interpreting parameters in Probit models through Maximum Likelihood estimation. (A)</p> <p>CSO 3.13: To critically analyze the assumptions underlying the Linear Probability Model and identify situations where it may be inappropriate. (K)</p>	12	20	

UNIT 4 Panel Data Models	Models for Panel data: Fixed effects and Random effects approach.	<p>CSO 4.1: To understand the concept of Panel Data Models and their relevance in econometrics. (U)</p> <p>CSO 4.2: To differentiate between Fixed Effects and Random Effects approaches in panel data analysis. (K)</p> <p>CSO 4.3: To apply the Fixed Effects approach to account for individual heterogeneity in panel data. (A)</p> <p>CSO 4.4: To implement the Random Effects approach for modelling unobserved individual-specific effects in panel data. (A)</p> <p>CSO 4.5: To evaluate the advantages and limitations of using Fixed Effects in panel data analysis. (U)</p> <p>CSO 4.6: To critically assess the assumptions underlying the Random Effects approach in panel data modelling. (K)</p> <p>CSO 4.7: To compare and contrast the efficiency of Fixed Effects and Random Effects models in different empirical settings. (K)</p> <p>CSO 4.8: To analyze the impact of individual heterogeneity on panel data model results. (U)</p> <p>CSO 4.9: To interpret the fixed effects coefficients in the context of panel data. (U)</p> <p>CSO 4.10: To apply diagnostic tests to assess the validity of assumptions in Fixed Effects and Random Effects models. (A)</p> <p>CSO 4.11: To justify the choice between Fixed Effects and Random Effects models based on the characteristics of the panel data. (K)</p> <p>CSO 4.12: To critically evaluate the implications of using different panel data models on statistical inference. (A)</p> <p>CSO 4.13: To demonstrate the ability estimate and interpret parameters in both Fixed Effects and Random Effects panel data models. (A)</p>	12	20	
UNIT 5 Time Series	Key concepts in Time series	CSO 5.1: To understand the fundamental concepts of Time	12	20	

<p>Econometrics</p>	<p>Econometrics: Stationary stochastic processes – Non-stationarity and Unit roots – Cointegration – ARCH and GARCH models.</p>	<p>Series Econometrics. (U) CSO 5.2: To differentiate between stationary and non-stationary stochastic processes. (K) CSO 5.3: To identify and interpret unit roots in time series data. (K) CSO 5.4: To apply methods to transform non-stationary time series data into stationary processes. (A) CSO 5.5: To analyze the concept of cointegration in the context of time series data. (A) CSO 5.6: To evaluate the implications of cointegration for long-term relationships in time series models. (U) CSO 5.7: To explain the ARCH (Autoregressive Conditional Heteroskedasticity) model in time series econometrics. (K) CSO 5.8: To apply ARCH models to capture volatility clustering in financial time series. (A) CSO 5.9: To understand the GARCH (Generalized Autoregressive Conditional Heteroskedasticity) model in time series analysis. (K) CSO 5.10: To apply GARCH models to model and forecast volatility in time series data. (A) CSO 5.11: To assess the limitations of stationary processes in capturing real-world time series data. (U) CSO 5.12: To demonstrate the ability to test for unit roots in time series data. (A) CSO 5.13: To critically evaluate the impact of cointegration on the estimation and interpretation of time series models. (U) CSO 5.14: To apply appropriate transformations to achieve stationarity in non-stationary time series data. (A) CSO 5.15: To analyze the predictive power of GARCH models in capturing volatility patterns over time. (A) CSO 5.16: To justify the choice</p>			
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		of time series models based on the characteristics and requirements of the data. (K)			
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Course Outline:

Unit I

20 marks/ 12 lectures

Testing and Inference

Inference and Structural Change: Testing linear restrictions -Modeling and testing for Structural break.

Unit 2

20 marks/ 12 lectures

Models for Stability Tests

Tests of Model Stability: Hansens' test, Recursive residuals and CUSUM test, predictive test, Causality tests.

Unit 3

20 marks/ 12 lectures

Qualitative Response Models

Qualitative Dependent Variable Models: The Linear Probability Model, Maximum Likelihood Probit and Logit, Multinomial Logit and Tobit models.

Unit 4

20 marks/ 12 lectures

Panel Data Models

Models for Panel data: Fixed effects and Random effects approach.

Unit 5

20 marks/ 12 lectures

Time Series Econometrics

Key concepts in Time series Econometrics: Stationary stochastic processes – Non-stationarity and Unit roots – Cointegration – ARCH and GARCH models.

Suggested Readings:

1. Gujarati, D.N. (1999). Basic Econometrics, Fourth edition, Vignyan Distributors
2. Asteriou, D. and Hall, S. G. (2022). Applied Econometrics: A Modern Approach Using EViews and Microfit. Bloomsbury (Manohar Publishers and Distributors).
3. Koutsoyiannis, A. (1997). Theory of Econometrics (Second Edition), Palgrave Publishers Ltd.
4. Maddala, G.S. (2001), Introduction to Econometrics, Ed.3, R. Publications, New Delhi Wang, Peijie.
5. Pindyck, R. S. and Rubinfeld, D. L. (1976). Econometric Models and Economic Forecasts – International Student edition.
6. Greene, W. H. (2004). Econometric Analysis Fifth edition, Pearson Education.

Core Course: 19

Course Name: INDUSTRIAL ECONOMICS

Course Code: ECC 7.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

The basic objective of the course is to enable students to understand the structure of markets. The focus of the course is split equally between economic theory and practical perspective. The emphasis will be on understanding how the theoretical tools can be used to analyze real world issues with respect to industrial development.

COURSE OUTCOME

On completing the course, the students will be able to understand the need and significance of industrialization. They should also understand the importance of industrialization and economic development and gain knowledge about the problems faced by industries.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INDUSTRIAL ECONOMICS**:

CO 1:	To inculcate in the students about the need and significance of industrialization.
CO 2:	To make the students understand the behavior of a firm in determining profitability.
CO 3	To make the students understand about the market structure and industrial efficiency.
CO 4:	To make the students learn the theories of Industrial Location.
CO 5:	To make the students learn about Industrialization in India.

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction to Industrial Economics.	Meaning and scope of Industrial Economics; Need and significance of the study of Industrial Economics; Factors affecting Industrial Development; Role, problems and future of public sector industries.	CSO 1.1: To define Industrial Economics (K). CSO 1.2: To write the scope of Industrial Economics (K). CSO 1.3: To explain the need of the study of Industrial Economic (U). CSO 1.4: To discuss the significance of Industrial Economics (U). CSO 1.5: To analyze the factors affecting Industrial Development (A). CSO 1.6: To explain the role of public sector industries (U).	12	20	

		<p>CSO 1.7: To analyze the problems of public sector industries (A).</p> <p>CSO 1.8: To discuss the future of public sector industries (U).</p>			
<p>UNIT 2</p> <p>Behavior of the firm.</p>	<p>Types and choice of organizational firm – ownership and control; Passive and active behavior of firm; The Firm: Emergence and its objectives - non-profit maximizing models. Cost theory and optimum size of a firm, Determinants of profitability and pricing decisions: Product pricing.</p>	<p>CSO 2.1: To differentiate the types and choice of organizational firm – ownership and control (K).</p> <p>CSO 2.2: To Differentiate between active and passive behavior of firm (A).</p> <p>CSO 2.3: To discuss the emergence of firm (U).</p> <p>CSO 2.4: To write the objectives of the firm (K).</p> <p>CSO 2.5: To explain the Non – profit maximising model of firm (U).</p> <p>CSO 2.6: To explain the cost theory and optimum size of the firm (U).</p> <p>CSO 2.7: To identify the determinants of profitability and pricing decisions (A).</p> <p>CSO 2.8: To identify the determinants of product pricing (A).</p>	12	20	
<p>UNIT 3</p> <p>Market and Industrial Efficiency.</p>	<p>Market structure and market conduct; Industrial Efficiency: concept, determinants, measurement and decision-making process. Market concentration, its measurement and effects on market Performance; Product differentiation</p>	<p>CSO 3.1: To explain market structure (U).</p> <p>CSO 3.2: To discuss market conduct (U).</p> <p>CSO 3.3: To define Industrial Efficiency (K).</p> <p>CSO 3.4: To identify the determinants of market efficiency (A).</p> <p>CSO 3.5: To examine the measurements of Industrial Efficiency (A).</p> <p>CSO 3.6: To analyze the decision-making process of Industrial Efficiency (A).</p> <p>CSO 3.7: To define market</p>	12	20	

	and advertisement, Diversification, Integration and Merger, Research & Development and Innovation; Theories of growth of firm: Constrained on growth.	<p>concentration (K).</p> <p>CSO 3.8: To examine the measurement of market concentration (A).</p> <p>CSO 3.9: To explain the effects of market concentration on market performance (U).</p> <p>CSO 3.10: To discuss product differentiation, advertisement and diversification (U).</p> <p>CSO 3.11: To Distinguish between Integration and Merger (A).</p> <p>CSO 3.12: To Discuss Research & Development and Innovation (U).</p> <p>CSO 3.13: To explain the theory of growth of firm – Constrained on growth (U).</p>			
UNIT 4 Industrial Locational Analysis.	Meaning of Industrial Location; determinants of Industrial location; factors affecting location; Weber's & Florence's Theories of Industrial location, Industrial Concentration: Causes and Effects, Need for balanced regional development of industries - role of SIDC.	<p>CSO 4.1: To define Industrial Location (K).</p> <p>CSO 4.2: To identify the determinants of Industrial Location (A).</p> <p>CSO 4.3: To analyze the factors affecting location (A0).</p> <p>CSO 4.4: To explain Weber's & Florence's Theories of Industrial Location (U).</p> <p>CSO 4.5: To examine the causes and effects of Industrial Concentration (A).</p> <p>CSO 4.6: To explain the need for a balanced regional development of industries (U).</p> <p>CSO 4.7: To explain the role of SIDC to maintain the need for balanced regional development of industries (U).</p>	12	20	
UNIT 5 Industriali zation in India.	Trends in Industrial growth and diversification;	<p>CSO 5.1: To discuss the trends in industrial growth and diversification (U).</p> <p>CSO 5.2: To analyze the impact</p>	12	20	

	<p>Globalization and its impacts on industries; Industrial Policy in India, Policy initiatives to liberalize Indian industries and its effects; Labour issues and reforms; SSIs and Cottage industries in India-Policy issues and performances; Competition Act 2002.</p>	<p>of globalization on Industrial Policy in India (A). CSO 5.3: To discuss the policy initiatives to liberalize Indian industries and its effects (U). CSO 5.4: To analyse labour issues and labour reforms (A). CSO 5.5: To explain SSIs and cottage industries in India-Policy and their issues (U). CSO 5.6: To discuss the performance of SSIs (U). CSO 5.7: To Discuss the Competition Act 2002 (U).</p>			
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Course Outline:

Unit I

Introduction to Industrial Economics

20 marks/ 12 lectures

Meaning and scope of Industrial Economics; Need and significance of the study of Industrial Economics; Factors affecting Industrial Development; Role, problems and future of public sector industries

Unit II

Behavior of the Firm

20 marks/ 12 lectures

Types and choice of organizational firm – ownership and control; Passive and active behavior of firm; The Firm: Emergence and its objectives - non-profit maximizing models. Cost theory and optimum size of a firm, Determinants of profitability and pricing decisions: Product pricing.

Unit III

Market and Industrial Efficiency

20 marks/ 12 lectures

Market structure and market conduct; Industrial Efficiency: concept, determinants, measurement and decision-making process. Market concentration, its measurement and effects on market Performance; Product differentiation and advertisement, Diversification, Integration and Merger, Research & Development and Innovation; Theories of growth of firm: Constrained on growth.

Unit IV

Industrial Locational Analysis

20 marks/ 12 lectures

Meaning of Industrial Location; determinants of Industrial location; factors affecting location; Weber’s & Florence’s Theories of Industrial location, Industrial Concentration: Causes and Effects, Need for balanced regional development of industries - role of SIDC

Unit V

Industrialization in India

20 marks/ 12 lectures

Trends in Industrial growth and diversification; Globalization and its impacts on industries; Industrial Policy in India, Policy initiatives to liberalize Indian industries and its effects; Labour issues and reforms; SSIs and Cottage industries in India-Policy issues and performances; Competition Act 2002.

Suggested Readings

1. Ahluwallia. I.J. (1992). Industrial Growth in India, OUP, Delhi.
2. Bain, J.E. (1959): Industrial Organization, Wiley and Sons, NY.
3. Barthwal, R.R. (2007): Industrial Economics: An Introduction Text Book (2e), New Age International, ND.
4. Dayananda, D. et al. (2002). Capital Budgeting- Financial Appraisal of Investment Projects, CU Press.
5. Divine, J. et al. (1976): An Introduction to Industrial Economics, George Allen and Unwin, London.
6. Hay, A.D. and D.J. Morris (1991): Industrial Economics and Organization: Theory and Evidence, OUP.
7. Smith, D.M. (1971). Industrial Location: An Economic and Geographic Analysis, John Wiley, NY.

Course Name: RESEARCH METHODOLOGY

Course Code: RM

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course offers a foundation on research methodology and the basic concept of carrying out research in a systematic manner using the most appropriate methods.

COURSE OUTCOME

On successful completion of the course the students will be able to understand and comprehend the basic concepts of scientific research and research methodologies, identify appropriate research topic and develop hypothesis. Students will be able to adopt suitable research design and formulate skills in data collection applying desirable measures. The course will enable the students in developing advanced writing skills in research using critical thinking and analytical skills.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **RESEARCH METHODOLOGY**:

CO 1:	To enable the students, understand the basic concepts of research in Economics and testing of hypothesis.
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CO 2:	To make the students comprehend collection of data using appropriate methods.
CO 3:	To assist in formulating suitable research design.
CO 4:	To inculcate the various aspects of sample design.
CO 5:	To assist in analysis and interpretation of data and understanding the process of report writing.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	Marks LOs
UNIT 1 Research in Economics	Research- meaning and types; Social Science Research- meaning, objectives and scope; Research methods versus methodology; Hypotheses- meaning, type I and type II error; one tailed and two tailed test, procedure of hypothesis testing; Literature review.	CSO 1.1: To define the meaning and types of research (K). CSO 1.2: To describe the meaning, objectives and scope of social science research (K). CSO 1.3: To distinguish between research methods and research methodology (A). CSO 1.4: To discuss the meaning of hypothesis (U). CSO 1.5: To analyze the two types of errors in hypothesis testing (A). CSO 1.6: To explore one tailed and two tailed tests (A). CSO 1.7: To examine the procedure of hypothesis testing (A). CSO 1.8: To discuss literature review and its importance in research (U).	12	20	
UNIT 2 Data Collection	Types of data; Collection of Primary data: Observation method; Questionnaires; Schedules; Difference between Questionnaires and Schedules; Pilot study and pre-testing.	CSO 2.1: To differentiate the types of data in research (U). CSO 2.2: To understand the different types of primary data (U). CSO 2.3: To define observation method (K). CSO 2.4: To discuss the different types of observation method (U). CSO 2.5: To define questionnaire method (K). CSO 2.6: To interpret the different types of questionnaire method (U). CSO 2.7: To outline the meaning of schedule in data collection (K).	12	20	

		<p>CSO 2.8: To distinguish between questionnaire and schedule methods (A).</p> <p>CSO 2.9: To discuss pilot study (U).</p> <p>CSO 2.10: To examine pilot study as a pre-testing tool in research (A).</p>			
UNIT 3 Research Design	<p>Meaning and significance, features of a good research design; concepts of research design; Types of research designs.</p>	<p>CSO 3.1: To define research design (K).</p> <p>CSO 3.2: To explain the significance of research design (U).</p> <p>CSO 3.3: To discuss the features of a good research design (U).</p> <p>CSO 3.4: To understand the various concepts of research design (U).</p> <p>CSO 3.5: To illustrate the different types of research designs (A).</p>	12	20	
UNIT 4 Sample Design	<p>Sampling Design - Surveys and sampling – Different types of Sample Designs, steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design; Case study methods.</p>	<p>CSO 4.1: To define surveys and sampling (K).</p> <p>CSO 4.2: To identify the different types of sample designs (A).</p> <p>CSO 4.3: To analyze the steps involved in sampling design (A).</p> <p>CSO 4.4: To examine the criteria of selecting a sampling procedure (A).</p> <p>CSO 4.5: To discuss the characteristics of a good sample design (U).</p> <p>CSO 4.6: To define case study method (K).</p> <p>CSO 4.7: To explain the different types of case study method (U).</p>	12	20	
UNIT 5 Report Writing	<p>Data preparation process; Analysis and Interpretation of Results; Types of reports, Steps in Writing Report; Citation Style. Research ethics.</p>	<p>CSO 5.1: To facilitate in preparing data (A).</p> <p>CSO 5.2: To illustrate analysis of data (A).</p> <p>CSO 5.3: To explain the process of data interpretation (U).</p> <p>CSO 5.4: To discuss the types of reports (U)</p> <p>CSO 5.5: To explain the steps involved in writing report (U).</p> <p>CSO 5.6: To outline the</p>	12	20	

		different types of citation style (K). CSO 5.7: To elaborate on APA style of referencing (U). CSO 5.8: To discuss on research ethics (U).			
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Course Outline:

Unit I

20 marks/ 12 lectures

Research in Economics

Research- meaning and types; Social Science Research- meaning, objectives and scope; Research methods versus methodology; Hypotheses- meaning, type I and type II error; one tailed and two tailed test, procedure of hypothesis testing; Literature review.

