ST.PHILOMENA'S COLLEGE (AUTONOMOUS), MYSURU
(AFFILIATED TO UNIVERSITY OF MYSORE & REACCREDITED BY NAAC WITH B++ GRADE)

MA ECONOMCS PROGRAMME

CBCS with Learning Outcome Based Curriculum
Academic years: 2020-22

{Approved in the Academic Council Meeting held on 12.01.2021}

{The Academic Year of 2020-21 was commenced on 24.01.2021 due to first wave of Covid-19 Pandemic}

ST. Philomena's College (Autonomous) Mysore
Post Graduate Programmes

Course – MA in Economics

CBCS with LOCF/ Learning Outcome Based Curriculum-2020

Preamble

The M.A Economics program was started in the year 2015-16. The curriculum was first revised in the academic year 2018-19. The present revision is the second one and finalized after subjecting for peer review from the academicians, alumni, and industry experts. It is focused on learners centric and learning outcome-based. The curriculum is focused on Programme Educational Objectives (PEOs), Programme Outcomes (POs), Programme Specific Outcomes (PSOs), Course Objectives (COs) and Course Learning Outcome (CLOs). The curriculum is designed to have a teaching and learning process involving technological tools, sharing of resources by industry with the institution. The learning-centric curriculum provides and enables a continuous improvement of curriculum, teaching-learning process, teaching resources, assessment methods, evaluation rubrics, validity, and reliability of the evaluation.

The curriculum is designed with compulsory Discipline Specific courses and choice based Discipline-Specific Electives courses like skill-enhancing, interdisciplinary, ability-enhancing, generic, and self-study. The students will acquire knowledge and skill to build learner competencies and become self-learners

The following new courses are introduced in the revised syllabus for the academic year 2020-21 onwards.

Sl. No	Semester	Existing Paper	New Paper Introduced	Credits	Justification	Percentage of Change
1	**Second**	-	Review of Literature	2	To promote research culture and to train the publication of articles.	**100**
2		-	Data Collection Techniques	2	To gain hands-on experience on different types of data collection and its presentation.	**100**

Sl. No	Semester	Existing Paper	New Paper Introduced	Credits	Justification	Percentage of Change
3		-	Energy Economics **SC-Ability Enhancement Course**	4	To make the students to understand the significance and role of Energy in economic development and to make efficient use of energy.	**100**
4		-	Basic Econometrics **SC - IDC offered to the sister department**	4	To understand econometrics application to the business models. Students can forecast the business situations and take decisions.	**100**
5		-	Environmental Economics **SC - IDC offered to the sister department**	4	To introduce economics principles related to environmental economics.	**100**
6		-	Economics of Tourism **SC - IDC offered to the sister department**	4	To understand and evaluate the concept tourism and its impact on economics development.	**100**
8		-	Banking System in India **OE**	2	To understand and evaluate the role of banking system on Indian economy.	**100**
9			Infrastructural Economics SC/GC	4	To understand the concept and importance of social infrastructure and quality of living.	100
10		-	Statistics for Economics	2	To understand and apply the different statistical techniques for analyzing the data.	**100**

Sl. No	Semester			Title	Credits	Objectives	Percentage
11			-	Demography **OE**	2	To provide knowledge about economic and social implications of sex and age structure and demographic dividend.	**100**
12	Fourth		-	Human Development : Dimensions and Disparities	4	To understand and analyse the relationship between economic growth and human development	**100**
13			-	Data Interpretation techniques	2	To evaluate and apply the economic models for economics problems and hypothesis testing.	**100**

SOFT-CORE GENERAL COURSES OFFERED TO THE MA ECONOMICS STUDENTS

Sl. No	Semester	Title of the paper	Type	Credits	Percentage
1	Second	Energy Economics	SC-GE	4	100
2	Third	Infrastructural Economics	SC-GE	4	100
3	Fourth	Human Development : Dimensions and Disparities	SC-GE	4	100

SELF STUDY ABILITY ENHANCEMENT COURSES OFFERED TO THE MA ECONOMICS STUDENTS

Sl. No	Semester	Title of the paper	Type	Credits	Percentage
1	Second	Review of Literature	SC-Self Study	2	100
2		Data Collection Techniques	SC-Self Study	2	100

NEW INTERDISCPLINARY COURSES OFFERED TO SISTER DEPARTMENT

Sl. No	Semester	Title of the paper	Type	Credits	Percentage
1	Second	Econometrics for Business	SC-ID	4	100
2		Environmental Economics	SC-ID	4	100
3		Economics of Tourism	SC-ID	4	100

SOFT-CORE SKILL BASED COURSES OFFERED TO MA ECONOMICS STUDENTS

Sl. No	Semester	Title of the paper	Type	Credits	Percentage
1	Third	Statistics For Economics	**SC-Skill**	2	100
2	Fourth	Software Usage for Economics	**SC-Skill**	2	100
3		Data Interpretation techniques	**SC-Skill**	2	100

NEW GENERIC ELECTIVE COURSES OFFERED TO OTHER DEPARTMENTS

Sl. No	Semester	Title of the paper	Type	Credits	Percentage
1	Third	Banking System in India	**SC-OE**	2	100
2	Fourth	Demography	**SC-OE**	2	100

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VISION AND MISSION OF THE COLLEGE

VISION:

The college is guided by the visionary zeal of providing value- based education to everyone irrespective of religion, caste, creed or sex by which the character is formed, intellect is explained and one can stand on his/ her feet

MISSION:

To transform young men and women who come to learn not from books, but also from life and to share the experience of working and playing together, this inculcates life skills to become good citizens with integrity and discipline.

VISION AND MISSION OF THE DEPARTMENT

VISION:

The department envisions achieving excellence in teaching and significant research to provide quality education to students, and prepare professional leaders to address the emerging global economic and social challenges.

MISSION:

1. To prepare students for acquiring applied knowledge of economics to enhance their employability and entrepreneurship.
2. To equip students with skills to formulate and implement theoretical and applied research work that will contribute to knowledge for nurturing future researchers and specialists in economics.
3. To provide a vibrant and innovative environment for students to acquire knowledge necessary for developing themselves into qualified professionals.

PEO. No.	Programme Educational Objectives (PEOs)
PEO-1	**PROFESSIONAL DEVELOPMENT** To train the students to acquire applied knowledge in economics and apply professionally and ethically with responsibility towards the need of the society
PEO-2	**CORE PROFICIENCY** To expertise the students to organize, understand, evaluate, and solve problems by providing hands-on experience through modern tools and techniques for necessary practice. .
PEO-3	**TECHNICAL ACCOMPLISHMENTS** To equip the students with the talent to interpret in core applications by building up a multi-disciplinary concept.
PEO-4	**PROFESSIONALISM** To train the students to acquire the significance of self-discipline, communication skills, professional attitude, holistic personality development, responsibility and team work to be a better economist.
PEO-5	**LEARNING ENVIRONMENT** To provide an environment for life-long learning to inculcate the importance of research, creativity, invention and leadership to become a successful economist.

Mapping of Mission of the department with Programme Educational Objectives

Mission	Programme Educational Objectives (PEOs)				
	PEOs-1	PEOs-2	PEOs-3	PEOs-4	PEOs-5
M1	✓	✓		✓	
M2	✓		✓		
M3				✓	✓

PO. No.	**PROGRAMME OUTCOMES (POs)** **Upon completion of the Programme the student will be able to -**
PO-1	Analyze the Socio-Political and Economic Issues related to national and international scenario.
PO-2	Create the capacity to Work effectively in a multi-disciplinary environment.
PO-3	Understand their research culture leading to the publication of articles and research article from the projects/subjects for hands-on experience.
PO-4	Understand how the economic policies affect the common people through the societal interactions.
PO-5	Empower with a holistic approach in professional attitude towards ethical issues, teamwork, responsibility and accountability for a better career

PSO No.	PROGRAMME SPECIFIC OUTCOMES PSOs Upon completion of the Programme the student will acquire -
PSO-1	Knowledge in depth about Micro and Macro Economics.
PSO-2	Knowledge and analyze fiscal policy, Monetary policy, Welfare policies and its implications in the economy.
PSO-3	Qualitative and quantitative techniques, Data analysis, and interpretation skills by using SPSS, Eviews, STATA, and Tally Software are used for hands on experience.
PSO-4	Training in handling research tools and techniques and ethics as well as publishing skills of research articles.
PSO-5	To understand the international trade and finance, Human development Index, MDG‟s and SDG‟s, Economic and Environmental Development.

MAPPING OF PROGRAMME EDUCATIONAL OBJECTIVES WITH PROGRAM OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

PROGRAMME EDUCATIONAL OBJECTIVES	PROGRAM OUTCOMES					PROGRAM SPECIFIC OUTCOMES				
	PO-1	PO-2	PO-3	PO-4	PO-5	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5
PEOs-1	✓							✓		
PEOs-2			✓			✓				
PEOs-3		✓						✓		
PEOs-4					✓			✓		✓
PEOs-5				✓			✓		✓	

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M.A ECONOMICS COURSE STRUCTURE

CHART INDICATING DISTRIBUTION OF HARDCORE, SOFT CORE AND OPEN/ GENERIC ELECTIVES AND CREDITS ACCORDING TO CHOICE BASED LEARNING OUTCOME BASED CURRICULUM/LOCF. SEMESTER-WISE DISTRIBUTION

FIRST YEAR

Sl. No	Subject Code	QP .Code	Course Title	Type	L	T	P	Credits	Total Credits
FIRST SEMESTER									
1.			Advanced Micro Economics	HC	4	0	0	4	
2.			Advanced Macro Economics	HC	4	0	0	4	
3.			Mathematics and Statistics for Economists	HC	4	0	0	4	
4.			Development Economics	HC	4	0	0	4	**20**
5.			Any one of the Soft-Core General Elective courses to be chosen from **List A**	SC	4	0	0	4	
SECOND SEMESTER									
6.			Indian Economy	HC	4	0	0	4	
7.			Public Economics : Theory & Policy	HC	4	0	0	4	
8.			Any one of the Interdisciplinary Elective courses from sister department to be chosen **List-D**	SC	4	0	0	4	**20**
9.			Any one of the Generic Elective course from other department to be chosen.	GE	2	0	0	2	
10.			Any one of the Self Study Elective courses to be chosen from **List B**	SC	2	0	0	2	
11.			Any one Ability Enhancement Courses to be chosen from the **List C**	SC	4	0	0	4	

SECOND YEAR
THIRD SEMESTER
12.			Research Methodology and Data Analysis	HC	3	0	2	4	
13.			International Trade - Theory & Policy	HC	4	0	0	4	
14.			Theory of Econometrics	HC	4	0	0	4	
15.			Any one of the Soft-Core General Elective course to be chosen from **List E.**	SC	4	0	0	4	
16.			Any one of the Generic Elective course from other department to be chosen.	SC	2	0	0	2	**20**
17.			Any one of the Skill Enhancing Elective course to be chosen from the **List F**	SC	1	0	2	2	
FOURTH SEMESTER
18			International Finance & Business	HC	4	0	0	4	
19.			Managerial Economics	HC	4	0	0	4	
20.			Welfare Economics	HC	0	0	8	4	
21.			Any one of the Soft-Core General courses to be chosen from **List G.**	SC	4	0	0	4	**18**
22			Any one of the Skill Enhancing Elective course to be chosen from the **List H**	SC	1	0	2	2	
TOTAL CREDITS = 78 REDITS