Unit 2

20 marks/ 12 lectures

Data Collection

Types of data; Collection of Primary data: Observation method; Questionnaires; Schedules; Difference between Questionnaires and Schedules; Pilot study and pre-testing.

Unit 3

20 marks/ 12 lectures

Research Design

Meaning and significance, features of a good research design; concepts of research design; Types of research designs.

Unit 4

20 marks/ 12 lectures

Sample Design

Sampling Design - Surveys and sampling – Different types of Sample Designs, Steps in Sampling Design, Criteria of Selecting a Sampling Procedure, Characteristics of a Good Sample Design; Case study methods.

Unit 5

20 marks/ 12 lectures

Report Writing

Data preparation process; Analysis and Interpretation of Results; Types of reports, Steps in Writing Report; Citation Style. Research ethics.

Suggested Readings

1. Kothari. C.R. (2004). Research Methodology. New International Publishers, New Delhi
2. Kurien. C.T. (Ed). (1992). A Guide to Research in Economics. Sangam Publishers, Chennai.
3. Ajai. S. G. and Sanjaya, S. G. (2006). Statistical Methods or Practice and Research - A Guide to Data Analysis with SPSS. Response Books, New Delhi.
4. Ahuja. R. (2009). Research Methods. Rawat Publications, Jaipur.
5. Bailey. K. D. (1978). Methods of Social Research. The Free Press, New York.

Core Course: 20
Course Name: MONETARY ECONOMICS
Course Code: ECC 8.1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course in Monetary Economics provides a comprehensive examination of the evolution, theories, and functions of money. Starting with an exploration of the Gold Standard and its downfall leading to the paper currency standard, the syllabus delves into key monetary theories such as the Quantity Theory of Money by Fisher and Cambridge, Keynes' theory of money and prices, and Milton Friedman's restatement of the Quantity Theory. The course further covers the dynamics of demand and supply of money, including the Indian currency system, and explores the functions and types of commercial banking, credit creation, and investment policies. The role of the Reserve Bank of India in credit control, rural and industrial credit, and exchange control is analyzed, along with a focus on the Indian Money Market, its structure, defects, and potential improvements. Additionally, the progress of Indian Banking post-nationalization and the role of development banks, including IDBI, IFCI, ICICI, and other term financing institutions in India, are discussed in the context of monetary policy and economic development.

COURSE OUTCOME

Upon completion of the Monetary Economics course, students will gain a deep understanding of the mechanisms that drive efficient economic functioning and the role of monetary policy in navigating economic transitions and fostering stability and growth. Students will develop a solid theoretical foundation in money supply and its determinants, and master various concepts of money and money substitutes. They will acquire the ability to explain and anticipate the consequences of changes in the quantity of money on critical economic variables such as interest rates, inflation, exchange rates, and unemployment.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **MONETARY ECONOMICS**:

CO 1:	To provide students with a fundamental understanding of the nature of money and different concepts of monetary theory.
CO 2:	To focus on examining the intricate relationship between money and economic activity.
CO 3:	To familiarize the modern banking in India.
CO 4:	To elaborate the knowledge on the money and capital markets
CO 5:	To bring awareness on the financing institutions in India.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	Marks LOs
UNIT 1 Evolution and Theories of Money	Evolution, Role and Functions of Money – Gold Standard – Types – Working of the Gold standard – causes for the down fall of the Gold standard – paper currency standard. Quantity Theory of money- Fisher and Cambridge; Keynes theory of money and Prices; Milton Friedman – Restatement of quantity Theory	<p>CSO 1.1: To outline the evaluation, role and functions of money. (K)</p> <p>CSO 1.2: To define the gold standard and its different types. (K)</p> <p>CSO 1.3: To evaluate the historical factors that led to the downfall of the gold standard in the 20th century.(A)</p> <p>CSO 1.4: To define the paper currency standard and its key features compared to the gold standard. (K)</p> <p>CSO 1.5: To explain the basic premise of the quantity theory of money, as proposed by Irving Fisher and Cambridge School economists. (U)</p> <p>CSO 1.6: To evaluate the criticisms of the quantity theory and its limitations. (A)</p> <p>CSO 1.7: To evaluate the implications of Keynesian theory for the effectiveness of monetary policy in influencing aggregate demand and inflation. (A)</p> <p>CSO 1.8: To elaborate Milton Friedman's restatement to the quantity theory, incorporating insights from Keynesian economics .(U)</p>	12	20	
UNIT 2 Demand and Supply of money	Paper currency – System of Note issue – Indian currency system: Development and Problems.	<p>CSO 2.1: To generalise the advantages and disadvantages of using paper currency compared to other monetary systems. (U)</p> <p>CSO 2.2: To define the</p>	12	20	

	<p>Concepts of supply and demand for money – money supply and price level – Keynes – classical</p> <p>Dichotomy – Real Balance Effect</p>	<p>different systems of note issue .(K)</p> <p>CSO 2.3: To analyze the current structure and features of the Indian currency system.(A)</p> <p>CSO 2.4: To explain the factors influencing both the supply and demand for money. (U)</p> <p>CSO 2.5: To discuss the implications of the relationship between money supply and inflation for the conduct of monetary policy in achieving price stability. (U)</p> <p>CSO 2.6: To analyse the concept of the "classical dichotomy" and its implications for the neutrality of money in the long run .(A)</p> <p>CSO 2.7: To investigate the implications of the real balance effect for the effectiveness of monetary policy in different economic contexts. (U)</p>			
UNIT 3 Modern Banking in India	<p>Introduction-social responsibility of banks; innovative banking; merchant banking; computerization of Indian banks; Economic liberalization and banking sector reforms.</p>	<p>CSO 3.1: To learn about the social responsibility of banks. (K)</p> <p>CSO 3.2: To learn about innovative banking (K).</p> <p>CSO 3.3: To learn about the merchant banking. (U)</p> <p>CSO 3.4: To evaluate the computerisation of Indian banks .(A)</p> <p>CSO 3.5: To understand about Economic liberalization.(U)</p> <p>CSO 3.6: To discuss the various quantitative and qualitative methods used by the RBI for credit control in India (U).</p>	12	20	

		CSO 3.7: To evaluate the banking sector reforms. (A)			
UNIT 4 Indian Money Market	Indian money market- Structure of Indian Money Market- Defects of Indian Money Market Measures to improve Indian Money Market. Indigenous bankers and money lenders	CSO 4.1: To define the Indian money market and its key participants, including organized and unorganized sectors (K). CSO 4.2: To identify the major defects of the Indian money market (A). CSO 4.3: To identify the key measures proposed or implemented to improve the Indian money market (A). CSO 4.4: To define the role and characteristics of indigenous bankers and money lenders in the Indian financial system (K).	12	20	
UNIT 5 Develop ment Banks	Progress of Indian Banking during post nationalization period – development banks, IDBI, IFCI, ICICI – other term financing Institutions in India	CSO 5.1: To analyse the major changes and impacts of bank nationalization in India (1969-1980.) (A) CSO 5.2: To define the concept of development banks and their role in promoting economic growth and development. (K) CSO 5.3: To identify and classify various term financing institutions operating in India.(A) CSO 5.4: To evaluate the contribution of term financing institutions in mobilizing long-term savings and providing long-term loans for specific sectors. (A)	12	20	

Course Outline:

Unit I

20 marks/ 12 lectures

Evolution and Theories of Money

Evolution, Role and Functions of Money – Gold Standard – Types – Working of the Gold standard – causes for the down fall of the Gold standard – paper currency standard. Quantity Theory of Money-Fisher and Cambridge; Keynes theory of money and Prices; Milton Friedman – Restatement of quantity Theory

Unit II

20 marks/ 12 lectures

Demand and Supply of money

Paper currency – System of Note issue – Indian currency system: Development and problems. Concepts of supply and demand for money – money supply and price level – Keynes – classical Dichotomy – Real Balance Effect

Unit III

20 marks/ 12 lectures

Modern Banking in India

Introduction-social responsibility of banks; innovative banking; merchant banking; computerisation of Indian banks; Economic liberalisation and banking sector reforms.

Unit IV

20 marks/ 12 lectures

Indian Money Market

Indian money market- Structure of Indian Money Market- Defects of Indian Money Market- Measures to improve Indian Money Market. Indigenous bankers and money lenders

Unit V

20 marks/ 12 lectures

Financing Institutions in India

Progress of Indian Banking during post nationalization period – development banks, IDBI, IFCI, ICICI – other term.

Suggested Readings

8. Bhole. L. (2009). Financial Institutions and Markets. McGraw Hill, New Delhi.
9. Cauvery, R., Kruparani N. Nayak, Sudha, U.K and Manimekakai A. (2003). Monetary Economics. S. Chand publishing.
10. Seth, M. L. (2020). Money, Banking International Trade and public finance. Lakshmi Narain Agarwal.
11. Mithani. D.M. (2012). Money Banking and International Trade. Himalaya Publishing house.
12. Paul. R. (2018). Monetary Economics 12th Edition. Kalyani
13. Sundharam. K.P.M. (1976). Monetary Theory and practices. Sultan Chand, New Delhi.
14. Vaish. M. (2005). Monetary theory. Vikas publishing house, New Delhi

Optional

Course Name: WELFARE ECONOMICS

Course Code: ECC 8.2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This Welfare Economics course provides a comprehensive understanding of the fundamental concepts and theories in the field. It begins with an introduction to welfare economics, exploring the definitions and scopes of individual and social welfare, and examining the role of value judgments. The syllabus then delves into Benthamite and Marshallian approaches, addressing issues of aggregate welfare, optimum resource allocation, and the measurement of consumer's surplus. Paretian Welfare Economics is explored with a focus on Pigovian welfare economics, externalities, public goods, and Pareto optimality. Modern welfare economics is introduced through concepts such as consumer's surplus, commodity indifference maps, and social welfare functions. The course concludes with an overview of recent developments in welfare economics, including a review of traditional theorems, the endogeneity of preference, conflicts between individual and social rationality, and the evolving paradigm of welfare towards human development and institutional restructuring.

COURSE OUTCOME

Upon successful completion of this course, students will gain a comprehensive understanding of welfare economics, its various approaches to measuring welfare, its practical applications in addressing real-world economic issues and will be equipped to identify and discuss the different approaches to measuring welfare and critically evaluate the strengths and weaknesses of each approach. Through these applications, they will gain insights into the practical implications of welfare economics and its contributions to addressing economic challenges. Overall, students will emerge from the course with a strong foundation in welfare economics, enabling them to think critically about the role of value judgments in economic analysis and the practical application of welfare principles in solving real-world problems.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **WELFARE ECONOMICS**:

CO 1:	To introduce students to the concept of welfare economics and its role in economic analysis.
CO 2:	To explore the different approaches to measuring welfare, including Marshallian, Paretian, and modern welfare economics.
CO 3:	To discuss the challenges of measuring welfare, such as the issue of interpersonal comparisons.
CO 4:	To apply the principles of welfare economics to real-world issues, such as externalities and public good.
CO 5:	To introduce students to the concept of welfare economics and its role in economic

analysis.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	Marks LOs
UNIT 1 Welfare Economics : An Introduction	Definition and scope of welfare economics- Individual welfare and social welfare- concept of Utility, welfare and social welfare function- role of value judgments in welfare economics.	CSO 1.1: To define welfare economics and its core objectives in assessing and improving social well-being (K). CSO 1.2: To differentiate between individual welfare and social welfare, recognizing different perspectives and potential conflicts (A). CSO 1.3: To define the concept of utility as a representation of individual preferences and its limitations (K). CSO 1.4: To cite the function of welfare and social welfare (K). CSO 1.5: To distinguish the inherent presence of value judgments in all aspects of welfare economics (A). CSO 1.6: To develop critical thinking skills to identify and understand the value judgments (A).	12	20	
UNIT 2 Conceptual and Measurement Issues	Benthamite approach to aggregate welfare: Optimum resource allocation and welfare maximization, Assumption of	CSO 2.1: To explain the core principles of utilitarianism as developed by Jeremy Bentham, focusing on maximizing total happiness in society (U). CSO 2.2: To state the optimum allocation of	12	20	

	<p>uniform income- Utility function of individuals; Question of income distribution; Issue of interpersonal comparisons of utility; Marshallian welfare economics: Consumer's surplus; Measurement of consumer's surplus- Difficulties involved and criticism.</p>	<p>resources and how it leads to the maximization of social welfare (K). CSO 2.3: To discuss the importance of income distribution in welfare analysis (U). CSO 2.4: To explain the difficulty of interpersonal comparisons of utility and its implications for aggregating individual welfare measures (U). CSO 2.5: To discuss the key concepts of Marshallian welfare economics (U). CSO 2.6: To analyze the concept of consumer surplus and its measurement as a potential indicator of individual welfare gains from market exchanges (A). CSO 2.7: To discuss the criticisms of Marshallian welfare economics and its compatibility with different ethical frameworks for social welfare assessment (U).</p>			
UNIT 3 Paretian Welfare Economics	<p>Pigovian welfare economics; Divergence between private and social costs; Externalities of production and consumption; Problem of public goods; Pareto optimality-</p>	<p>CSO 3.1: To explain the core principles of Pigovian welfare economics (U). CSO 3.2: To discuss the concept of social costs and private costs (U). CSO 3.3: To examine different types of externalities (A). CSO 3.4: To define public goods and explain their</p>	12	20	

	<p>Optimum exchange conditions, The production optimum, The consumption optimum; Concept of contract curve; Contributions of Kaldor and Hicks in welfare economics; The Scitovsky double criterion</p>	<p>key characteristics (K). CSO 3.5: To explain Pareto optimality and discuss its significance as a benchmark for efficient resource allocation in welfare economics (U). CSO 3.6: To clarify the concept of the contract curve and its graphical representation (U). CSO 3.7: To evaluate the contributions of Kaldor and Hicks in expanding the scope of welfare analysis (A). CSO 3.8: To critically examine the Scitovsky double criterion (U).</p>			
<p>UNIT 4 Modern Welfare Economics</p>	<p>Concepts of consumer's surplus and commodity indifference map; Samuelson's utility possibility curve; Value judgments and welfare in economics; Bergson's social welfare function; Arrow's impossibility theorem</p>	<p>CSO 4.1: To define consumer's surplus (K). CSO 4.2: To explain the concept of a commodity indifference map and analyze the relationship between consumer's surplus and the indifference map (U). CSO 4.3: To explain the concept of the utility possibility curve and its limitations (U). CSO 4.4: To develop critical thinking skills to identify and understand the value judgments embedded in economic analyses and policy proposals (A). CSO 4.5: To analyze the key features of Bergson's Social welfare function and evaluate its limitations</p>	<p>12</p>	<p>20</p>	

		(A). CSO 4.6: To explain the core tenets of Arrow's Impossibility Theorem and its implications for the existence of an ideal social welfare function (U).			
UNIT 5 Some Recent Developments in Welfare Economics	Review of the two fundamental theorems of the traditional welfare economics, endogeneity of preference, conflict between individual and social rationality, impracticability of redistribution of resources, the principle of normative individualism, evolutionary approach to social welfare, replacement of traditional paradigm of welfare by human development, institutional restructuring of individual choices	CSO 5.1: To discuss the relevance of the theorems in contemporary economic analysis and policy design (U). CSO 5.2: To explain the concept of endogenous preferences and discuss its potentials (U). CSO 5.3: To develop the potential differences between individual and social rationality (A). CSO 5.4: To examine the arguments against large-scale redistribution of resources (A). CSO 5.5: To identify the principle of normative individualism and analyze its criticisms (A). CSO 5.6: To discuss the core concepts of an evolutionary approach to welfare and its limitations (U). CSO 5.7: To explain the critiques of the traditional welfare paradigm and discuss the implications of shifting towards a human development approach for policy priorities and assessment strategies (U). CSO 5.8: To develop the concept of institutional	12	20	

		restructuring and how it can influence individual choices and preferences through rules, norms, and incentive structures (A).			
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Course Outline:

Unit I

20 marks/ 12 lectures

Welfare Economics: An Introduction

Definition and scope of welfare economics- Individual welfare and social welfare- concept of utility, welfare and social welfare function- role of value judgments in welfare economics.

Unit 2

20 marks/ 12 lectures

Conceptual and Measurement Issues

Benthamite approach to aggregate welfare: Optimum resource allocation and welfare maximization, assumption of uniform income-Utility function of individuals; Marshallian welfare economics: Consumer's surplus; Measurement of consumer's surplus-Difficulties involved and criticism.

Unit 3

20 marks/ 12 lectures

Paretian Welfare Economics

Pigovian welfare economics; Divergence between private and social costs; Externalities of production and consumption; Problem of public goods; Pareto optimality, Contributions of Kaldor and Hicks in welfare economics; The Scitovsky double criterion.