SEMESTER WISE SOFT- CORE ELECTIVE PAPERS OFFERED TO

M.A ECONOMICS STUDENTS

List A- Soft-Core General Courses
S. I No	**Semester**	**Title of the paper**	**L**	**T**	**P**	**Credits**
1		Monetary Economics	4	0	0	4
2	**First**	Agricultural Economics	4	0	0	4
3		Economics of Health	4	0	0	4

List B- Soft-Core Self Study Courses
S. I No	**Semester**	**Title of the paper**	**L**	**T**	**P**	**Credits**
1		Review of Literature	2	0	0	2

2	**Second**	Data Collection Techniques	2	0	0	2

List C- Soft-Core Ability Enhancement Courses

S. I No	Semester	Title of the paper	L	T	P	Credits
1	**Second**	Financial Economics	4	0	0	4
2		Gender Economics	4	0	0	4
3		Energy Economics	4	0	0	4

INTERDISCPLINARY COURSES OFFERED TO SISTER DEPARTMENT

List D- Soft-Core Interdisciplinary Courses

S. I No	Semester	Title of the paper	L	T	P	Credits
1	**Second**	Basic Econometrics	4	0	0	4
2		Environmental Economics	4	0	0	4
3		Economics of Tourism	4	0	0	4

List E- Soft-Core General Courses

S. I No	Semester	Title of the paper	L	T	P	Credits
1	**Third**	Natural Resources and Environmental Economics	4	0	0	4
2		Labor Economics	4	0	0	4
3		Infrastructural Economics	4	0	0	4

List F- Soft-Core Skill Based Courses

SI .No	Semester	Title of the paper	L	T	P	Credits
1	**Third**	Computer Application for Economics	2	0	0	2
2		Statistics For Economics	2	0	0	2

List G- Soft-Core General Courses

S. I No	Semester	Title of the paper	L	T	P	Credits
1	**Fourth**	Term Project	4	0	0	4
2		Applied Econometrics	4	0	0	4
3		Human Development : Dimensions and Disparities	4	0	0	4

List H- Soft-Core Skill Based Courses

S. I No	Semester	Title of the paper	L	T	P	Credits
1	**Fourth**	Software Usage for Economics	2	0	0	2
2		Data Interpretation techniques	2	0	0	2

SEMESTER WISE OPEN ELECTIVE COURSES OFFERED TO OTHER DEPARTMENT

Sl. No	Semester	Title of the paper	L	T	P	Credits
1	Second	Indian Economy	2	0	0	2
2		Banking System in India	2	0	0	2
1	Third	Demography	2	0	0	2
2		Environmental Economics	2	0	0	2

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PROGRAMME: M.A.ECONOMICS
(For Candidates admitted during the Academic year 2020 onwards)

I SEMESTER

Course Title	ADVANCED MICROECONOMIC						
Course Type	Hard Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To Analysis the cost conditions of the industries
CO-2	To Understand the market conditions and make decision in market
CO-3	To Uunderstand the concept of input output analysis
CO-4	To Insist an entrepreneurial skill among the students

Mapping of CLOs with PSOs & CDLs

CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand and analyze the behavioral patterns of Consumers and Markets.	PSO-1	Analyse
CLO-2	Apply and evaluate the Cost of Capital Techniques in a Production.	PSO-3	Evaluate
CLO-3	Analyse Linear & Non- Linear functional relationship	PSO-4	Analyse
CLO-4	Understand price determination of factors (Rent, wages, interest and Profit.) and social welfare function.	PSO-2	Understand
CLO-5	Evaluate the externalities effect on the different market conditions.	PSO-5	Evaluate

Course Content	Duration

Module I: Theory of Consumer Behavior   **16 Hrs**

    1.1   Introduction: Historical Development of the Theory

    1.2   Indifference Curve Analysis

    1.3   Revealed Preference Hypothesis

    1.4   Consumer's Behavior under Conditions of Uncertainty and Risk

    1.5   Lancaster's Theory.

Keywords: Analyze the behavioral patterns of Consumers and Markets.

Module II: Theory of Demand and Supply   **16Hrs**

2.1   Theory of demand-Derivation Demand Schedules -Factors Influencing Demand

2.2   Elasticity of Demand (Applications) - Changes in Demand and Changes in Quantity Demanded -Price Elasticity - Income Elasticity- Cross Elasticity.

2.3   Recent Developments in the Theory of Demand - Linear Expenditure System.Demand for the Product of a Firm.

2.4   Theory of Supply -Factors Influencing Supply -Changes in Supply - Supply Elasticity- Determinants of Supply Elasticity- Market Determination of Price and Quantity-
Equilibrium Supply and Demand - (Applications).

Keywords: Evaluate the Cost of Capital Techniques in a Production.

Module-III: Production and Cost Analysis   **16Hrs**

3.1   **Production Theory:** Production Function with One Variable Input and Two Variable Inputs

3.2   Optimal use of Variable Inputs and Optimal Combination

3.3   Empirical Production Function – Cobb-Douglas production function - CES production function

3.4   Technology and International Competition

3.5   **Cost Theory**

3.6   Short-Run Cost Function and Cost Curves, Long-Run Cost Curves

3.7   Economics of Scale and Economies of Scope

3.8   Learning Curve

3.9   Empirical Cost Functions

Keywords: Analyse Linear & Non- Linear functional relationship

Module-IV: Price and Output Determination under Different Markets   **16Hrs**

4.1   **Perfect Competition:** Equilibrium of the Firm under Market Period, Short-Run and Long- Run - Constant, Increasing and Decreasing Cost - Industries - Equilibrium of the Firm and Industry.