Unit 4

20 marks/ 12 lectures

Modern Welfare Economics

Concepts of consumer's surplus and commodity indifference map; Samuelson's utility possibility curve; Value judgments and welfare in economics; Bergson's social welfare function; Arrow's impossibility theorem.

Unit 5

20 marks/ 12 lectures

Some Recent Developments in Welfare Economics

Review of the two fundamental theorems of the traditional welfare economics, conflict between individual and social rationality, impracticability of redistribution of resources, the principle of normative individualism, evolutionary approach to social welfare, replacement of traditional paradigm of welfare by human development.

Suggested Readings

1. Ahuja. H. (1970). Advanced Economic Theory: Microeconomics Analysis. S. Chand & company ltd, 18th revised edition.
2. Arrow. K. (1951). Social choice and Individual Values. Yale Univ. Press, New Haven
3. Baumol. W. (1965). Welfare Economics and the Theory of the State. 2nd edition, Longmans London.
4. Baumol. W. (2001). Welfare Economics. U.K: Edward Elgar.
5. Broadway. R.W and Bruce, N. (1984). Welfare Economics, Basil Blackwell, Oxford.

6. Feldman. A. (1980). Welfare Economics and Social Choice Theory. Martinus Nijhoff, Boston
7. Little. I.M.D. (1939). A. Critique of Welfare Economics, Oxford: 2nd edition, university press Oxford.
8. Myint. H. (1948). Welfare Economics. London: Macmillan.
9. Pigou. A. (1962). The Economics of Welfare. 4th edition, Macmillan, London.

Optional

Course Name: ECONOMICS OF GENDER

Course Code: ECC 8.3

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course examines the gender dimensions of economics, concepts, importance of Gender Studies. It also discusses the decision-making process of women in economic activities.

This course will also focus on the Labour market and the factors affecting female entry into the labour market and the determinants of wage differentials in gender. It will also put an emphasis on the perspective of Gender Planning and development policies and governance on gender.

COURSE OUTCOME

By the end of this course, Students should be able to understand the concepts and methods of gender economics, gender statistics system of gender inequality factors. They should be able to understand the importance of gender studies- health, education etc. students should be able to recognize the social security, Gender planning, development policies and governance. and the governance.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **ECONOMICS OF GENDER:**

CO 1:	To introduce to the students, the subject of Economics of Gender.
CO 2:	To provide students with a state-of-the-art overview of the literature relating to the concept, and importance of gender studies and the demography of gender.
CO 3:	To address the concept of women's participation in the decision-making of various economic activities.
CO 4:	To address the issue of labour market participation and factors affecting entry into the labour market.
CO 5:	To discuss the concept of gender planning and development policies and governance.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction to Economics of Gender.	Concepts and methods of gender economics -A brief history of gender economics- Gender statistics System of gender inequality factors- Gender inequality in the labour market- Inequality in the labour market: entry into and exit from the labour market, careers, wages, skills training.	CSO 1.1: To discuss the Concepts and methods of gender economics - A brief history of gender economics- Gender statistics (U). CSO 1.2: To explain the System of gender inequality factors (U). CSO 1.3: To analyze gender inequality in the labor market (A). CSO 1.4: To discuss entry into and exit from the labor market (U). CSO 1.5: To discuss careers, wages, skills training (U).	12	20	
UNIT 2 Importance of Gender Studies: Demography of Gender	Importance of gender studies in patriarchal and matriarchal societies and structures-Gender bias in the theories of values, distribution, and population; Demography of female population of declining sex ratios and fertility rates in LDCs and particularly India and their access to nutrition, health, education, and	CSO 2.1: To explain the Importance of gender studies in patriarchal and matriarchal societies and structures (U). CSO 2.2: To analyze the Gender bias in the theories of values, distribution, and population (A). CSO 2.3: To analyze the Demography of female population of declining sex ratios and fertility rates in LDCs and particularly India and their access to nutrition, health, education, and community resources and their impacting female mortality and fertility (A). CSO 2.4: To explain the Feminist criticism of development indices, theories of gender inequality (U).	12	20	

	community resources and their impacting female mortality and fertility; Feminist criticism of development indices, theories of gender inequality.				
UNIT 3 Decision Making, Economic Activity and Women	Factors affecting decision-making by women; property rights, access to and control over economic resources, assets, power of decision-making at household, class, and community level; economic status of women and its effect in WPR, income level, health and education in developing countries; Concept and analysis of women's work; visible and invisible work, economically and socially productive work; Women in pre-industrial and industrial; societies, female contribution to national income.	<p>CSO 3.1: To identify the Factors affecting decision-making by women; property rights, access to and control over economic resources, assets (A).</p> <p>CSO 3.2: To discuss the power of decision-making at household, class, and community level (U).</p> <p>CSO 3.3: To analyze the economic status of women and its effect in WPR, income level, health and education in developing countries (A).</p> <p>CSO 3.4: To discuss the Concept and analysis of women's work; visible and invisible work, economically and socially productive work (U).</p> <p>CSO 3.5: To analyze the female contribution to national income pre-industrial and industrial; societies (A).</p>	12	20	
UNIT 4 Labour Market, Environme	Factors affecting female entry in the labour market, supply and	<p>CSO 4.1: To identify Factors affecting female entry in the labour market (A).</p> <p>CSO 4.2: To explain the supply and</p>	12	20	

<p>nt and Women</p>	<p>demand for female labour in developed and developing countries; studies of female work participation in agricultural and non-agricultural rural activities, internal sector, cottage and small industries, organized industry and services sector, women & SHGS; Wage differentials in female activities; Determinants of wage differentials, gender, education, skill, productivity, efficiency, opportunity; structure of wage across regions and economic sectors; Female activities and ecological and environmental.</p>	<p>demand for female labour in developed and developing countries (U). CSO 4.3: To discuss female work participation in agricultural and non-agricultural rural activities, internal sector, cottage and small industries, organized industry and services sector (U). CSO 4.4: To discuss women & SHGS (U). CSO 4.5: To analyze the Determinants of wage differentials, gender, education, skill, productivity, efficiency, opportunity (A). CSO 4.6: To discuss the structure of wage across regions and economic sectors (U). CSO 4.7: To discuss Female activities and ecological and environmental (U).</p>			
<p>UNIT 5 Social Security, Gender Planning, Development Policies and Governance</p>	<p>Social security for women: entitlements, economic independence, and risk coverage, access to Unit and insurance markets, SHGs & social security; Review of legislations for women's empowerment, social security&</p>	<p>CSO 5.1: To discuss social security for women: entitlements, economic independence, and risk coverage. (U) CSO 5.2: To analyze access to Unit and insurance markets, SHGs & social security.(A) CSO 5.3: To analyze the review of legislations for women's empowerment, social security& property rights for affirmative action on the part of the government. (A) CSO 5.4: To discuss the</p>	<p>12</p>	<p>20</p>	

	<p>property rights for affirmative action on the part of the government; Mainstreaming gender into development policies, gender planning techniques, gender budgeting, gender-sensitive governance; Democratic decentralization and women's empowerment.</p>	<p>mainstreaming gender into development policies, gender planning techniques, gender budgeting, gender-sensitive governance. (U) CSO 5.5: To explain the Democratic decentralization and women's empowerment. (U)</p>			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Introduction to Economics of Gender

Concepts and methods of gender economics -A brief history of gender economics- Gender statistics System of gender inequality factors- Gender inequality in the labour market- Inequality in the labour market: entry into and exit from the labour market, careers, wages, skills training.

Unit 2

20 marks/ 12 lectures

Importance of Gender Studies: Demography of Gender

Importance of gender studies in patriarchal and matriarchal societies and structures-Gender bias in the theories of values, distribution, and population; Demography of female population of declining sex ratios and fertility rates in LDCs and particularly India and their access to nutrition, health, education, and community resources and their impacting female mortality and fertility; Feminist criticism of development indices, theories of gender inequality.

Unit 3

20 marks/ 12 lectures

Decision Making, Economic Activity and Women

Factors affecting decision-making by women; property rights, access to and control over economic resources, assets, power of decision-making at household, class, and community level; economic status of women and its effect in WPR, income level, health and education in developing countries; Concept and analysis of women's work; visible and invisible work, economically and socially productive work;

Unit 4

20 marks/ 12 lectures

Labour Market, Environment and Women

Factors affecting female entry in the labour market, supply and demand for female labour in

developed and developing countries; studies of female work participation in agricultural and non-agricultural rural activities, internal sector, cottage and small industries, organized industry and services sector, women & SHGS.

Unit 5

20 marks/ 12 lectures

Social Security, Gender Planning, Development Policies and Governance

Social security for women: entitlements, economic independence, and risk coverage, access to Unit and insurance markets, SHGs & social security; Review of legislations for women's empowerment, social security & property rights for affirmative action on the part of the government; Mainstreaming gender into development policies, gender planning techniques, gender budgeting, gender-sensitive governance.

Suggested Readings

- 1.Amsden. A.H. (Ed.) (1980). The Economics of Women and Work. Penguin, Harmondsworth.
- 2.Borerup. E. (1970). Women's Role in Economic Development, George Allen and Unwin, London.
- 3.Engles. F. (1985). The Origin of the Family, Private Property and the State, Progress Publications, Moscow.
- 4.Kabeer. N. (1994): Reversed Realities: Gender Hierarchies in Development Thought, Kali for Women, ND.
- 5.Krishnaraj. M., R.M.Sudarshan and A.Shariff (1999): Gender, Population and Development, OUPND.
- 6 Kuhn. A. and A.N.Wolpe(Eds.)(1978): Feminism and Materialism, Routledge and Kegan Paul, London.
- 7.Mies. M. (1998): Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour, Zed Books, London
- 8.Mitra. A. (1979): Implications of Declining Sex Ratio in India's Population, Allied, ND.
- 9.Murthy. K.R.(ed.) (2001): Building Women's Capacities.

Optional

**Course Name: HUMAN RESOURCE DEVELOPMENT AND
MANAGEMENT**

Course Code: ECC 8.4

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course provides a comprehensive exploration of Human Resource Development and Management, covering fundamental aspects such as the nature, objectives, and functions of HRM in the context of a changing business landscape and evolving technologies. The curriculum delves into Human Resource Planning, addressing job design, motivation,

recruitment, selection, and performance appraisal. Compensation Management and Industrial Relations are examined through various approaches, and the course analyzes the causes and resolution of industrial disputes, along with insights into Trade Unions and their historical perspective in India.

COURSE OUTCOME

Students will be able to understand the concepts and philosophy of Human Resource Development (HRD). They should be able to know the importance of Human Resource Planning and the crucial aspect of training and development, explore the intricacies of compensation management, including an in-depth understanding of the components of compensation and recognizing the factors influencing employee compensation and the challenges associated with it. Students should recognize the importance of Industrial Relations and examine the causes of Industrial Disputes.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT**:

CO 1:	To make the students learn the basic concepts, nature and implications of Human Resource Development.
CO 2:	To enable the students, comprehend the significance of Human Resource Planning and the crucial aspect of training and development.
CO 3:	To make the students explore the intricacies of compensation management and wage policies.
CO 4:	To analyse industrial relations and various approach pertaining to it.
CO 5:	To examine industrial disputes, settlements and genesis of industrial movements in India.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction	Introduction to human resource management: Nature, objectives and functions of human resource management; role and structure in the changing business scenario, organizations and changing technologies & their implications	CSO 1.1: To define human resource management (K). CSO 1.2: To understand the nature and objectives of human resource management (U). CSO 1.3: To explain the functions of human resource management (U). CSO 1.4: To discuss the role and structure in the changing business scenario, organizations and changing technologies (U). CSO 1.5: To analyze the	12	20	

	for human resource management, an overview of concept and philosophy of HRD, Role of HRD in mergers and acquisitions.	implications of changing business scenario, organizations and changing technologies in human resource management (A). CSO 1.6: To understand the concept and philosophy of Human Resource Development (U). CSO 1.7: To explain the role of Human Resource Development in mergers and acquisitions (U).			
UNIT 2 Human Resource Planning	Meaning and Objectives of human resource planning; job design; motivation; empowerment; recruitment, screening, selection, placement, induction; performance appraisal; training and development; outsourcing	CSO 2.1: To define human resource planning (K). CSO 2.2: To outline the objectives of human resource planning (K). CSO 2.3: To discuss job design (U). CSO 2.4: To discuss motivation and empowerment (U). CSO 2.5: To discuss recruitment, screening, selection, placement and induction (U). CSO 2.6: To explain performance appraisal (U). CSO 2.7: To identify training and development (A). CSO 2.8: To explore outsourcing (A).	12	20	
UNIT 3 Compensation Management	Components of compensation: monetary benefits (wage and salary, bonus, claims, incentives and fringe benefits, pre dearness allowance) and non-monetary benefits; Theories of compensation: Reinforcement and Expectancy Theories, Equity Theory, Agency Theory; Factors affecting employee compensation;	CSO 3.1: To describe the components of compensation (K). CSO 3.2: To discuss monetary benefits and non-monetary benefits (U). CSO 3.3: To discuss the theories of compensation (U). CSO 3.4: To discuss Reinforcement and Expectancy Theories (U). CSO 3.5: To examine the Equity Theory of compensation (A). CSO 3.6: To analyze the Agency Theory of compensation (A). CSO 3.7: To determine factors affecting employee compensation (A). CSO 3.8: To examine the challenges	12	20	

	Challenges of compensation; Wage policy in India.	of compensation (A). CSO 3.9: To examine wage policy in India (A).			
UNIT 4 Industrial Relations	Importance of industrial relations; Approaches to industrial relation: Unity approach, Pluralist approach, Marxist approach, The Human Relation approach; Parties to industrial relation.	CSO 4.1: To state the importance of industrial relations (K). CSO 4.2: To examine the approaches to industrial relation (A). CSO 4.3: To examine Unity approach, Pluralist approach, Marxist approach and the Human Relation approach to industrial relation (A). CSO 4.4: To illustrate the parties to industrial relation. (A).	12	20	
UNIT 5 Industrial Disputes and Trade Unions	Industrial Disputes: Causes for Industrial disputes and settlement of disputes. Trade Unions: Nature; Managing trade unions; Historical perspective and problems of trade union movement in India.	CSO 5.1: To discuss industrial disputes (U). CSO 5.2: To interpret the causes for Industrial disputes (A). CSO 5.3: To discuss the settlement of disputes (U). CSO 5.4: To define trade unions (K). CSO 5.5: To explain the nature of trade unions (U). CSO 5.6: To discuss the means to manage trade unions (U). CSO 5.7: To identify the historical perspective of trade union movement in India. (A). CSO 5.8: To examine the problems of trade union movement in India	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Introduction

Introduction to human resource management: Nature, objectives and functions of human resource management; role and structure in the changing business scenario, organizations and changing technologies & their implications for human resource management, an overview of

concept and philosophy of HRD, Role of HRD in mergers and acquisitions.

Unit 2

20 marks/ 12 lectures

Human Resource Planning

Meaning and Objectives of human resource planning; job design; motivation; empowerment; recruitment, screening, selection, placement, induction; performance appraisal; training and development; outsourcing.

Unit 3

20 marks/ 12 lectures

Compensation Management

Components of compensation: monetary benefits (wage and salary, bonus, claims, incentives and fringe benefits, pre dearness allowance) and non-monetary benefits; Theories of compensation: Reinforcement and Expectancy Theories, Equity Theory, Agency Theory; Factors affecting employee compensation; Challenges of compensation; Wage policy in India.

Unit 4

20 marks/ 12 lectures

Industrial Relations

Importance of industrial relations; Approaches to industrial relation: Unity approach, Pluralist approach, Marxist approach, The Human Relation approach; Parties to industrial relation.

Unit 5

20 marks/ 12 lectures

Industrial Disputes and Trade Unions

Industrial Disputes: Causes for Industrial disputes and settlement of disputes. Trade Unions: Nature; Managing trade unions; Historical perspective and problems of trade union movement in India.

Suggested Readings:

1. Aswathappa. K. (2018). Human Resource Management. Text and Cases, McGraw Hill Education (India) Pvt. Ltd.
2. Ghosh. B. (2011). Human Resource Development and Management. Vikas Publishing House, Pvt. Ltd.
3. Jyothi. P. and Venkatesh, D. N. (2012). Human Resource Management. Oxford University Press, India.
4. Snell. S. and Bohlander, G. (2007). Human Resource Management. Baba Barkha Nath Printers, Delhi.

Minor Paper -1

Course Name: INTRODUCTORY MICROECONOMICS

Course Code: ECM 1

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyse real-life situations.

COURSE OUTCOMES

Students should be able to define economics, comprehend the nature and scope of the subject, and distinguish between microeconomics and macroeconomics. Students should have a clear understanding of demand, both at the individual and market levels. They should comprehend the Law of Demand, factors influencing demand, exceptions to the law, and be able to analyze changes in demand and shifts in the demand curve. Students should understand the concept of utility, assumptions of cardinal utility analysis, marginal utility, total utility, and the Law of Diminishing Marginal Utility. Students should be able to explain the meaning and assumptions of indifference curves, analyze the marginal rate of substitution, understand the properties of indifference curves, and apply indifference curve analysis to analyze consumer equilibrium under different circumstances. Students should comprehend the concept of elasticity of demand, types of price elasticity of demand, methods of measuring price elasticity, and the determinants of price elasticity.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTRODUCTORY MICROECONOMICS**:

CO 1:	To create understanding among the students about the subject matter of economics and the working of price mechanism.
CO 2:	Students should be able to analyze the concept of demand, and Demand function.
CO 3:	Students should be able to analyze the consumers behavior in terms of Cardinal Utility.
CO 4:	Students should be able to explain the concepts of indifference curves, and apply indifference curve analysis to analyze consumer equilibrium.
CO 5:	Students should be able to understand and explain the concept, types, and methods of measuring elasticity of demand.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Exploring the subject Matter of Economics and Price Mechanism	Definition of economics, nature Scope of Economics; Distinction between micro and macroeconomics. economic	CSO 1.1: To be able to define economics (K) CSO 1.2: To be able to explain the nature Scope of Economics. (K) CSO 1.3: To be able to Distinguish between micro and macroeconomics (Application. (A) CSO 1.4: To be able to understand and analyse the economic problems (Understanding. (U)	12	20	

	problems: Scarcity and choice; the question of what to produce, how to produce and how to distribute output. Price mechanism.	CSO 1.5: To be able to understand the concept and role of Price mechanism. (A)			
UNIT 2 Demand and Demand Function	Demand; individual and market demand; Law of demand; why does the demand curve slop downward? Exceptions to the law of demand. Factors determining demand; increase and decrease in demand; shift in demand curve.	CSO 2.1: To be able to define demand in economics. (K) CSO 2.2: To be able to distinguish between the individual demand and market demand. (A) CSO 2.3: To be able to explain the law of demand. (U) CSO 2.4: To be able to explain why does the demand curve slop downward? (U) CSO 2.5: To be able to enumerate the exceptions to the law of demand (K) CSO 2.6: To be able to analyse the factors determining demand (A) CSO 2.7: To be able to differentiate between the increase and decrease in demand. (U) CSO 2.8: To be able to understand the concept of shift in demand curve. (U)	12	20	
UNIT 3 Consumer's Behavior- Cardinal utility analysis	Utility; meaning, assumptions; marginal utility and total utility; Law of Diminishing marginal utility; Consumers equilibrium: principle of equi-marginal utility and its limitations.	CSO 3.1: To be able to define the concept of utility in economics. (K) CSO 3.2: To be able to explain the assumptions of utility analysis (K) CSO 3.3: To be able to compare between marginal utility and total utility (A) CSO 3.4: To be able to explain the Law of Diminishing marginal utility. (U) CSO 3.5: To be able to elaborate the Consumers equilibrium under indifference curve analysis (U) CSO 3.6: To be able to explain the principle of equi-marginal utility and its limitations (K)	12	20	
UNIT 4 Indifference Curve	Indifference curve: meaning; assumptions;	CSO 4.1: To be able to define the concept of indifference curve in economics. (K) CSO 4.2: to be able to explain the	12	20	

Analysis	marginal rate of substitution; properties of indifference curve. budget line, changes in price and budget line. Consumers equilibrium under indifference curve analysis.	assumptions of indifference curve analysis (U) CSO 4.3: To be able to understand the meaning of marginal rate of substitution (U) CSO 4.4: To be able to list out the properties of indifference curve. (K) CSO 4.5: To be able to explain the concept of budget line. (U) CSO 4.5: To be able to determine the consumers equilibrium under indifference curve analysis (A)			
UNIT 5 Elasticity of Demand	Elasticity of demand; meaning and types of price elasticity of demand, measurement of price elasticity of demand; determinants of price elasticity of demand. Income elasticity of demand: meaning and types. Cross elasticity of demand.	CSO 5.1: To be able to explain the meaning of elasticity of demand. (U) CSO 5.2: To be able to elaborate different types of elasticity of demand. (U) CSO 5.3: To be able to measure the price elasticity of demand (A) CSO 5.4: To be able to describe the determinants of price elasticity of demand (K) CSO 5.5: To be able to explain the meaning and types of Income elasticity of demand. (U) CSO 5.6: to be able to define and elaborate the cross elasticity of demand. (K &U)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Exploring the subject Matter of Economics and Price Mechanism

Definition of economics, nature Scope of Economics; Distinction between micro and macroeconomics. economic problems: Scarcity and choice; the question of what to produce, how to produce and how to distribute output. Price mechanism.

Unit 2

20 marks/ 12 lectures

Demand and Demand Function

Demand; individual and market demand; Law of demand; why does the demand curve slop downward? Exceptions to the law of demand. Factors determining demand; increase and decrease in demand; shift in demand curve.

Unit 3

20 marks/ 12 lectures

Consumer's Behavior- Cardinal utility analysis

Utility; meaning, assumptions; marginal utility and total utility; Law of Diminishing marginal

utility; Consumers equilibrium: principle of equi-marginal utility and its limitations.

Unit 4

20 marks/ 12 lectures

Indifference Curve Analysis

Indifference curve: meaning; assumptions; marginal rate of substitution; properties of indifference curve. budget line, changes in price and budget line. Consumers equilibrium under indifference curve analysis.

Unit 5

20 marks/ 12 lectures

Elasticity of Demand

Elasticity of demand; meaning and types of price elasticity of demand, measurement of price elasticity of demand; determinants of price elasticity of demand. Income elasticity of demand: meaning and types. Cross elasticity of demand.

Suggested Readings:

1. Koutsoyiannis. A. (2005) Modern Microeconomics. London: Macmillan Press Ltd.
2. Ahuja, H.L. (2012). Advanced Economic theory. New Delhi: S. Chand & Company Ltd.
3. Karl E. C. and Ray C. Fair, (2007). Principles of Economics (8th Ed.). Pearson Education Inc.
4. Mankiw. N.G. (2007). Economics; Principles and applications (4th Ed.). India edition by South Western, a part of Cengage learning, Cengage Learning India Private Limited.
5. Jhingan. M.L. (2009). Microeconomic Theory (7th ed.) Vrinda Publications (P) LTD.

Minor Paper-2

Course Name: INTRODUCTORY MACROECONOMICS

Course Code: ECM 2

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation and the balance of payments.

COURSE OUTCOMES

Students should be able to recognize the difficulties in measuring national income and comprehend the factors determining national income, emphasizing its importance in economic analysis. Students should understand the various definitions of money, including near money, and the functions of money. They should be able to analyze the quantity theory of money, Keynes's reformulated quantity theory, determinants of money supply, high powered money, money multiplier, and measures of money supply in India. Students should understand the concepts of inflation, deflation, reflation, and disinflation. They should analyze the types, causes, and effects of inflation, as well as measures to control inflation, inflationary gaps, and the social costs associated with inflation. Students should comprehend the meaning, types, and characteristics of the business cycle, as well as the phases of the cycle. They should also explore various theories of the business cycle, including Hawtrey's Monetary Theory, Keynes's view on the trade cycle, and Schumpeter's Innovation Theory. Students should understand Say's Law of Market and the classical theory of employment. They should be able to analyze Keynes's criticism of the classical theory, aggregate demand and aggregate supply functions, the principle of effective demand, and the importance of effective demand in Keynesian theory of income, output, and employment.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTRODUCTORY MACROECONOMICS**:

CO 1:	To create understanding among the students to Introduction to Macroeconomics and National Income Accounting
CO 2:	To explore the functions of Money in the economy.
CO 3:	To analyze the effect of Inflation
CO 4:	To describe the Business Cycle and the theories of business cycle
CO 5:	To illustrate the determination of Output and Employment in the economy.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Introduction to Macroeconomics and National Income Accounting	Nature and Scope Macroeconomics; Concepts and Measurement of National Income. Difficulties in the measurement of national income; Factors determining national income.	CSO 1.1: To be able to describe the Nature and Scope Macroeconomics (K) CSO 1.2: To be able to explain the concept and measurement of national income. (U) CSO 1.3: To be able to express factors determining national income. (A) CSO 1.4: To be able to analyze the importance of national	12	20	

	Importance of national income.	income. (A)			
UNIT 2 Money	Money- Definitions of Money, money and near money, inside and outside money, Functions of money; quantity theory of money- cash transaction and cash balance approach; Keynes's Reformulated quantity theory of money; determinants of money supply; High powered money and money multiplier; Measures of money supply in India.	<p>CSO 2.1: To be able to define Money. (K)</p> <p>CSO 2.2: To be able to differentiate between money and near money and inside and outside money. (U)</p> <p>CSO 2.3: To be able to illustrate the functions of money. (A)</p> <p>CSO 2.4: To be able to explain the functions of money. (U)</p> <p>CSO 2.5: To be able to state the cash transaction and cash balance approach to the quantity theories of money. (K)</p> <p>CSO 2.6: To be able to demonstrate Keynes's Reformulated quantity theory of money. (A)</p> <p>CSO 2.7: To be able to state the determinants of money supply. (K)</p> <p>CSO 2.8: To be able to describe the High-powered money and money multiplier. (K)</p> <p>CSO 2.8: To be able to evaluate the different measures of money supply in India. (A)</p>	12	20	
UNIT 3 Inflation	Concept of Inflation, Deflation & Reflation and disinflation; types of inflation, Causes and effects of inflation, measures to control inflation, inflationary gap, social costs of	<p>CSO 3.1: To be able to define the concepts of inflation, deflation & reflation and disinflation. (K)</p> <p>CSO 3.2: To be able to explain the types of inflation. (U)</p> <p>CSO 3.3: To be able to analyze the cause and effects of inflation. (A)</p> <p>CSO 3.4: To be able to elaborate the measures to control inflation. (U)</p> <p>CSO 3.5: To be able to describe</p>	12	20	

	inflation	the social costs of inflation. (K)			
UNIT 4 Business Cycle	Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle- Hawtrey's Monetary Theory, Keynes view on trade cycle, Schumpeter's Innovation Theory.	CSO 4.1: To be able to define the meaning of inflation. (K) CSO 4.2: To be able to analyze the types and characteristics of business cycle. (A) CSO 4.3: To be describe the different phases of business cycle. (K) CSO 4.4: To be able to describe Hawtrey's Monetary Theory of trade cycle. (K) CSO 4.5: To be able to explain Keynes view on trade cycle. (U) CSO 4.6: To be able to elaborate Schumpeter's Innovation Theory of trade cycle. (U)	12	20	
UNIT 5 Output and Employment	Say's Law of Market and classical theory of employment; Keynes's criticism of classical theory; aggregate demand and aggregate supply functions; the principle of effective demand, importance of effective demand; Keynesian theory of income, output and employment.	CSO 5.1: To be able to explain the Say's Law of Market (U) CSO 5.2: To be able to analyze the classical theory of employment. (A) CSO 5.3: To be able to elaborate Keynes's criticism of classical theory. (U) CSO 5.4: To be describe aggregate demand and aggregate supply functions and the principle of effective demand. (K) CSO 5.5: To be able to state the Keynesian theory of income, output and employment. (U)	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Introduction to Macroeconomics and National Income Accounting

Nature and Scope Macroeconomics; Concepts and Measurement of National Income. Difficulties in the measurement of national income; Factors determining national income. Importance of national income.

Unit 2

20 marks/ 12 lectures

Money

Money-Definitions of Money, money and near money, inside and outside money, Functions of money; quantity theory of money- cash transaction and cash balance approach; Keynes's Reformulated quantity theory of money; determinants of money supply; High powered money and money multiplier; Measures of money supply in India.

Unit 3

20 marks/ 12 lectures

Inflation

Concept of Inflation, Deflation & Reflation and disinflation; types of inflation, Causes and effects of inflation, measures to control inflation, inflationary gap, social costs of inflation

Unit 4

20 marks/ 12 lectures

Business Cycle

Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle- Hawtrey's Monetary Theory,' Keynes view on trade cycle, Schumpeter's Innovation Theory;

Unit 5

20 marks/ 12 lectures

Output and Employment

Say's Law of Market and classical theory of employment; Keynes's criticism of classical theory; aggregate demand and aggregate supply functions; the principle of effective demand, importance of effective demand; Keynesian theory of income, output and employment.

Suggested Readings:

1. Dornbusch. F. and Startz, (2010). Macroeconomics (11th ed.). McGraw Hill.
2. Mankiw. N.G. (2010). Macroeconomics (7th ed.). Worth Publishers.
3. Olivier Blanchard, B. (2009), Macroeconomics (5th ed.). Pearson Education, Inc.
4. Froyen. R.T. (2005). Macroeconomics (2nd ed.). Pearson Education Asia,
5. Abel. A.B & Bernanke B.S. (2011). Macroeconomics (7th ed.). Pearson Education, Inc.
6. D'Souza. E. (2009) Macroeconomics, Pearson Education.
7. Krugman. P.R., Obstfeld, M. & Melitz, M. (2012). International Economics (9th ed.). Pearson Education Asia.
8. Jhingan. M.L. (2010) Macroeconomic Theory, 12th edition. Delhi: Vrinda Publications Ltd.
9. Ahuja. H.L., (2018) Macroeconomics: Theory and Policy. New Delhi: S Chand and company Ltd.
10. Ackley. G. (2007) Macroeconomic theory. Delhi: Surjeet Publications.

Minor Paper-3

Course Name: INTERMEDIATE MICROECONOMICS

Course Code: ECM 3

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course is a sequel to Intermediate Microeconomics-I. The emphasis will be on giving concepts clarity to the students coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare; imperfect markets and topics under information economics.

COURSE OUTCOME

Upon completion of this course the students will understand better the consumer welfare, types of market, strategic action and behaviour in the economy and better information on microeconomics. The students will be able to demonstrate better on the microeconomic paradigms and be able to conduct analyses on the microeconomics theories, making strategic actions towards it.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTERMEDIATE MICROECONOMICS**:

CO 1:	To introduce to the students the concepts of general equilibrium and welfare.
CO 2:	To address the concepts of imperfect market competition.
CO 3:	To discuss on the theories of profit.
CO 4:	To analyse the concepts and theories on game theory.
CO 5:	To look at the aspects of market failure and give an explanation on welfare economics.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 General Equilibrium, Efficiency and Welfare	Equilibrium and efficiency under pure exchange and production, overall efficiency and welfare economics.	CSO 1.1: To discuss the efficiency under pure and production. (U) CSO 1.2: To recall the concepts of general equilibrium. (K) CSO 1.3: To examine the concepts, nature and scope of welfare economics. (A) CSO 1.4: To discuss on the role of measuring	12	20	

		welfare. (U)			
UNIT 2 Imperfect Market Competition	Monopolistic Competition; Oligopoly classical Model, Kinked Demand Curve, non-collusive and collusive oligopoly, cartel and price leadership, pricing with market power, price discrimination.	CSO 2.1: To define monopolistic competition. (K) CSO 2.2: To discuss on the oligopoly completion. (U) CSO 2.3: To elaborate on kinked demand curve. (U) CSO 2.4: To contrast between cartel and price leadership. (U) CSO 2.5: To examine various models of collusive oligopoly. (A) CSO 2.6: To discuss on price discrimination in the market. (U)	12	20	
UNIT 3 Theory of Profits	Profit as a dynamic surplus. Innovations and profit. Risk, uncertainty and profits. Monopoly and profits.	CSO 3.1: To define profit as a dynamic surplus. (K) CSO 3.2: To explain Innovation and profit. (U) CSO 3.3: To elaborate risk, uncertainty. (U) CSO 3.4: To explain the relationship between monopoly and profit. (U) CSO 3.5: To explain the theories of profit. (U)	12	20	
UNIT 4 Game Theory and Strategic Behaviour	Cooperative and non-cooperative Game, Dominant Strategy, Choice of an Optimal strategy in the absence of dominant strategy, Neumann-Morgenstern Game Theory, The Prisoners Dilemma and oligopoly theory.	CSO 4.1: To define game in economics. (K) CSO 4.2: To explain different types of game in economics. (U) CSO 4.3: To explain making optimal choices in the presence and absence of dominant strategy. (U) CSO 4.4: To explain Neumann-Morgenstern theory. (U) CSO 4.5: To enumerate	12	20	

		prisoner's dilemma. (K)			
UNIT 5 Market Failure and Welfare Economics	Externalities; public goods and market: welfare economics- Pareto Optimality, Kaldor, Hicks Welfare Criterion, Scitovsky paradox.	CSO 5.1: To define externalities. (K) CSO 5.2: To explain public goods. (U) CSO 5.3: To discuss on the different types of public goods. CSO 5.4: To examine Pareto Optimality theorem. (A) CSO 5.5: To interpret Kaldor Hicks welfare criterion. (U) CSO 5.6: To explain Scitovsky paradox. (U)	12	20	

Course Outline:

Unit 1 **20 marks/ 12 lectures**

General Equilibrium, Efficiency and Welfare

Equilibrium and efficiency under pure exchange and production, overall efficiency and welfare economics.

Unit 2 **20 marks/ 12 lectures**

Imperfect Market Competition

Oligopoly classical Model, Kinked Demand Curve, non-collusive and collusive oligopoly, cartel and price leadership, pricing with market power, price discrimination.

Unit 3 **20 marks/ 12 lectures**

Theory of Profits

Profit as a dynamic surplus. Innovations and profit. Risk, uncertainty and profits. Monopoly and profits.