4.2   **Pure Monopoly:** Demand and Marginal Revenue under Monopoly - Short-Run and Long- Run Equilibrium - Cost of Monopoly to Society - Price Discrimination

4.3   **Imperfect Competition:**
Monopolistic Competition: Fundamentals - Short-Run and Long-Run Equilibrium - Product Differentiation - Resource Allocation and Utilization - Selling Cost: Case Study.

4.4   **Oligopoly:** Chamberlin Model – The Kinked Demand Curve Model – The Centralized and Market Sharing Cartel Model – Price Leadership – Collusive Oligopoly – Oligopoly and Price Rigidity

4.5   The Marginalist Controversy- Bain's Limit Pricing Theory and its Recent Developments -Sylos – Labini's Model -Behavioural Model of The Firm- Game Theoretic Model

Keywords: Evaluate the externalities effect on the different market conditions.

Note: Course content involves 100% Theory

Self-Study Component:
Historical development of the consumer theory - cardinal versus ordinal Utility theory. The Law of Demand-Elasticities of Demand–Demand Schedule -Supply Schedule-Equilibrium Supply and Demand

Production Theory - Returns to Scale-nature and types of costs-theory of firm Equilibrium of the firm and the industry- Characteristic features of Perfect competition, Monopoly, Monopolistic Competition-Price and output determination under different market conditions.

Reference Books

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Modern Microeconomics	Koutsoyiannis,	Macmillan, London	5th	1997
2	Principles of Microeconomics , latest edition	N.GragoryMankiw,	The Dryden Press	7th	2019
3	Theory and Problems of Microeconomic	Dominick Salvator	Schaum's Outline Series, McGraw-Hill Book Company	12th	2002
4	Microeconomics	Pindyck Robert S., and Daniel L. Rubinfeld,	Pearson Prentice Hall.	7th	2006
5	Advanced Economic Theory	Ahuja H.L	S.Chand and Company	19th	2002
6	Principles of Economics	McConnell R. and Stanley L. Brue	Tata McGraw Hill Inc	16th	2005
7	Microeconomics	Hubbard R. Glenn and Anthony Patrick O'Brien	Pearson Prentice Hall	2th	2016

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I SEMESTER

Course Title		**ADVANCED MACROECONOMICS**						
Course Type	Hard Core Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able to
CO-1	Understand the concepts of national income and accounting.
CO-2	Familiarize the students, the basic difference between the classical and Keynesian Theories.
CO-3	Understand the theoretical structure of macroeconomics its very essential for the Students to analyze the different issues and policies in the real economy.
CO-4	Understand about Inflation, Unemployment problem and knowledge about Business cycle.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes (CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand of national income accounting.	PSO-1	Understand
CLO-2	Understand and analyse classical & Keynesian theories of outputand employment.	PSO-2	Analyze
CLO-3	Evaluate the consumption and Investment functions.	PSO-3	Evaluate
CLO-4	Apply the business cycle theories in the economy.	PSO-4	Apply
CLO-5	Understand various macroeconomic problems.	PSO-2	Understand

Course Content	**Duration**

Module 1: National Income Accounting   **12Hrs**

    1.1   Measurement of National Income and Macro Performance

    1.2   National Income Accounts- Accounting Concepts & Identities

    1.3   Green accounting

    1.4   GNP and Quality of Life measuring the cost of Living

    1.5   Importance of National Income Analysis

Keywords: Understand of national income accounting

Module-II: Classical Theory of Income and Employment   **14Hrs**

    2.1   The Classical Revolution -Basic Assumptions of the Classical School

    2.2   Determinants of Output, Employment, Savings, Investment, Wages, Prices, Interest Rate

    2.3   Equilibrium Output and Employment

Keywords: Analyse classical & Keynesian theories of output and employment

Module-III: Keynesian Theories of Income and Employment   **14Hrs**

    3.1   **Concept of Effective Demand:** Aggregate Demand and Aggregate Supply

    3.2   **Consumption Function and its Determinants:** Implications of Consumption Function.

    3.3   Alternative Theories of Consumption Behaviour –Friedman‟s theory of consumption. Franco Modigliani and the Life-Cycle Hypothesis - Robert Hall and the Random- Walk Hypothesis.

    3.4   **Investment Function and its Determinants:** Business Fixed Investment, Residential Investment, Inventory Investment - Equilibrium Income and Output in SimpleTwoSectorModel,ThreeSectorandFourSectorModels- Multiplierand Accelerator Analysis - Relevance and Critique of Keynesian Macroeconomics.

Keywords: Evaluate the consumption and Investment function

Module –IV: Business Cycle Theory: The Economy in the Short-Run   **12Hrs**

    4.1   **Introduction to Economic Fluctuations:** Time Horizons in Macroeconomics -Aggregate Demand - Aggregate Supply - Stabilization Policy.

4.2 **Aggregate Demand:** Goods Market and the *IS* Curve - Money Market and the *LM* Curve.

4.3 Explaining Fluctuations with the *IS-LM* Model - *IS-LM* as a Theory of Aggregate Demand - The Great Depression.

4.4 Aggregate Demand in the Open Economy: Mundell-Fleming Model with Changing Price Level.

4.5 **Aggregate Supply:** Three Models of Aggregate Supply: Sticky-Wage Model, Imperfect-Information Model, Sticky-Price Model - Inflation, Unemployment and the Phillips Curve. Edmond Phelps on Phillips Curve.

4.6 **Macroeconomic Policy Debates:** Stabilization Policy.

Keywords: Apply the business cycle theories in the economy

Note: Course content involves 100% theory

Self-Study Components
1. Central Themes of Macroeconomics
2. Functional relationships &Identities
3. Methods of National Income Estimation
4. Trends in India's National Income
5. Problems in the estimation of India's National Income
6. Says Law of Markets. OTM, Pigouvian Theory, Real Theory of Interest.
7. Determinants of the PC and Investment
8. MEC & its determinants
9. Investment Multiplier Accelerator
10. Alternative theories of consumption behavior.
11. Causes & Consequences of economic fluctuations
12. Theories of inflation.

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Macroeconomic Analysis	Shapiro Edward	Galgotia Publications	First	2004
2	Macroeconomics	RudigerDornbusch, Stanley Fisher and Richard Startz	Tata Mcgraw-Hill Publishing	Fifth	2004
3	Macroeconomics	Mankiw N Gregony	Worth Publishers	12thEdn	2014
4	Advanced Macro economics	David Romer	McGraw Hill	9thEdn.	2001
5	Macroeconomics: Theory and Policy	Ackley Gardner	Macmillan	5thEdn	2010
6	Macroeconomics	Blanchard Oliver	Blanchard Oliver	latest	2018

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Course Title	**MATHEMATICS AND STATISTICS FOR ECONOMISTS**							
Course Type	Hard Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15			30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able to**
CO-1	Provide quantitative skills to collect, analyse and interpret the analytical data.
CO-2	Give basic mathematical and statistical techniques for economic students.
CO-3	Understand the different techniques for analyzing the data.
CO-4	Provide various tools which helps for decision making

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Gives the mathematical and statistical methods toanalyzeand understand economic theories.	PSO-3	Understand
CLO-2	They get analytical skills, market prediction and cause and effect relationship between the variables.	PSO-1	Analyze
CLO-3	Analyse the difference between the linear andnon-linear functions	PSO-3	Analyze
CLO-4	Able to analyse to take decisions and forecast the economic variables	PSO-4	Analyze
CLO-5	Gives an idea about how to utilize the optimum resources.	PSO-2	Understand

Course Content	**Duration**

Module: I Equilibrium   **12 Hrs.**

  1.1   Meaning of equilibrium, Partial market equilibrium-A linear andnon-linear functions

  1.2   Solution of a general equation system

  1.3   Equilibrium in national income analysis- Aggregate demand and aggregate

  1.4   supply functions- Consumption function- Cost function-

Keywords: Understand and Analyse application mathematical and statistical methods to economic theories.

Module: II Calculus   **24Hrs**

  2.1   Differential techniques and Rules-Maxima and Minima of function-

        Integration techniques- Introduction to Differential Equations

  2.2   **Utility analysis** - Maximization of utility - Mathematical derivation of consumers" equilibrium- Demand elasticity and estimation, Relationship – MR, AR and elasticity- Consumer's Surplus

  2.3   **Production Analysis:** Production function- Revenue function-Cost function- Producer's Surplus- Cobb-Douglas production function-CES Production Function, -Euler's theorem

2.4 **Theory of Firms' Behavior**: Equilibrium of firms and profit maximization, -Homogenous Function-Monopoly and joint production, -Duopoly-Producers" surplus -Cob-web model -Multi-market equilibrium.

2.5 **Vector and Matrices –** Basic concepts, types of matrix, elementary operations, Inverse matrix- Solving a system of linear equations- Testing consistency of linear equation

Keywords : Analyse and prediction of different types of market and also cause and effect relationship between the variables.

Module: III Correlation and Regression   14 Hrs.

3.1 Meaning and Types of Correlation, Scatter diagram Correlation coefficient- Pearson's correlation-Spearman's Rank Correlation Coefficient

3.2 Regression Method – Linear regression method - Two variables- Multiple Regression

Keywords: Analyse the difference between the linear and non-linear functions

Module: IV Index Numbers

4.1 Types and Measure of Index Numbers, Price index, Retail price index, Quantity index Link and Chain- Relative uses of index numbers- Deflating the index numbers   **14 Hrs.**

4.2 Method of construction of index numbers- Computation of Index numbers– Laspeyer's, Paache's Index numbers- Marshall- Edgeworth Index numbers – Fisher's Aggregate method- Limitation of index numbers

Keywords: Able to analyse to take decisions and forecast the economic variables

Note Course content involves 20% of theory and 80% of Problems.

Self-study components
1. Applicability of mathematical and statistical tools to other disciplines, Inductive and Deductive reasoning, Axiom system, Logic meaning of necessary and sufficient conditions, sets and relations, number system, Algebra –Function and limits -linear and non- linear functions, exponential function, logarithmic function., Analytical Geometry, Simultaneous equation and solutions for twovariables.
2. Differentiation and Integration – Derivative, rules of differentiation, functions of several variables, partial derivatives, totalderivative.
3. Types of Data, Nominal data, Ordinal data, qualitative data and quantitative data, Discrete and Continuous data, Sources of data, Population andSamples,
4. Standard normal t, X^2 and F distributions.