Unit 4 **20 marks/ 12 lectures**

Game Theory and Strategic Behaviour

Cooperative and non-cooperative Game, Dominant Strategy, Choice of an Optimal strategy in the absence of dominant strategy, Neumann- Morgenstern Game Theory, The Prisoners Dilemma and oligopoly theory.

Unit 5 **20 marks/ 12 lectures**

Market Failure and Welfare Economics

Externalities; public goods and market: welfare Economics-Pareto Optimality, Kaldor, Hicks Welfare Criterion, Scitovsky paradox.

Suggested Readings:

1. Hal, V. R. (2010). Intermediate Microeconomics, a Modern Approach (8th Ed). W.W Norton and Company/Affiliated East-West Press (India).
2. Snyder, C. and Nicholson, W. (2010). Fundamentals of Microeconomics, Cengage Learning (India).
3. Ahuja, H. L. (2012) Advance Economics Theory (8th Ed).S. Chand & Company Ltd. New Delhi.

Minor Paper-4**Course Name: INTERMEDIATE MACROECONOMICS****Course Code: ECM 4****Total Lectures: 60 (12*5)****Total Credits: 4****Total Marks: 100****COURSE DESCRIPTION**

This course aims to provide students with a comprehensive understanding of key macroeconomic concepts and theories, focusing on the intermediate level of analysis. Students will delve into the intricacies of consumption, inflation, unemployment, business cycles, and investment, exploring both classical and contemporary perspectives. The course places a strong emphasis on the theoretical foundations and practical implications of these macroeconomic phenomena, equipping students with the tools to analyze and interpret economic trends and policies.

COURSE OUTCOME

By the completion of the course, Students should be able to explain the concept of the consumption function, comprehend Keynes' Psychological Law of Consumption, and analyze the determinants of the consumption function. They should also understand the Relative Income Hypothesis, the Permanent Income Hypothesis, and the Life Cycle Hypothesis. They should be able to evaluate the Philips curve, understand the relationship between inflation and unemployment, and analyze the Long Run Philips curve from the perspectives of Friedman, Tobin, and Solow. Students should understand the meaning, types, and characteristics of the business cycle, analyze the phases of the business cycle, and evaluate various theories of the business cycle, including Hawtrey's Monetary Theory, Keynes' view on the trade cycle, and Schumpeter's Innovation Theory. They should comprehend the meaning and theory of the investment multiplier, analyze its effectiveness in Less Developed Countries (LDCs), and understand leakages to the multiplier process. Students should understand the meaning of investment, differentiate between autonomous and induced investment, and analyse the concept of the marginal efficiency of capital.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INTERMEDIATE MACROECONOMICS** :

CO 1:	To create understanding among the students about Consumption function.
CO 2:	To explore the relation between Inflation, Unemployment and Expectations
CO 3:	To analyze the Business Cycle
CO 4:	To describe the Theories of Multiplier and Accelerator
CO 5:	To illustrate the Investment Theory

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Consumption Function	Meaning of Consumption Function; Keynes Psychological Law of Consumption; Determinants of Consumption function; Relative income hypothesis; The Permanent Income Hypothesis; the Life Cycle hypothesis	CSO 1.1: To be able to state the meaning of consumption function CSO 1.2: To be able to explain the Keynes Psychological Law of Consumption. (U) CSO 1.3: To be able to list out the determinants of consumption function. CSO 1.4: To be able to illustrate the Relative income hypothesis (A) CSO 1.5: To be able to elaborate the Permanent Income Hypothesis. (U) CSO 1.6: To be able to enumerate the Life Cycle hypothesis. (K)	12	20	
UNIT 2 Inflation, Unemployment and Expectations	Philips curve; The relation between inflation and unemployment; Long run Philips curve- Friedman's view, Tobin's	CSO 2.1: To be able to explain the Philips curve. (U) CSO 2.2: To be able to determine the relation between inflation and unemployment. (A) CSO 2.3: To be able to elaborate Friedman's view,	12	20	

	view and Solow's view; Rational expectation and long run Philips curve; Policy implications of the Philips Curve; Stabilization policy and Ratex hypothesis	Tobin's view, and Solow's view on long run Phillips curve. (U) CSO 2.4: To be able to state the relation between Rational expectation and long run Philips curve CSO 2.5: To be able to explain the Policy implications of the Philips Curve. (U) CSO 2.6: To be able to analyze the relation between the Stabilization policy and Ratex hypothesis			
UNIT 3 Business Cycle	Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle- Hawtrey's Monetary Theory, Keynes view on trade cycle, Schumpeter's Innovation Theory.	CSO 3.1: To be able to define the meaning of inflation. (K) CSO 3.2: To be able to analyze the types and characteristics of business cycle. (A) CSO 3.3: To be describe the different phases of business cycle. (K) CSO 3.4: To be able to describe Hawtrey's Monetary Theory of trade cycle. (K) CSO 3.5: To be able to explain Keynes view on trade cycle. (U) CSO 3.6: To be able to elaborate Schumpeter's Innovation Theory of trade cycle. (U)	12	20	
UNIT 4 : Theory of Multiplier and Accelerator	Investment multiplier: meaning, theory of investment multiplier and its effectiveness in	CSO 4.1: To be able to write the meaning of Investment multiplier. (K) CSO 4.2: To be able to explain the theory of Investment multiplier and	12	20	

	LDCs, Leakages to the multiplier process. Paradox of thrift. Theory of Accelerator; Samuelson and Hicks multiplier and accelerator interaction model, Control of trade cycle.	<p>its effectiveness in LDCs. (U)</p> <p>CSO 4.3: To be able to demonstrate the Leakages to the multiplier process. (A)</p> <p>CSO 4.4: To be able to interpret the Paradox of thrift. (U)</p> <p>CSO 4.5: To be able to elaborate the theory of Accelerator. (U)</p> <p>CSO 4.6: To be able to illustrate the theory of Accelerator. (U)</p> <p>CSO 4.7: To be able to analyze the Samuelson and Hicks multiplier and accelerator interaction model. (A)</p> <p>CSO 4.8: To be able to state the measures to Control of trade cycle. (K)</p>			
UNIT 5 Investment Theory	Investment: meaning; types of Investment- Autonomous and induced investment, Marginal efficiency of capital, general equilibrium- IS and LM curves.	<p>CSO 5.1: To be able to write the meaning of Investment. (K)</p> <p>CSO 5.2: To be able to distinguish between Autonomous and induced investment. (A)</p> <p>CSO 5.3: To be able to explain the theory of Marginal efficiency of capital. (U)</p> <p>CSO 5.4: To be able to examine the general equilibrium- IS and LM curves. (A)</p>	12	20	

Course Outline:

Unit-1

20 marks/ 12 lectures

Consumption Function

Meaning of Consumption Function; Keynes Psychological Law of Consumption;

Determinants of Consumption function; Relative income hypothesis; The Permanent Income Hypothesis; the Life Cycle hypothesis

Unit-2

20 marks/ 12 lectures

Inflation, Unemployment and Expectations

Philips curve; The relation between inflation and unemployment; Long run Philips curve- Friedman's view, Tobin's view and Solow's view; Rational expectation and long run Philips curve; Policy implications of the Philips Curve; Stabilization policy and Ratem hypothesis.

Unit-3

20 marks/ 12 lectures

Business Cycle

Meaning, Types and Characteristics of Business Cycle; Phases of business cycle; Theories of Business cycle- Hawtrey's Monetary Theory, Keynes view on trade cycle, Schumpeter's Innovation Theory;

Unit-4

20 marks/ 12 lectures

Theory of Multiplier and Accelerator

Investment multiplier: meaning, theory of investment multiplier and its effectiveness in LDCs, Leakages to the multiplier process. Paradox of thrift. Theory of Accelerator; Samuelson and Hicks multiplier and accelerator interaction model, Control of trade cycle.

Unit-5

20 marks/ 12 lectures

Investment Theory

Investment: meaning; types of Investment- Autonomous and induced investment, Marginal efficiency of capital, general equilibrium IS and LM curves.

Suggested Readings:

1. Dornbusch, Fischer and Startz. (2010). Macroeconomics, 11th edition, McGraw Hill.
2. N. Gregory Mankiw. (2010). Macroeconomics, 7th edition, Worth Publishers.
3. Olivier Blanchard (2009). Macroeconomics, 5th edition, Pearson Education, Inc.
4. Charles I. Jones. (2002). Introduction to Economic Growth, 2nd edition, W.W. Norton & Company,
5. Andrew B. Abel and Ben S. Bernanke. (2011). Macroeconomics, 7th edition, Pearson Education, Inc.
6. Errol D'Souza. (2009). Macroeconomics, Pearson Education.

Minor Paper -5

Course Name: INDIAN ECONOMY-I

Course Code: ECM 5

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post -Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

COURSE OUTCOME

On completion of the course the students will be able to understand issues relating to the evolution and performance on all the aspects of the Indian economy. It will allow the students to learn the major policy regime poverty, inequality and unemployment and also provide suitable policies to resolves those problem in form of government intervention or suggestive measures. It will help the students to understand better the demographic characteristics of the country, discuss on the infrastructure in the country and its contribution towards the growth of the economy. The course will address to contemporary issues which propels the economy, it will emphasis on the planning mechanism in the country so as to enlighten the students on the evolvment, transition and achievement of planning in the country.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INDIAN ECONOMY-1**

CO 1:	To make the students learn about economic development since Independence.
CO 2:	To inculcate the students to understand Population and Human Development.
CO 3:	To make the students to understand infrastructure in Indian economy.
CO 4:	To create and understanding among the students on growth and distribution in Indian economy.
CO 5:	To assist the students, know about planning in Indian economy.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Economic Development since Independence	Major features of the Economy at Independence; major issues and development; characteristics of the Indian Economy as a developing economy; Occupational distribution.	CSO 1.1: To explain the features of Indian economy at Indedpendence. (U) CSO 1.2: To recall the major issues in Indian economy. (K) CSO 1.3: To examine the characteristics of Indian economy as a developing economy. (A) CSO 1.4: To discuss on	12	20	

		occupational distribution in India. (U) CSO 1.5: To explore on major development in Indian economy. (A)			
UNIT 2 Population and Human Development	Demographic trends and issues; population issues; Human Development in India; health and malnutrition.	CSO 2.1: To define demography. (K) CSO 2.2: To explain demographic trends and issues. (U) CSO 2.3: To elaborate on human development in India. (U) CSO 2.4: To discuss on health in India. (U) CSO 2.5: To examine malnutrition in India. (A)	12	20	
UNIT 3 Infrastructure in Indian Economy	Infrastructure and economic development; energy; power; rail-road coordination; water transport in India; Civil aviation; urban infrastructure; science and technology.	CSO 3.1: to enumerate the importance of infrastructure in economic development. (K) CSO 3.2: to explain energy sector in India. (U) CSO 3.3: to explore on railroads in India. (A) CSO 3.4: to explain water transport in India. (U) CSO 3.5: To explore civil aviation in India. CSO 3.6: To discuss on urban infrastructure in India. CSO 3.7: To explain on science and technology in India.	12	20	
UNIT 4 Growth and Distribution	Trends and Policies in Poverty; Inequality and Unemployment	CSO 4.1: To define Poverty and types of poverty. (K) CSO 4.2: To explain inequalities and types of inequalities. (U) CSO 4.3: To explain unemployment and types	12	20	

		of unemployment. (U) CSO 4.4: To analyse the trend and policies in poverty. (U) CSO 4.5: To determine the trend and policies inequalities. (A) CSO 4.6: To explain the trend and policies in unemployment. (U)			
UNIT 5 Planning in India	Objectives, achievements and failures, NITI Aayog- Objectives, allocation and targets. Economic Reforms	CSO 5.1: to explain objectives of planning in India. (K) CSO 5.2: to list out the achievements and failures of planning in India. (K) CSO 5.3: to discuss on NITI Aayog and its objectives. (U) CSO 5.4: to examine the allocation of resources in NITI Aayog. (A) CSO 5.5: To explain the targets and goals of NITI Aayog. (U) CSO 5.6: To interpret economic reforms in India. (U)		20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Economic Development since Independence

Major features of the Economy at Independence; major issues and development; characteristics of the Indian Economy as a developing economy; Occupational distribution.

Unit 2

20 marks/ 12 lectures

Population and Human Development

Demographic trends and issues; population issues; Human Development in India; health and malnutrition.

Unit 3

20 marks/ 12 lectures

Infrastructure in Indian Economy

Infrastructure and economic development; energy; power; rail-road coordination; water transport in India; Civil aviation; urban infrastructure; science and technology.

Unit 4

20 marks/ 12 lectures

Growth and Distribution

Trends and Policies in Poverty; Inequality and Unemployment

Unit 5

20 marks/ 12 lectures

Planning in India

Objectives, achievements and failures, NITI Aayog- Objectives, allocation and targets.
Economic Reforms.

Suggested Readings:

1. Dreze. J. and Sen, A. (2013). An Uncertain Glory: India and its Contradictions, Princeton University Press.
2. Puri. V.K and Misra, S.K. (2008). Indian Economy, Himalaya Publishing House.
3. Datt. R. (1989). Indian Economy, S.Chand& Company (Pvt) Ltd.
4. Balakrishnan. P. (2007). The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.
5. Mohan. R. (2008). Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
6. Shetty. S.L.(2007). India's Savings Performance since the Advent of Planning.
7. Himanshu (2010). Towards New Poverty Lines for India, Economic and Political Weekly, January.
8. Dreze. J. and Deaton. A. (2009). Food and Nutrition in India: Facts and Interpretations, Economic and Political Weekly, February.
9. Himanshu (2011). Employment Trends in India: A Re-examination, Economic and Political Weekly, September.
10. Rama Baru et al. (2010). Inequities in Access to Health Services in India: Caste, Class and Region, Economic and Political Weekly, September.
11. Kingdon. G. (2007). The Progress of School Education in India, Oxford Review of Economic Policy.
12. Singh. R. (2023). Indian Economy. (15 Ed.). McGraw Hill Publication.

Minor Paper -6

Course Name: INDIAN ECONOMY-II

Course Code: ECM 6

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

COURSE OUTCOME

Upon successful completion of this course, students will be able to develop a nuanced understanding of India's agricultural, industrial, and service sectors, including the unique economic scenario of Nagaland. Acquire skills to formulate and evaluate sector-specific policies, address challenges, and foster economic development. Gain insights into the interconnectedness of economic, social, and political factors in shaping trends and policies.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **Indian Economy-II**

CO 1:	To help students understand the policies and performance in agriculture.
CO 2:	To assist students in comprehending industrial policies and performance.
CO 3:	To help students in understanding the trends and performance in Services.
CO 4:	To familiarize students with the dynamics of the External Sector in India.
CO 5:	To acquaint students with the nuances and dynamics of the economy in Nagaland.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Policies and Performance in Agriculture	Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.	CSO 1.1: To explain growth and productivity in the agricultural sector in India. (U) CSO 1.2: To understand the agrarian structure in India. (U) CSO 1.3: To understand the growth of technology in the agricultural sector with special mention of the Green Revolution. (U) CSO 1.4: To explain capital formation in the agricultural sector. (U) CSO 1.5: To understand trade pricing and procurement in the agricultural sector. (U) CSO 1.6: To assess the trade pricing and procurement in the agricultural sector. (A)	12	20	
UNIT 2	Growth; productivity;	CSO 2.1: To explain	12	20	

<p>Policies and Performance in Industry</p>	<p>diversification; small scale industries; public sector; competition policy; foreign investment. Industrial Policies.</p>	<p>growth and productivity in the industrial sector in India. (U) CSO 2.2: To explain diversification in the industrial sector. (U) CSO 2.3: To understand the significance of small scale industries. (U) CSO 2.4: To explain the importance of public sector. (U) CSO 2.5: To explain competition policy. (U) CSO 2.6: to understand the significance of foreign investment. (U) CSO 2.7: To explain various Industrial policies in India. (U) CSO 2.8: To assess the industrial policies. (A)</p>			
<p>UNIT 3 Trend and Performance in Services.</p>	<p>Role of Foreign Trade, trade in exports and imports, composition and direction of India's foreign trade.</p>	<p>CSO 3.1: To explain the role of foreign trade. (U) CSO 3.2: To understand the trends of trade in exports and imports. (U) CSO 3.3: To discuss the composition of trade (U) CSO 3.4: To discuss the composition of India's foreign trade. (U) CSO 3.5: To discuss the direction of India's foreign trade. (U) CSO 3.6: To assess the trend of India's foreign trade. (A) CSO 3.7: To analyze the composition and direction of India's foreign trade, (A)</p>	12	20	

<p>UNIT 4 External Sector in India</p>	<p>Meaning, Forex Reserve, Exchange rates in India: IMF and India, Special Economic Zones.</p>	<p>CSO 4.1: To explain the concept of external sector. (K) CSO 4.2: To explain the meaning of Forex reserve. (U) CSO 4.3: To evaluate the impact of Forex Reserve on the Indian economy. (A) CSO 4.4: To analyse Exchange Rates in India, with a focus on the relationship between India and the International Monetary Fund (IMF). (A) CSO 4.5: To assess the relation of IMF and India. (A) CSO 4.6: To understand the dynamics and implications of Special Economic Zones. (U)</p>	<p>12</p>	<p>20</p>	
<p>UNIT 5 Economy of Nagaland.</p>	<p>Natural Resources; population, infrastructure and structural changes in Nagaland Economy.</p>	<p>CSO 5.1: To acquire knowledge and understanding of the diverse natural resources in Nagaland. (K) CSO 5.2: To analyse the impact of natural resources on the economic dynamics of Nagaland. (A) CSO 5.3: To evaluate the role of population in shaping the economic landscape of Nagaland, taking into account demographic trends and their implications. (A) CSO 5.4: To assess the</p>	<p>12</p>	<p>20</p>	

		influence of infrastructure development on the economic growth. (A) CSO 5.5: To examine the structural changes occurring in the Nagaland economy and their implications for future development. (A)			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Policies and Performance in Agriculture

Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

Unit 2

20 marks/ 12 lectures

Policies and Performance in Industry

Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment. Industrial Policies.