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	An Introduction of Mathematical Economics	Bose D	Himalaya Publishing House	-	2018
2	Mathematics and Statistics for Economics (New Delhi)	Monga G S,Vikas	Publishing House	-	2000.
3	Theory and Problems of Microeconomic	Dominick Salvator	Schaum's Outline Series, McGraw-Hill Book Company	12th	2002
4	Microeconomics	Pindyck Robert S., and Daniel L. Rubinfeld,	Pearson Prentice Hall.	7th	2006
5	Advanced Economic Theory	Ahuja H.L	S.Chand and Company	19th	2002
6	Mathematical Analysisfor Economists,	Allen R.G.D	Macmillan		

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I SEMESTER

Course Title	**DEVELOPMENT ECONOMICS**						
Course Type	Hard Core Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks	
		External	Duration	C3	03 Hr.	70 Marks	100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**		
CO-1	To familiarizes the basic theories, approaches and problems of economics of development and planning.		
CO-2	To analyse the basis of inequality measurement is used to develop measures of in equality between nations.		
CO-3	The course proceeds to aggregates models of growth and cross-national comparisons of the growth experience.		
CO-4	To understand the theories of neo classical growth and partial theories of economic growth and development.		
Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the differences between Economic growth and Development, Indicators of Economic Development.	PSO-5	Understand
CLO-2	Analyse the inequality measures and Characteristicsof Developing Countries.	PSO-1	Analyze

CLO-3	Understand Constraints on Development Process.	PSO-5	Understand
CLO-4	Understand theories and Approaches of economic development.	PSO-5	Understand
CLO-5	Evaluate some growth models.	PSO-2	Evaluate

Course Content	**Duration**

Module: I Introduction to Development Economics **12 Hrs.**

1.1 Measuring Economic Development, Concept of Human Development

1.2 Human Development Index

1.3 Human Capability Approach to Development

1.4 Development versus Displacement.

1.5 Sustainable development

Keywords: Understand the differences between Economic growth and Development, Indicators of Economic Development.

Module-II: Theory of Poverty and Income Distribution **14Hrs**

2.1 Growth and Distribution Justice – Kuznets's Hypothesis

2.2 Poverty and its Measurement - Poverty Alleviation Measures - Vicious Circle of Poverty

2.3 Development Gap - Causes, Consequences and Measures to Reduce Development Gap

2.4 Measuring income distribution- Lorenz curve, Gini Co-efficient & functional distribution of income.

Keywords: Analyse the inequality measures and Characteristics of Developing Countries.

Module-III: Grand Theories of Economic Growth and Development **14Hrs**

3.1 Classical Theory of Economic Development and its Salient Features

3.2 **Theories of growth :**Adam Smith's & David Ricardo's

3.3 Karl Marx: Growth and Decay of Capitalism, Theory of Social Change, SurplusValue Theory, Reserve Army and Materialistic Interpretation of History

3.4 Schumpeter's Growth Theory: Capitalistic Development, Crisis in Capitalism, Innovation, Degeneration of Capitalism

Keywords: Understand Constraints on Development Process

Module-IV: Neo-Classical Growth Theories and Partial theories of Economic Growth and Development **12Hrs**

4.1 Stylized Factors of Neo-Classical Growth Theory

4.2 J.E. Meade's Growth Model- Harrod- Domar Model –Kaldor & Mirrlees Model- Mrs. Joan Robinson's Model

4.3 Cambridge Criticism of Neo-Classical Growth Model- Lewis Model

4.4 Salient Features of Partial Theories

4.5 Big-push and Critical Minimum Effort Thesis

4.6 Balanced and Unbalanced Growth Theories

Keywords: Evaluate some growth models

Note: Course content involves 100% of theory.

Self-Study Components

1: Concept of Development Economics- Evolution of Development Economics –Definitions & meaning of Economic development .Calculation of HDI, GDI, GEM, HPI, Human Deprivation Index.

2: Measures of Development distance – NIEO – review of latest world development Report to know the current position of global development status.

3: Failure of Marxism – A critique – relevance of Schumpeter in globalization context Technology as the driving force under globalization – ICT revolution and Human development.

4: Recording the grievances of small & marginal farmers – Meeting few Industrialists & recording their problems in the context of globalization – meeting local exporters & listing the barriers to export – panel discussion on commercialization of service sector.

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Growth & Development	Thirlwall A.P,	West press Pvt. Ltd.		
2	Economic Development in the 3th World,	Todaro M.P & Smith	Orient & Longman	2nd	2007
3	Development Economics,	Ray Debraj	Princeton university press	Latest	1998
4	Leading Issues in Economic Development	Meier M Gerald,	Oxford New York	Latest	2004
5	Economic Development – Theory Principles &History	Higgins Benjamin W.W Norton	New York	---	1999
6	Economics of Growth, Development &Planning	Srivastava O.S	Vikas publication	6th	1996
7	Frontiers of Development Economics	G.M Meier & Josephs E. Stiglitz	Oxford University Press	4th	2002
8	Paradigm of Development Economics	Rajanikanth	--	2nd	2003
9	Economic Development – Theory & Practice for divided World	Stuart R. Lynn Printice Hall	New Jersy		2003
10	Economic Growth	Robert J. Barro & Xavier Sale I Martin	McGraw Hill	3rd	2010

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Course Title	**MONETARY ECONOMICS**						
Course Type	Soft Core- Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To Understand measures of money supply ,theories of demand for money and the concepts of National income
CO-2	To analyze the nature of classical & Keynesian theories of employment
CO-3	To stimulate an awareness on macroeconomic challenges and policy management in progressive nations
CO-4	To understand Fiscal policy and crowding out effect, Optimum Policy mix with IS-L M Model.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understands the operations of money, interactions between monetary aggregates and real aggregates, monetary policy interventions.	PSO-1	Understand
CLO-2	Understand and analyze the determinants and measures of money supply and its role in causing the business cycles.	PSO-4	Analyze
CLO-3	Knowledge of the monetary policy formulations, its targets and objectives and to create an interest in the recent monetary reforms initiated in India	PSO-2	Apply
CLO-4	Gives the monetary forces operate through a multitude of channels viz., markets, non-markets, institutions and the State.	PSO-5	Analyze
CLO-5	Attempt is made to give an insight to the present global financial crisis.	PSO-5	Understand

Course Content		**Duration**
Module: I Money and the Economy		**12 Hrs.**
1.1	Money and Economy Linkages	
1.2	Money Supply and Money Demand - Concepts and Measures.	
1.3	**Theories of money demand**: Quantity Theory of Money -Classical and Keynesian Version of the Quantity Theory of Money-Milton Friedman's Reformulation of Quantity Theory of Money –Tobin's Portfolio Analysis - Monetarism V/s Keynesianism	
1.4	**Liquidity Approach to Monetary Theory**: General Liquidity: Concept and Definitions, Radcliffe - Sayers Thesis- Gurley - Shaw Thesis	
1.5	Implications of Monetary Policy.	

Keywords: Understands the operations of money, interactions between monetary aggregates and real aggregates, monetary policy interventions.

Module: II Theories of Interest		14Hrs
2.1	Keynesian Theory of Liquidity Preference	
2.2	Hicks-Hansen *IS-LM* Approach to General Equilibrium	
2.3	Factors affecting the Equilibrium Rate of Interest	
2.4	Implications of these Theories for Monetary Policy.	

Keywords: Analyze the determinants and measures of money supply and its role in causing the business cycles.

Module: III Inflation: Theories and Policies		12Hrs
3.1	Theories of Business cycle	
3.2	Theories of Inflation : Demand-Pull and Cost-Push Theories of Inflation - Social Costs of Inflation- Hyperinflation	
3.3	Phillips Curve - Monetarist, Keynesian and New Classical Views on Inflation and Unemployment- Fisher's Effect	
3.4	Inflation and Interest Rates-Real and Nominal Interest Rates	
3.5	Classical Dichotomy	

Keywords: Apply the knowledge of the monetary policy formulations, its targets and objectives and to create an interest in the recent monetary reforms initiated in India

Module: IV Monetary Policy		12Hrs
4.1	Introduction - Objectives of Monetary Policy	
4.2	Exchange Rate Stability - Price Stability- Price Policy	
4.3	Time Lags in the Monetary Policy -Limitations of Monetary Policy	
4.4	Efficiency of Monetary Policy	
4.5	Co-ordination between Instruments and Objectives of Monetary and Fiscal Policies.	

Keywords: Analyse the monetary forces operate through a multitude of channels viz., markets, non-markets, institutions and the State.

Note: Course content involves 100% of theory.

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	The Theory of Money and Financial Institutions	Shubik Martin	The MIT Press	Volume I and II	1999
2	Towards a New Paradigm in Monetary Economics	Stiglitz, Joseph E and Bruce E. Greenwald,	Cambridge University Press	-	2003
3	Monetary Economics	HajalaT.N	Kanark Publishers Pvt. Limited	-	1998
4	Monetary Economics; Institutions, Theory and Policy	Suraj B. Gupta	S. Chand & Company Limited	-	2004

Course Title		**AGRICULTURAL ECONOMICS**						
Course Type	Soft Core -Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To expose the students to the concept, scope and significance of agricultural economics.
CO-2	To impart adequate knowledge and analytical skills in the field of agricultural marketing issues.
CO-3	To impart knowledge on issues related to lending to priority sector credit management and financial risk management.
CO-4	To make them to understand the agricultural policies and its effect on sustainable agricultural development

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes (CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the scope and significance of agricultural economics.	PSO-1	Understand
CLO-2	Students are able to get adequate knowledge and analytical skills in the field of agricultural marketing issues.	PSO-3	Analyze
CLO-3	Evaluate the issues related to lending to priority sector credit management and financial risk management.	PSO-3	Evaluate
CLO-4	Able to analyze the agricultural policies and its effect on sustainable agricultural development.	PSO-5	Analyze
CLO-5	Understand the theories of agricultural development.	PSO-2	Understand

Course Content		Duration
Module: 1 Nature and Scope		**16 Hrs**
1.1	Agriculture and economic development	
1.2	Difference between agriculture and industry	
1.3	Farming systems	
1.4	Role of Land, Labour and Capital in Farming	
1.5	Farm Management concept and its significance in modern farming	
1.6	Agricultural development-poverty	
1.7	Environment-recent trends in agricultural development.	
Keywords: Understand the scope and significance of agricultural economics.		

Module: II Theories of agricultural development		16Hrs
2.1	Transformation of traditional agriculture	
2.2	Theories of Mellor- Boserup- Lewis- Fei-Ranis- Dale Jorgenson- Schultz.	

Keywords: Students are able to get adequate knowledge and analytical skills in the field of agricultural marketing issues.

Module: III Production relationships in Agriculture		16Hrs
3.1	Laws of returns	
3.2	Production functions	
3.3	Factor-product	
3.4	Factor-factor and Product-product relationships	
3.5	Cobb-Douglas production function.	

Keywords: Evaluate the issues related to lending to priority sectorcredit management and financial risk management.

Module: IV Factors determining the farm products and Environmental problems of agriculture		16Hrs
4.1	Supply behavior in agriculture	
4.2	Features and problems of Agricultural marketing.	
4.3	Environmental problems of Agricultural Development	
4.4	Excess use of water- Fertilizers and pesticides	
4.5	Cropping pattern- Causes, impact and importance of social forestry.	

Keywords: Able to analyze the agricultural policies and its effect on sustainable agricultural development.