Unit 3

20 marks/ 12 lectures

Trend and Performance in Services

Role of Foreign Trade, trade in exports and imports, composition and direction of India's foreign trade.

Unit 4

20 marks/ 12 lectures

External Sector in India

Meaning, Forex Reserve, Exchange rates in India: IMF and India, Special Economic Zones.

Unit 5

20 marks/ 12 lectures

Economy of Nagaland

Natural Resources; population, infrastructure and structural changes in Nagaland Economy.

Suggested Readings:

1. Acharya. S. (2010). Macroeconomic Performance and Policies. Oxford University Press.
2. Datt. R. (1989). Indian economy, S.Chand & company (Pvt) Ltd.
3. Mohan. R.(2010). India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.
4. Goldar. B.N. and Aggarwal S.C.(2005). Trade Liberalisation and Price-Cost Margin in Indian Industries, The Developing Economics, September.
5. Goldberg. P. Khandelwal, A. Pavcnik, A and Topalova, P.(2009). Trade Liberalisation and New Imported Inputs, American Economic Review, Papers and Proceedings, May.

6. Sen. K (2010). Trade, Foreign Direct Investment and Industrial Transformation in India.

Minor Paper -7
Course Name: MONETARY ECONOMICS
Course Code: ECM 7

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

This course in Monetary Economics provides a comprehensive examination of the evolution, theories, and functions of money.

COURSE OUTCOMES

Upon completion of the Monetary Economics course, students will gain a deep understanding of the mechanisms that drive efficient economic functioning and the role of monetary policy in navigating economic transitions and fostering stability and growth.

Students will develop a solid theoretical foundation in money supply and its determinants, and master various concepts of money and money substitutes. They will acquire the ability to explain and anticipate the consequences of changes in the quantity of money on critical economic variables such as interest rates, inflation, exchange rates, and unemployment.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **MONETARY ECONOMICS**:

CO 1:	To provide students with a fundamental understanding of the nature of money and different concepts of monetary theory.
CO 2:	To focus on examining the intricate relationship between money and economic activity.
CO 3:	To familiarize the monetary policy of Indian Economy.
CO 4:	To elaborate the knowledge on the money and capital markets
CO 5:	To explores into the contributions of Keynesian and post-Keynesian view on money.
CO 6:	To bring awareness on the concept of Inflation, its causes, and its impact on the economy.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit	Unit Contents	Course Specific Objectives	Lecture	Marks	LOs
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& Title		(CSOs)	Hours		
UNIT 1 Evolution and Theories of Money	Evolution, Role and Functions of Money – Gold Standard – Types – Working of the Gold standard – causes for the down fall of the Gold standard – paper currency standard. Quantity Theory of money- Fisher and Cambridge; Keynes theory of money and Prices; Milton Friedman – Restatement of quantity Theory	CSO 1.1: To outline the evaluation, role and functions of money (K). CSO 1.2: To define the gold standard and its different types (K) CSO 1.3: To evaluate the historical factors that led to the downfall of the gold standard in the 20th century (A). CSO 1.4: To define the paper currency standard and its key features compared to the gold standard (K). CSO 1.5: To explain the basic premise of the quantity theory of money, as proposed by Irving Fisher and Cambridge School economists. CSO 1.6: To evaluate the criticisms of the quantity theory and its limitations (A). CSO 1.7: To evaluate the implications of Keynesian theory for the effectiveness of monetary policy in influencing aggregate demand and inflation (A). CSO 1.8: To elaborate Milton Friedman's restatement to the quantity theory, incorporating insights from Keynesian economics (U).	12	20	
UNIT 2 Demand and Supply of money	Paper currency – System of Note issue – Indian currency system: Development and Problems. Concepts of supply and demand for	CSO 2.1: To generalise the advantages and disadvantages of using paper currency compared to other monetary systems. (U) CSO 2.2: To define the different systems of note issue .(K) CSO 2.3: To analyze the current structure and features of the Indian currency system. (A)	12	20	

	<p>money – money supply and price level – Keynes – classical Dichotomy – Real Balance Effect</p>	<p>CSO 2.4: To explain the factors influencing both the supply and demand for money .(U) CSO 2.5: To discuss the implications of the relationship between money supply and inflation for the conduct of monetary policy in achieving price stability. (U) CSO 2.6: To analyze the concept of the "classical dichotomy" and its implications for the neutrality of money in the long run .(A) CSO 2.7: To investigate the implications of the real balance effect for the effectiveness of monetary policy in different economic contexts. (U)</p>			
<p>UNIT 3 Commercial banks</p>	<p>Functions and types of commercial banking – balance sheet – credit creation – Investment policy in commercial Banking. Reserve Bank of India – Functions – credit control – Rural and Industrial credit – Exchange control- Credit control quantitative and qualitative methods – Limitations.</p>	<p>CSO 3.1: To classify different functions and types of commercial banks. (K) CSO 3.2: To draw the key components of a bank's balance sheet. (K) CSO 3.3: To explain the process of credit creation by commercial banks. (U) CSO 3.4: To evaluate the impact of investment policy on bank profitability and financial stability .(A). CSO 3.5: To identify and explain the core functions of the Reserve Bank of India (RBI) as the central bank of India. (A) CSO 3.6: To discuss the various quantitative and qualitative methods used by the RBI for credit control in India .(U) CSO 3.7: To evaluate the impact of RBI's initiatives on improving access to finance for rural and industrial sectors. (A)</p>	<p>12</p>	<p>20</p>	

		CSO 3.8: To develop the limitations of credit control and the increasing use of alternative monetary policy tools (A).			
UNIT 4 Indian Money Market	Indian money market- Structure of Indian Money Market- Defects of Indian Money Market Measures to improve Indian Money Market. Indigenous bankers and money lenders	CSO 4.1: To define the Indian money market and its key participants, including organized and unorganized sectors (K). CSO 4.2: To identify the major defects of the Indian money market (A). CSO 4.3: To identify the key measures proposed or implemented to improve the Indian money market (A). CSO 4.4: To define the role and characteristics of indigenous bankers and money lenders in the Indian financial system (K).	12	20	
UNIT 5 Development Banks	Progress of Indian Banking during post nationalization period – development banks, IDBI, IFCI, ICICI – other term financing Institutions in India	CSO 5.1: To analyze the major changes and impacts of bank nationalization in India (1969-1980) (A). CSO 5.2: To define the concept of development banks and their role in promoting economic growth and development (K). CSO 5.3: To identify and classify various term financing institutions operating in India (A). CSO 5.4: To evaluate the contribution of term financing institutions in mobilizing long-term savings and providing long-term loans for specific sectors (A).	12	20	

Course Outline:

Unit 1

20 marks/ 12 lectures

Evolution and Theories of Money

Evolution, Role and Functions of Money – Gold Standard – Types – Working of the Gold standard – causes for the down fall of the Gold standard – paper currency standard. Quantity

Theory of money-Fisher and Cambridge; Keynes theory of money and Prices; Milton Friedman – Restatement of quantity Theory

Unit 2

20 marks/ 12 lectures

Demand and Supply of Money

Paper currency – System of Note issue – Indian currency system: Development and problems. Concepts of supply and demand for money – money supply and price level – Keynes – classical Dichotomy – Real Balance Effect

Unit 3

20 marks/ 12 lectures

Commercial Banks

Functions and types of commercial banking – balance sheet – credit creation – Investment policy in commercial Banking. Reserve Bank of India – Functions – credit control – Rural and Industrial credit – Exchange control- Credit control quantitative and qualitative methods – limitations.

Unit 4

20 marks/ 12 lectures

Indian Money Market

Indian money market- Structure of Indian Money Market- Defects of Indian Money Market- Measures to improve Indian Money Market. Indigenous bankers and money lenders

Unit 5

20 marks/ 12 lectures

Development Banks

Progress of Indian Banking during post nationalization period – development banks, IDBI, IFCI, ICICI – other term financing Institutions in India.

Suggested Readings

1. Bhole, L. (2009). Financial Institutions and Markets. New Delhi: McGraw Hill.
2. Cauvery, R., Kruparani N. Nayak, Sudha, U.K and Manimekakai A. (2003). Monetary Economics. S. Chand publishing
3. Seth, M. L. (2020). Money, Banking International Trade and public finance. Lakshmi Narain Agarwal.
4. Mithani, D.M. (2012). Money Banking and International Trade . Himalaya Publishing house.
5. Paul, R. (2018). Monetary Economics 12th Edition. Kalyani.
6. Sundharam, K.P.M. (1976). Monetary Theory and practices. New Delhi: Sultan Chand.
7. Vaish, M. (2005). Monetary theory. New Delhi: Vikas publishing house.

Minor Paper -8

Course Name: AGRICULTURAL ECONOMICS

Course Code: ECM 8

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

The course gives a meaningful insight about the importance and expose the student to various aspects to agriculture thereby guide the students towards entrepreneurial activities.

COURSE OUTCOME

Upon successful completion of the course the students will gain knowledge on the prospects of agriculture in the economy. It will also enhance the calibre of the students to expand their perspective of the agriculture as a means to expand entrepreneurial activities by learning various allied services engage to agriculture. It will also engage the students to projects and skill enhancement activities by encouraging them to various types of cropping seasons, patterns and also the use of the basic and integrated inputs in the agriculture system. Above all the course will direct the students to embarked agricultural practices and further create a proficiency in agriculture.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **AGRICULTURAL ECONOMICS**:

CO 1:	To understand the role of agriculture in economic development
CO 2:	To examine the issue of Indian agriculture
CO 3:	To recognize the problems in Indian agriculture
CO 4:	To plan for agricultural development
CO 5:	To develop an understanding of the importance of rural infrastructure and its role in agricultural development, and assess the effectiveness of various agricultural financing mechanisms.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	Marks LOs
UNIT 1 Agriculture and Economic Development	Meaning, Nature and Scope of agricultural economics; Traditional Agriculture and its Modernization; Role of agriculture in economic development; Interdependence between agriculture and industry-some	CSO 1.1: To define Agricultural Economics (K). CSO 1.2: To write the scope of Agricultural Economics (K). CSO 1.3: To compare the contrast traditional and modern agricultural practices (U). CSO 1.4: To explore the motivations and impacts of modernization (A). CSO 1.5: To analyse the critical role of agriculture in driving economic growth and	12	20	

	empirical evidence; Rural economics	development (A). CSO 1.6: To investigate the Interdependence of agricultural and industrial sectors using empirical evidences to support the claims (A). CSO 1.7: To discuss the complexities and unique challenges faced by rural economics (U).			
UNIT 2 Diversification of Rural Economic Activities	Livestock economics- Livestock resources and their productivity; Problems of marketing: white revolution: Fishery and poultry development; Forestry, horticulture and floriculture; Issues and problems in rural industrialization and development of agro-based industries.	CSO 2.1: To discuss the economic aspects of livestock production (K). CSO 2.2: To analyse the problems of livestock marketing (A). CSO 2.3: To discuss white revolution (U). CSO 2.4: To examine the contribution of fishery, poultry, forestry, horticulture and floriculture to rural economies (A). CSO 2.5: To explore the opportunities and constraints of their growth and development (A) CSO 2.6: To critically analyse the opportunities and challenges related to rural industrialization (A). CSO 2.7: To explain the development of agro-based industries (U).	12	20	
UNIT 3 Economics of Rural Infrastructure	Use of land, water and energy; Rural transport, communication, banking, extension services, role. Modes and	CSO 3.1: To define the land, water and energy resources in rural economic (K). CSO 3.2: To analyze the economic significance and optimal utilization of resources in rural economic development (A).	12	20	

	<p>problems of rural electrification; rural social infrastructure-education and health and information dissemination</p>	<p>CSO 3.3: To discuss the specific roles played by rural transportation and communication in promoting economic development. (U)</p> <p>CSO 3.4: To assess the combined impact of banking and extension services in stimulating rural infrastructure development (A).</p> <p>CSO 3.5: To critically evaluate the effectiveness of existing rural infrastructure in meeting the needs of diverse rural populations. (A)</p> <p>CSO 3.6: To define the importance of rural electrification (K).</p> <p>CSO 3.7: To identify the problems and challenges of rural electrification (A).</p> <p>CSO 3.8: To explain the rural social infrastructure (U).</p> <p>CSO 3.9: To investigate the role of education, health and information dissemination in promoting rural development and economic well-being (A).</p>			
<p>UNIT 4 Agricultural Production and Productivity</p>	<p>Agricultural Production-Resource use and efficiency; Production function and analyses in Agriculture; Factor combination and resource substitution; cost and supply curve; Size of farm and</p>	<p>CSO 4.1: To define Agricultural production (K).</p> <p>CSO 4.2: To ascertain the resource use efficiency (U).</p> <p>CSO 4.3: To outline the production functions (K).</p> <p>CSO 4.4: To explore the theoretical framework of production functions and its application in analysing agricultural production processes (A).</p> <p>CSO 4.5: To explain the principles of factor</p>	<p>12</p>	<p>20</p>	

	<p>laws of returns-theoretical and empirical findings; Farm budgeting and cost concepts: Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture: technical change, labour absorption and gender issues in agricultural services.</p>	<p>combination and resource substitution and their impact on production cost and output (U)</p> <p>CSO 4.6: To analyse the cost structure of agricultural production and its relationship to the supply of agricultural products (A).</p> <p>CSO 4.7: To explore the theoretical and empirical evidence regarding the farm size and returns to scale (A).</p> <p>CSO 4.8: To elaborate the essential skills for farm budgeting and cost analysis (U).</p> <p>CSO 4.9: To discuss the factors influencing the supply of individual crops and the aggregate agricultural supply (U).</p> <p>CSO 4.10: To measure the resource use efficiency in traditional agricultural practices (A).</p> <p>CSO 4.11: To explore the impact of technological advancements on labour needs (A).</p> <p>CSO 4.12: To investigate gender disparity in access to and benefits from agricultural services (A).</p>			
<p>UNIT 5 Agricultural Policy and Finance</p>	<p>Agricultural price policy and subsidies; the public distribution system; Agricultural finance; institutional sources of</p>	<p>CSO 5.1: To cite the objectives and impacts of different agricultural price policies (K).</p> <p>CSO 5.2: To examine the effectiveness and efficiency of alternative subsidy mechanisms in supporting agricultural development (A).</p>	<p>12</p>	<p>20</p>	

	<p>Agricultural finance: Cooperative Banks, Commercial Banks, NABARD, RRB's: Role of micro-finance; SHG's and NGO's</p>	<p>CSO 5.3: To explain the rationale and objectives of the PDS in India and discuss the challenges and potential reforms for improving the efficiency and effectiveness of the PDS (U).</p> <p>CSO 5.4: To defend the importance of access to finance for agricultural development and productivity (U).</p> <p>CSO 5.5: To evaluate the role of various institutions like Cooperative Banks, Commercial Banks, NABARD, and RRBs in providing agricultural finance (A).</p> <p>CSO 5.6: To explain the concept of microfinance and its potential for empowering rural communities and promoting financial inclusion (U).</p> <p>CSO 5.7: To analyze the role of Self-Help Groups (SHGs) in microfinance and their impact on rural development (A).</p> <p>CSO 5.8: To evaluate the contribution of Non-Governmental Organizations (NGOs) in supporting agricultural development and financial inclusion (A).</p>			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Agriculture and Economic Development

Meaning, Nature and Scope of agricultural economics; Traditional Agriculture and its Modernization; Role of agriculture in economic development; Interdependence between agriculture and industry-some empirical evidence; Rural economics.

Unit 2

20 marks/ 12 lectures

Diversification of Rural Economic Activities

Livestock Economics-Livestock resources and their productivity; Problems of marketing; white revolution: Fishery and poultry development; Forestry, horticulture and floriculture; Issues and problems in rural industrialization and development of agro-based industries.

Unit 3

20 marks/ 12 lectures

Economics of Rural Infrastructure

Use of land, water and energy; Rural transport, communication, banking, extension services, role. Modes and problems of rural electrification; rural social infrastructure-education and health and information dissemination

Unit 4

20 marks/ 12 lectures

Agricultural Production and Productivity

Agricultural Production-Resource use and efficiency; Production function and analyses in Agriculture; Factor combination and resource substitution; cost and supply curve; Size of farm and laws of returns-theoretical and empirical findings; Farm budgeting and cost concepts: Supply response of individual crops and aggregate supply; Resource use efficiency in traditional agriculture: technical change, labour absorption and gender issues in agricultural services.

Unit 5

20 marks/ 12 lectures

Agricultural Policy and Finance

Agricultural price policy and subsidies; the public distribution system; Agricultural finance; institutional sources of Agricultural finance: Cooperative Banks, Commercial Banks, NABARD, RRB's: Role of micro-finance; SHG's and NGO's.

Suggested Reading

1. Appu, P. (1996). Land Reforms in India. Vikas. New Delhi.
2. Bardhan, P. (1984). Land, Labour and Rural poverty. Oxford University Press, New Delhi.
3. Bhaduri, A. (1984). The Economic Structure of Backward Agriculture. Macmillan, New Delhi.
4. Bhardwaj, K. (1974). Production Conditions in Indian Agriculture. Cambridge University press, Cambridge.
5. Bilgmi, S. (1996). Agricultural Economic. Himalaya Publishing House, Delhi. Brahmananda.
6. Brahmananda, P.R., Narayan, B. K. and Kalappa, A. (1987). Dilimas of Rural Development in India. Himalaya Publishing House, Bombay.
7. P.R. and Y.R. Panchumukhi. (1987). The Development Process of the Indian economy. Himalaya Publishing house, Bombay.

Minor Paper -9

Course Name: INDUSTRIAL ECONOMICS

Course Code: ECM 9

Total Lectures: 60 (12*5)

Total Credits: 4

Total Marks: 100

COURSE DESCRIPTION

The basic objective of the course is to enable students to understand the structure of markets. The focus of the course is split equally between economic theory and practical perspective. The emphasis will be on understanding how the theoretical tools can be used to analyze real world issues with respect to industrial development.

COURSE OUTCOME

Upon successful completion of the course the students will gain knowledge on the need and significances of industries. It will also enhance the caliber of the students to expand their perspective about industries knowledge and behavior of the firms. It will also help the students to know about the industrial location analysis and the trends of industrialization in the global world.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **INDUSTRIAL ECONOMICS**:

CO 1:	To inculcate in the students about the need and significance of industrialization.
CO 2:	To make the students understand the behavior of a firm in determining profitability.
CO 3:	To make the students understand about the market structure and industrial efficiency.
CO 4:	To make the students learn about Industrialization in India.
CO 5:	To make the students learn about Industrialization in India.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objectives (CSOs)	Lecture Hours	Marks	Marks LOs
UNIT 1 Introducti on to Industrial Economics.	Meaning and scope of Industrial Economics; Need and significance of the study of Industrial Economics; Factors affecting	CSO 1.1: To define Industrial Economics (K). CSO 1.2: To write the scope of Industrial Economics (K). CSO 1.3: To explain the need of the study of Industrial Economic (U). CSO 1.4: To discuss the	12	20	

	Industrial Development; Role, problems and future of public sector industries.	<p>significance of Industrial Economics (U).</p> <p>CSO 1.5: To analyze the factors affecting Industrial Development (A).</p> <p>CSO 1.6: To explain the role of public sector industries (U).</p> <p>CSO 1.7: To analyze the problems of public sector industries (A).</p> <p>CSO 1.8: To discuss the future of public sector industries (U).</p>			
UNIT 2 Behaviour of the firm.	Types and choice of organizational firm – ownership and control; Passive and active behavior of firm; The Firm: Emergence and its objectives - Non -profit maximizing models. Cost theory and optimum size of a firm, Determinants of profitability and pricing decisions: Product pricing.	<p>CSO 2.1: To differentiate the types and choice of organizational firm – ownership and control (K).</p> <p>CSO 2.2: To Differentiate between active and passive behavior of firm (A).</p> <p>CSO 2.3: To discuss the emergence of firm (U).</p> <p>CSO 2.4: To write the objectives of the firm (K).</p> <p>CSO 2.5: To explain the Non – profit maximising model of firm (U).</p> <p>CSO 2.6: To explain the cost theory and optimum size of the firm (U).</p> <p>CSO 2.7: To identify the determinants of profitability and pricing decisions (A).</p> <p>CSO 2.8: To identify the determinants of product pricing (A).</p>	12	20	
UNIT 3 Market and Industrial	Market structure and market conduct; Industrial	<p>CSO 3.1: To explain market structure (U).</p> <p>CSO 3.2: To discuss market conduct (U).</p>	12	20	

Efficiency.	Efficiency: concept, determinants, measurement and decision-making process. Market concentration, its measurement and effects on market Performance; Product differentiation and advertisement, Diversification, Integration and Merger, Research & Development and Innovation; Theories of growth of firm: Constrained on growth.	<p>CSO 3.3: To define Industrial Efficiency (K).</p> <p>CSO 3.4: To identify the determinants of market efficiency (A).</p> <p>CSO 3.5: To examine the measurements of Industrial Efficiency (A).</p> <p>CSO 3.6: To analyze the decision-making process of Industrial Efficiency (A).</p> <p>CSO 3.7: To define market concentration (K).</p> <p>CSO 3.8: To examine the measurement of market concentration (A).</p> <p>CSO 3.9: To explain the effects of market concentration on market performance (U).</p> <p>CSO 3.10: To discuss product differentiation, advertisement and diversification (U).</p> <p>CSO 3.11: To Distinguish between Integration and Merger (A).</p> <p>CSO 3.12: To Discuss Research & Development and Innovation (U).</p> <p>CSO 3.13: Explain the theory of growth of firm – Constrained on growth (U).</p>			
UNIT 4 Industrial Locational Analysis.	Meaning of Industrial Location; determinants of Industrial location; factors affecting location;	<p>CSO 4.1: To define Industrial Location (K).</p> <p>CSO 4.2: To identify the determinants of Industrial Location (A).</p> <p>CSO 4.3: To analyze the factors affecting location</p>	12	20	

	<p>Weber's & Florence's Theories of Industrial location, Industrial Concentration: Causes and Effects, Need for balanced regional development of industries - role of SIDC.</p>	<p>(A0. CSO 4.4: To explain Weber's & Florence's Theories of Industrial Location (U). CSO 4.5: To examine the causes and effects of Industrial Concentration (A). CSO 4.6: To explain the need for a balanced regional development of industries (U). CSO 4.7: To explain the role of SIDC to maintain the need for balanced regional development of industries (U).</p>			
<p>UNIT 5 Industrialization in India.</p>	<p>Trends in Industrial growth and diversification; Globalization and its impacts on industries; Industrial Policy in India, Policy initiatives to liberalize Indian industries and its effects; Labour issues and reforms; SSIs and Cottage industries in India-Policy issues and performances; Competition Act 2002.</p>	<p>CSO 5.1: To discuss the trends in industrial growth and diversification (U). CSO 5.2: To analyze the impact of globalization on Industrial Policy in India (A). CSO 5.3: To discuss the policy initiatives to liberalize Indian industries and its effects (U). CSO 5.4: To analyze labour issues and labour reforms (A). CSO 5.5: To explain SSIs and cottage industries in India-Policy and their issues (U). CSO 5.6: To discuss the performance of SSIs (U). CSO 5.7: To Discuss the Competition Act 2002 (U).</p>	<p>12</p>	<p>20</p>	

Course Outline:

Unit I

20 marks/ 12 lectures

Introduction to Industrial Economics

Meaning and scope of Industrial Economics; Need and significance of the study of Industrial Economics; Factors affecting Industrial Development; Role, problems and future of public sector industries

Unit 2

20 marks/ 12 lectures

Behavior of the firm

Types and choice of organizational firm – ownership and control; The Firm: Emergence and its objectives - Non-profit maximizing models. Cost theory and optimum size of a firm, Determinants of profitability and pricing decisions: Product pricing.

Unit 3

20 marks/ 12 lectures

Market and Industrial Efficiency

Market structure and market conduct; Industrial Efficiency: concept, determinants, measurement and decision-making process. Market concentration, its measurement and effects on market Performance; Product differentiation and advertisement, Diversification, Integration and Merger, Research & Development and Innovation; Theories of growth of firm: Constrained on growth.

Unit 4

20 marks/ 12 lectures

Industrial Locational Analysis

Meaning of Industrial Location; determinants of Industrial location; factors affecting location; Weber's & Florence's Theories of Industrial location, Industrial Concentration: Causes and Effects, Need for balanced regional development of industries - role of SIDC

Unit 5

20 marks/ 12 lectures

Industrialization in India

Trends in Industrial growth and diversification; Globalization and its impacts on industries; Industrial Policy in India, Policy initiatives to liberalize Indian industries and its effects; Labour issues and reforms; SSIs and Cottage industries in India-Policy issues and performances; Competition Act 2002.

Suggested Readings

1. Ahluwallia I.J. (1992): Industrial Growth in India, OUP, Delhi. 2. Bain, J.E. (1959): Industrial Organization Wiley and Sons, NY. 3. Barthwal, R.R. (2007): Industrial Economics: An Introduction to Industrial Economics, George Allen and Unwin, London.
4. Hay, (1976) An Introduction to Industrial Economics, George Allen and Unwin, London.
5. A.D. and D.J. Morris (1991): Industrial Economics and Organization: Theory and Evidence, OUP.
6. Mookherjee, D. (ed.) (1995): Indian Industry: Policy and Performance, OUP, Delhi.
7. Panagariya Arvind (2008): India: The Emerging Giant, Oxford University Press
8. Sivayya, K.V. and V.B.M. Das (1996): Indian Industrial Economy, S. Chand and Company, ND.

8. 10.Smith, D.M. (1971): Industrial Location: An Economic and Geographic Analysis, John Wiley, NY.

Skill Enhancement Course

Course Name: Basic Computer Applications in Banking services

Course Code: ECS 1

Total Lectures:30

Total Credits: 2

Total Marks: 50

COURSE DESCRIPTION

The course is planned to aim at imparting a basic level appreciation programme for the common man. After completing the course, the incumbent is able to the use the computer for basic purposes of preparing his personnel/business letters, viewing information on Internet (the web), sending mails, using internet banking services etc. it will allow a common man to be digitally literate and will also help the small business communities, to maintain their small account using the computers and enjoy in the world of Information Technology.

The module on financial literacy will enable the individuals to understand the various financial services and be aware of the various schemes.

COURSE OUTCOMES

Students should be able to comprehend the concepts of basic knowledge about word processing and spread sheet. Students should be able to learn the communications and basic electronic mail. They should also be able to understand and gain knowledge about the financial literacy through computer applications.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **BASIC COMPUTER APPLICATIONS IN BANKING SERVICES**:

CSO 1:	Understand the basic knowledge about Word Processor and Spreadsheet.
CSO 2:	Learn the communications and Collaboration through electronic mail and instant messengers.
CSO 3:	Gain knowledge about the Financial Literacy for Banking Scheme and its Applications

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Understanding Word	Word Processing Basics; Opening and Closing of	CSO 1.1: To describe Word Processor(K) CSO 1.2: To explain available features of MS	11	17	

Processing and Using Spread Sheet	documents; Text creation and Manipulation; Formatting of text; Table handling; Spell check, language setting and thesaurus; Printing of word document. Basics of Spreadsheet; Manipulation of cells; Formulas and Functions; Editing of Spread Sheet, printing of Spread Sheet.	Word(U) CSO 1.3: To demonstrate an application of MS Word with an example (A) CSO 1.4: To describe Spreadsheet(K) CSO 1.5: To explain various features of MS Excel(U) CSO 1.6: To explain how to use formulas(U) CSO 1.7: To differentiate between formulas and functions(U) CSO 1.8: To explain various functions(U) CSO 1.9: To demonstrate an application of MS Excel with an example(A)			
UNIT 2 Communications and Collaboration	Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration; Instant Messaging; Netiquettes.	CSO 2.1: To explain electronic mail. (U) CSO 2.2: To explain how to create an email account (U) CSO 2.3: To demonstrate creating, sending, receiving emails and attachment (A) CSO 2.4: To List Instant messengers (K) CSO 2.5: To demonstrate usage of Instant messengers (A) CSO 2.6: To define Netiquettes. (K) CSO 2.7: To list Netiquettes. (K)	11	17	
UNIT 3 Financial Literacy for Banking Scheme	Why savings are needed, why save in a bank, banking products-ATM card, Banking Instruments-	CSO 3.1: To discuss savings. (U) CSO 3.2: To explain ATM and cards (U)	8	16	

<p>and Applications:</p>	<p>Cheque, Demand Draft (DD), Banking Services Delivery Channels, Know Your Customer (KYC), Opening of bank account and documents required, Types of bank accounts, Bank's services including remittances, loan, mobile banking, Overdraft, Pension.</p>	<p>CSO 3.3: To explain demand draft (DD), delivery channels, KYC. (U) CSO 3.4: To explain the procedure for opening an account . (U) CSO 3.5: To list the document required (K) CSO 3.6: To list different types bank account. (K) CSO 3.7: To discuss various banking services. (U) CSO 3.8: To demonstrate online banking. (A)</p>			
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Course Outline:

Unit 1

20 marks/10 lectures

Understanding Word Processing and Using Spread Sheet

Word Processing Basics; Opening and Closing of documents; Text creation and Manipulation; Formatting of text; Table handling; Spell check, language setting and thesaurus; Printing of word document. Basics of Spreadsheet; Manipulation of cells; Formulas and Functions; Editing of Spread Sheet, printing of Spread Sheet.

Unit 2

10 marks/8 lectures

Communications and collaboration:

Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration; Instant Messaging; Netiquettes.

Unit 3

20 marks/ 12lectures

Financial Literacy for Banking Scheme and Applications:

Why savings are needed, why save in a bank, banking products-ATM card, Banking Instruments-Cheque, Demand Draft (DD), Banking Services Delivery Channels, Know Your Customer (KYC), Opening of bank account and documents required, Types of bank accounts, Bank's services including remittances, loan, mobile banking, Overdraft, Pension

Course Name: Desktop Publishing (DTP)

Course Code: ECS 2

Total Lectures:30

Total Credits: 2

Total Marks: 50

COURSE DESCRIPTION

An Introduction to the tools used in Desktop Publishing.

COURSE OUTCOMES

Students should be able to familiarize with fundamental computer concepts, learn advanced image manipulations using Adobe Photoshop. Students should be able to understand and gain knowledge about gain knowledge about page maker.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **DESKTOP PUBLISHING (DTP)**:

CSO 1:	Familiarize students with fundamentals of computer concepts, Windows Operating System and MS Paint
CSO 2:	Learn advanced image manipulations using Adobe Photoshop
CSO 3:	Gain knowledge about page maker

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Windows and MS Paint	Introduction to Computer, creating folders and files, Directories, MS Paint: Introduction, About the limits of MS Paint , Presentation and setup of user interface and help , Open and save an image , Knowledge of available file types (JPG, TIFF, ICO, PNG, GIF...) , Set opened image as desktop wallpaper, Display options (zoom, miniature, grid, etc.) , Define or resize the size of an image (non-functional transparency) ,	CSO 1.1: To define computer. (K) CSO 1.2: To list the features of computer system. (K) CSO 1.3: To differentiate between files and folders. (U) CSO 1.4 To demonstrate the various tools of MS paint including. (A) CSO 1.5: To List different image file types. (K) CSO 1.6: To demonstrate wallpaper setting. (A) CSO 1.7: To discuss display option(U) CSO 1.8: To discuss drawing tools. (U)	8	16	

	Drawing tools overview , Colors selection with right click/left click in the palette , Copy/Paste from selection with or without transparency , Insert an external image in a composition, Colors number selection and color inversion.	CSO 1.9: To discuss Color selection. (U)			
UNIT 2 Photoshop	Getting Acquainted with Photoshop, Basic Image Manipulation, Color Basics, Painting Tools, Brush Settings, Making Selections, Filling and stroking, Layers, Advanced Layers , Text, Drawing, Using Channels and Masking, Manipulating images, Getting to know the work area, Using Adobe Bridge, Basic Photo Corrections, Retouching and Repairing, Working with selections, Layer Basics, Masks and channels, Correcting and enhancing digital photographs, Topographic design, Vector drawing techniques, Advanced Layer techniques, Vector Composting, Creating Links within	CSO 2.1: To explain Photoshop window. (U) CSO 2.2: To discuss image manipulation. (U) CSO 2.3: To demonstrate various features including, color, tools, filling and stroking, masks and layers. (A) CSO2.4: To explain work area. (U) CSO 2.4: To demonstrate image manipulation. (A) CSO 2.5: To discuss topographic design and vector drawing. (U) CSO 2.6: To discuss animation. (U) CSO 2.7: To explain producing and printing. (K)	11	17	

	an image, Creating rollover web visuals, Animating GIF images for the web, Producing and printing consistent color.				
UNIT 3 PageMaker	Getting Started with PageMaker, PageMaker Interface, Creating a New Document, Managing Document Layer, Creating & Editing Text, Working with Edit Story, Managing Text as an Object, Working with Text and Graphics, Using Graphics, Applying Colors to Graphics, Framing Graphics, Cropping and masking Graphics, Working with Layers, Working with Master pages, Working with Plugins, Using Text Wrap , Using Advanced Features, Creating a PDF Document in PageMaker, Working with Data Merger, Using Scripts, Using Object Linking and Embedding, Color Separation Capabilities, Printing.	CSO 3.1: To discuss PageMaker. (U) CSO 3.2: To explain creating ad editing text, text as an object. (U) CSO 3.3: To explain using graphics, applying colors, framing, applying colors, cropping and masking. (U) CSO 3.4: To demonstrate with various features of PageMaker. (A) CSO 3.5: To demonstrate working with layers, master pages, plugins. (A) CSO 3.6: To explain publishing as pdf, OLE(U) CSO 3.7: To explain printing. (U)	11	17	

Course Outline:

Unit 1**20 marks/ 10 lectures****Windows and MS Paint**

Introduction to Computer, creating folders and files, Directories, MS Paint: Introduction, About the limits of MS Paint , Presentation and setup of user interface and help , Open and save an image , Knowledge of available file types (JPG, TIFF, ICO, PNG, GIF...) , Set opened image as desktop wallpaper, Display options (zoom, miniature, grid, etc.) , Define or resize the size of an image (non-functional transparency) , Drawing tools overview , Colors selection with right click/left click in the palette , Copy/Paste from selection with or without transparency , Insert an external image in a composition, Colors number selection and color inversion.

Unit2**20 marks/ 12 lectures****Photoshop**

Getting Acquainted with Photoshop, Basic Image Manipulation, Color Basics, Painting Tools, Brush Settings, Making Selections, Filling and stroking, Layers, Advanced Layers , Text, Drawing, Using Channels and Masking, Manipulating images, Getting to know the work area, Using Adobe Bridge, Basic Photo Corrections, Retouching and Repairing, Working with selections, Layer Basics, Masks and channels, Correcting and enhancing digital photographs, Topographic design, Vector drawing techniques, Advanced Layer techniques, Vector Composting, Creating Links within an image, Creating rollover web visuals, Animating GIF images for the web, Producing and printing consistent color.

Unit 3**10 marks/ 8 lectures****PageMaker**

Getting Started with PageMaker, PageMaker Interface, Creating a New Document, Managing Document Layer, Creating & Editing Text, Working with Edit Story, Managing Text as an Object, Working with Text and Graphics, Using Graphics, Applying Colors to Graphics, Framing Graphics, Cropping and masking Graphics, Working with Layers, Working with Master pages, Working with Plugins, Using Text Wrap , Using Advanced Features, Creating a PDF Document in PageMaker, Working with Data Merger, Using Scripts, Using Object Linking and Embedding, Color Separation Capabilities, Printing.

Suggested Readings:

1. Rajasaman V. and Adabala Nechasika. (2022). Fundamentals of computers, 6th ed. Adobe press.
2. Adobe creative team. (2022). Adobe photoshop classroom in a book, adobe press.
3. Adobe creative team. (2022). Adobe PageMaker 7.0 classroom in a book, adobe press.

Course Name: INDUSTRIAL ECONOMICS**Course Code: ECS 3****Total Lectures:30****Total Credits: 2****Total Marks: 50**

COURSE DESCRIPTION

The course is to enable students understand the meaning of industrialization. The emphasis will be on understanding how the theoretical tools can be used to analyze real world issues with respect to industrial development.

COURSE OUTCOME

On completing the course, the students will be able to understand the need and significance of industrialization. They will also be able to understand the importance of industrialization and economic development and gain knowledge about the problems faced by industries.

COURSE OBJECTIVES

The following are the Course Objectives (CO's) for the paper **INDUSTRIAL ECONOMICS**:

CO 1:	To escalate the significance of industrialization.
CO 2:	To make the students understand the importance of industrialization and Economic Development.
CO 3:	To make the students understand the problems faced by industries.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective	Lecture Hours	Marks	LO's
UNIT 1 Introduction of Industrialization	Meaning of Industrialization -- Need for industrialization; industrialization and economic development.	CSO 1.1: To define Industrialization. (K) CSO 1.2: To understand the Need for industrialization. (U) CSO 1.3: To explain industrialization and economic development. (U).	8	10	
UNIT 2 Industrialization and Economic Development	Industrialization and productivity of labour; Industrialization and generation of employment; industrialization and low elasticity of demand for food products; industrialization and mobilization of surplus; industrialization and economies of scale; industrialization and	CSO 2.1: To learn about the Industrialization and productivity of labour. (U) CSO 2.2: To learn Industrialization and generation of employment. (U) CSO 2.3: To learn industrialization and low elasticity of demand for food products. (U) CSO 2.4: To learn industrialization and mobilization of surplus. (U) CSO 2.5: To learn	8	10	

	balance of payments; industrialization and savings; industrialization, stability and flexibility	industrialization and economies of scale. (U) CSO 2.6: To learn industrialization and balance of payments. (U) CSO 2.7: To learn industrialization and savings; industrialization, stability and flexibility . (U)			
UNIT 3 Critique of Industrialization	Problems associated with industrialization; factors hindering industrialization developing countries.	CSO 3.1: To discuss the Problems associated with industrialization. (K) CSO 3.2: To describe the factors hindering industrialization developing countries. (K)	8	10	

Course Outline:

Unit 1

10 marks/ 8 lectures

Introduction of Industrialization

Meaning of Industrialization —Need for industrialization; industrialization and economic development.

Unit2

20 marks/ 12 lectures

Industrialization and Economic Development

Industrialization and productivity of labour; Industrialization and generation of employment; industrialization and low elasticity of demand for food products; industrialization and mobilization of surplus; industrialization and economies of scale; industrialization and balance of payments; industrialization and savings; industrialization, stability and flexibility

Unit 3

20 marks/ 10 lectures

Critique of Industrialization

Problems associated with industrialization; factors hindering industrialization developing countries.

Suggested Readings:

1. Anup Chatterjee. (2012) “Industrial Policy and Economic Development in India – 1947 - 2012” – New Century Publications, New Delhi.
2. Desai. S.S.M (1988) “Industrial Economy of India”, Himalaya Publishing House, Bombay.
3. Kuchhal. S.C. (1978), “Industrial Economy of India”, Chaitanya Publishing House, Allahabad.
4. AnupChatterjee (2006) “60 years of Indian Industry – 1947-2007- Growth, Reforms and Outlook, New Century Publications, New Delhi.

Course Name: Soft Skill Development

Course Code: ECS 4

Total Lectures:30

Total Credits: 2

Total Marks: 50

COURSE DESCRIPTION

This course is designed to empower students with essential soft skills crucial for personal and professional development. The focus is on cultivating effective communication through public speaking, mastering interview skills, and honing time management abilities. The course provides practical insights and hands-on exercises to enhance these critical soft skills, fostering the holistic growth and employability of students.

COURSE OUTCOME

Students should be able to comprehend the concept and significance of soft skills. They should be able to understand and develop an awareness of the various contexts where public speaking skills are crucial. Students should understand and familiarize students with common interview formats and expectations.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **SOFT SKILL DEVELOPMENT**:

CO 1:	To create understanding among the students about Public Speaking.
CO 2:	To develop the Interview Skills
CO 3:	To Cultivate the Time Management Skills.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **Soft Skill Development**:

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1	Introduction to Soft	CSO 1.2: To be able to	12	20	

Public Speaking	Skills. Introduction to Public Speaking, Role and Importance of Public Speaking, Challenges and Fears Associated with Public Speaking, Key Elements of Effective Communication, Overcoming Anxiety and Building Confidence, Techniques for Audience Engagement.	give an introduction soft skill development. (K) CSO 1.3: To be able to understand the Role and Importance of Public Speaking. (U) CSO 1.4: To be able to explain the fears and challenges associated with public speaking, CSO 1.5: To be able to elaborate the key elements of effective communication. (U) CSO 1.6: To be able to analyze the skill to overcome the Anxiety and Build Confidence. (A) CSO 1.7: To learn the techniques for Audience Engagement. (A)			
UNIT 2 Interview Skills	Introduction to Interview Skills, Self-introduction, Things to avoid during self-introduction, communication during your job interview.	CSO 2.1: To be able to understand the interview skill. (U) CSO 2.2: To learn the skill of self-introduction. (K) CSO 2.3: To be able to state the Things to avoid during self-introduction. CSO 2.4: To be able to analyze the skill of communication during your job interview. (A)	6	10	
UNIT 3 Time Management Skills	What is Time Management? Importance of Time Management, Time Management Skills, How to Improve the Time Management Skills.	CSO 3.1: To be able to define the time management. (K) CSO 3.2: To be able to analyze the importance of time management. (A) CSO 3.3: To be able to apply the time	12	20	

		management skills. (A) CSO 3.4: To be able to elaborate and apply the Time Management Skills.			
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Course Outline:

Unit 1

20 marks/ 12 lectures

Public Speaking:

Introduction to Soft Skills. Introduction to Public Speaking, Role and Importance of Public Speaking, Challenges and Fears Associated with Public Speaking, Key Elements of Effective Communication, Overcoming Anxiety and Building Confidence, Techniques for Audience Engagement.

Unit 2

10 marks/ 8 lectures

Interview Skills

Introduction to Interview Skills, Self-introduction, Things to avoid during self-introduction, communication during your job interview.

Unit 3

20 marks/ 10 lectures

Time Management Skills

What is Time Management? Importance of Time Management, Time Management Skills, how to Improve the Time Management Skills.

Course Name: Working with Advanced excel

Course Code: ECS 5

Total Lectures:30

Total Credits: 2

Total Marks: 50

COURSE DESCRIPTION

The Advance excel course helps the students to present the information in an easy to analyse format and extract meaning full information from business data by using Microsoft excel as a tool for solving business problems.

COURSE OUTCOMES

Students should be able to understand the concept, processing and summarizing. They should be able to understand and analyze data for decision making. Students should understand and familiarize students about charting data and analyzing data.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **DESKTOP PUBLISHING (DTP)**:

CSO 1:	To understand the way of Organizing and processing Data using MS Excel.
CSO 2:	To understand working with Formulae and Functions.
CSO 3:	To analyze Data for decision making.

COURSE SPECIFIC OBJECTIVES (CSOs)

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Organizing and processing Data	Spreadsheets Introduction: Concept of worksheets and workbooks, creating, opening, closing and saving workbooks, moving, copying, inserting, deleting and renaming worksheets, working with multiple worksheets and multiple workbooks, controlling worksheet views, naming cells using name box, name create and name define, Printing and Protecting worksheets: Adjusting margins, creating headers and footers, setting page breaks, changing	CSO 1.1: To discuss Spreadsheet (U) CSO 1.2: To demonstrate various tools available in MS Excel (A) CSO 1.3: To explain worksheets and workbooks (U) CSO 1.4 To demonstrate working with worksheets and workbook(A) CSO 1.5: To explain various worksheet views(U) CSO 1.6: To explain name box (U) CSO 1.7: To discuss printing (U) CSO 1.8: To discuss page setting(U) CSO 1.9: To discuss file and date protection(U)	11	17	

	orientation, creating portable documents and printing data and formulae. Implementing file level security and protecting data within the worksheet				
UNIT 2 Formulae and Functions	Using formulae and functions: Understanding absolute, relative and mixed referencing in formulas, referencing cells in other worksheets and workbooks, correcting common formula errors, working with inbuilt function categories like mathematical, statistical, text, lookup, information, logical, database, date and time and basic financial functions. Consolidating worksheets and workbooks using formulae and data consolidate command	CSO 2.1: To discuss about formulae(U) CSO 2.2: To distinguish between formulae and functions(U) CSO 2.3: To discuss various cell references(U) CSO2.4: List Formulae errors(K) CSO 2.4: To explain inbuilt functions(U) CSO 2.5: To apply functions and formulas in an application(A) CSO 2.6: To discuss data consolidation(U)	8	16	
UNIT 3 Summarizing and Analyzing data for Decision Making	Creating charts and graphics: Choosing a chart type, understanding data points and data series, editing and formatting chart elements, and creating sparkline graphics. Analyzing data using pivot tables: Creating, formatting and modifying a pivot table, sorting, filtering and grouping items, creating calculated field and calculated item, creating pivot table charts, producing a report with	CSO 3.1: To explain various charts(U) CSO 3.2: To list charts types(K) CSO 3.3: To demonstrate formatting chart elements(A) CSO 3.4: To discuss analyzing data(U) CSO 3.5: To demonstrate pivot table(A) CSO 3.6: To demonstrate what-if analysis(A) CSO 3.7: To discuss various tools of what-if	11	17	

	pivot tables. Performing what-if analysis: Types of what if analysis (manual, data tables, scenario manager), what-if analysis in reverse (goal-seek, solver) Exchanging data using clipboard, object linking and embedding.	analysis(U) CSO 3.8: To explain clipboard, OLE(U)			
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Course Outline:

Unit 1

15 Marks/ 10m lectures

Organizing and processing Data

Arranging data in tabular form, formatting data, performing basic calculations and financial calculations.

Unit 2

15 Marks/ 10 lectures

Summarizing Data

Creating graphs, Customizing Graphs, working with the cross tabulated data, and representing the cross tabulated data graphically.

Unit 3

20 Marks/ 10 lectures

Analyzing data for Decision Making

Charting Data fluctuations, Charting Data Trend, Performing What-if Analysis: Using Scenario Manager, Using Goal Seek, Using Solver.

Readings:

1. Working with Advanced Excel 2013: student Guide. Published by NIIT
2. Aron Ritu. (2023). Mastering Advanced Excel., bpb.

Course Name: AGRICULTURAL ECONOMICS

Course Code: ECS 6

Total Lectures:30

Total Credits: 2

Total Marks: 50

COURSE DESCRIPTION

The course gives a meaningful insight about the importance and expose the student to various aspects to agriculture thereby guide the students towards entrepreneurial activities.

COURSE OUTCOME

Upon successful completion of the course the students will gain knowledge on the prospects of agriculture in the economy. It will also enhance the calibre of the students to expand their perspective of the agriculture as a means to expand entrepreneurial activities by learning various allied services engage to agriculture. It will also engage the students to projects and skill enhancement activities by encouraging them to various types of cropping seasons, patterns and also the use of the basic and integrated inputs in the agriculture system. Above all the course will direct the students to embarked agricultural practices and further create a proficiency in agriculture.

COURSE OBJECTIVES (COs)

The following are the Course Objectives (COs) for the paper **AGRICULTURAL ECONOMICS**

CO 1:	To make the students learn about economic development since Independence.
CO 2:	To inculcate the students to understand Population and Human Development.
CO 3:	To make the students to understand infrastructure in Indian economy.

Course Specific Objective

Unit & Title	Unit Contents	Course Specific Objective (CSOs)	Lecture Hours	Marks	LOs
UNIT 1 Agricultural Economics: An Introduction	What is Agricultural Economics? Scope; Commercialization of Agriculture; Modernization of Agriculture; Role of Agricultural Economics; Changing phases of Agriculture in Economics Development.	CSO 1.1: To explain Agricultural economics and its scope. (U) CSO 1.2: To enumerate commercialization of agriculture. (K) CSO 1.3: To examine the role of agricultural economics. (A) CSO 1.4: To discuss on changing phases of agriculture in economic development. (U)	11	20	Not to be filled-in
UNIT 2 Basic Agriculture Inputs	HYV Seeds; Chemical Fertilizers; Integrated Irrigational System; Mechanization in Agriculture; Use of bio-technology in Agriculture; Organic Farming.	CSO 2.1: To define HYV seeds. (K) CSO 2.2: To explain chemical fertilizers and integrated irrigational system. (U) CSO 2.3: To elaborate use of bio-technology in agriculture. (U)	8	10	Not to be filled-in

		CSO 2.4: To discuss on organic farming. (U)			
UNIT 3 Livestock Management	Fisheries; Poultry; Dairy Farming; Piggery; prospects and challenges in Livestock Management in Nagaland.	CSO 3.1: to enumerate fisheries, poultry and dairy farming. (K) CSO 3.2: to explain prospects and challenges in livestock. (U) CSO 3.3: to explore livestock management in Nagaland. (A)	11	20	Not to be filled-in

Course Outline:

Unit 1

20 Marks/ 12 lectures

Agricultural Economics: An Introduction

What is Agricultural Economics? Scope; Commercialization of Agriculture; Modernization of Agriculture; Role of Agricultural Economics; Changing phases of Agriculture in Economics Development.

Unit 2

10 marks/ 8 lectures

Basic Agriculture Inputs

HYV Seeds; Chemical Fertilizers; Integrated Irrigational System; Mechanization in Agriculture; Use of bio-technology in Agriculture; Organic Farming.

Unit 3

20 marks/ 10 lectures

Livestock Management

Fisheries; Poultry; Dairy Farming; Piggery; prospects and challenges in Livestock Management in Nagaland.

Suggested Readings:

1. Lekhi. R.K. (2012). Agriculture Economy of India. Kalyani Publishers, Ludhiana, Punjab, 141008.
2. Mathew. S. and Neikha, K. (2019). Human Resources in India: The Potential Untapped. Mittal Publications, New Delhi, 110002.
3. Jamir K. and M Giribabu. (2020), Agriculture and Rural Transformation. Rawat Publications, Jaipur, 302004.