Note: Course contents involves 100% of theory

Self-Study:

Principles of farm management -Farm budgeting techniques - Land tenure systems and land reforms - Determination of cost of cultivation of farm products -Various cost concepts adopted by CACP – Instability of farm prices – Agricultural Prices policy - Minimum Support Prices for farm products-climate change and sustainableagriculture.

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Reference Books:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Agricultural Economics	Subba Reddy, Raghuram, Neelakanta Sastry and Bhavani Devi	Oxford & IBH		
2	Fundamentals of Agricultural Economics	Sadhu and Singh	Himalaya Publishing House	2nd	2005
3	Introduction to Agricultural Economic analysis	Bishop and Toussaint	John Wiley & Sons	First	2009

4	Agricultural Economics	Charles	Goodwin	First	2004
5	Elements of Farm Management Economics	Singh, I.J	East-West Press Pvt. Ltd	First	2004
6	Agricultural Marketing in India	Acharya and Agarwal	Oxford& IBH	---	2011

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I SEMESTER

Course Title	**ECONOMICS OF HEALTH**							
Course Type	Soft Core-Theory	Total Hours	64	Hours/Week	04	Credits	04	
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		100
		External	Duration	C3	03 Hr.	70 Marks		

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able to**
CO-1	Understand the scope and objectives of health economics.
CO-2	Acquire sufficient knowledge about fundamental principles of health economics.
CO-3	Create awareness about financing health care services and allocation of resources in the budget.
CO-4	Understand and analyze the health inputs, outputs and health indicators.
Mapping of CLOs with PSOs & CDLs	

CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Relate and rephrase the scope and objectives of health economics.	PSO-1	Remember
CLO-2	Students are able to Understand and apply microeconomic principles to analyze the major issues of the health care sector.	PSO-1	Understand
CLO-3	Understand the public supply of health services with free and discriminatory pricing.	PSO-2	Understand
CLO-4	Understand about health insurance and its importance.	PSO-5	Understand
CLO-5	Analyze the health care for poor and latest health Programmes.	PSO-3	Analyze

Course Content	**Duration**
Module: 1 Understanding Health Economics	**16 Hrs.**
1.1 Health Care Economics – its economic theory	
1.2 Health care needs and the health care sector	
1.3 Health care services in human resource development process	
1.4 Global health scenario	
1.5 Major diseases-estimates of ill health burden	

1.6	Estimation of economic value of health care services.	
Keywords: Understand and apply microeconomic principles to analyze the major issues of the health care sector		
Module: II Demand and Supply of health services and pricing system		**16 Hrs.**
2.1	The supply function of health care services	
2.2	The demand for health care- Derivation of the demand	
2.3	Public provision of health care	
2.4	Public supply of health services	
2.5	Health insurance- Individuals and family	
Keywords: Understand the public supply of health services with free and discriminatory pricing.		
Module: III Financing health care services		**16 Hrs.**
3.1	Government financing of health care	
3.2	Health care as public good and merit good	
3.3	Allocation of resources in the budget	
3.4	Comparing the ratio of health expenditure with comparable countries	
3.5	Financing through social insurance- latest health programmes	
Keywords: Understand about health insurance and its importance.		
Module: IV Health inputs, outputs and health indicators		**16 Hrs.**
4.1	Costs- cost concepts and cost analysis- Cost- output relationships	
4.2	Production function	
4.3	Outputs and health indicators- measures of mortality and morbidity	
4.4	Measures of function and dysfunction health profiles	
4.5	Global health indicators- quality adjusted life year (QALY)	
Keywords: Analyze the health care for poor and latest health programmes.		
Note: Course content involves 100% of theory.		

Self-Study:

National health policy for all by 2000 A.D.- Alternative health policy, Voluntary health services, private sector in health services, Reproductive health care system, user pays principle in pricing- Networking of the health care system National Nutritional Programmes.

Books for Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	The economics of health and health care	Folland, Sherman, Aller C. Goodman and Mivan Stano	Prentice hall	2nd	1997
2	Health Economics	Phelps- Charles .E,Addison	Wesley	2nd	1997
3	National Health Policy	GOI, Ministry of Health and Family Welfare	GOI, Ministry of health and family welfare	latest	1983
4	Investing in People: The Health sector	World Bank	World Bank	Latest	1994

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Course Title	**INDIAN ECONOMY**							
Course Type	Hard Core-Theory	Total Hours	64	Hours/Week	04	Credits	04	
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr.	70 Marks		100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To understand an overview of Indian economy.
CO-2	To understand the importance of agricultural sector in Indian economy.
CO-3	To introduce the role of industrialization growth and structural composition of Indian economy.
CO-4	To create awareness about the growth of service sector in India.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the Basic Characteristics and Major issues of Indian economy.	**PSO-1**	**Understand**
CLO-2	Analyse the Poverty and Unemployment Concepts and theirtrends in Indian economy.	**PSO-2**	**Analyze**
CLO-3	Evaluate the role of agricultural and industrial sector in the Indian economy.	**PSO-1**	**Evaluate**
CLO-4	Understand the performance of service sector in India.	**PSO-2**	**Understand**
CLO-5	Understand the Balance of Payments Problems and Policiesand FDI in India.	**PSO-3**	**Understand**

Course Content		**Duration**
Module I: Overview of an Indian Economy		**14Hrs**
1.1	Natural resources and Human Resources Development	
1.2	Infrastructure	
1.3	Trends in the growth of National Income- Green Accounting	
1.4	India's Development Experience - Planning and Development Strategies -Planning Commission to NITI Aayog	
1.5	Parallel Economy and its Implications	
1.6	Poverty and unemployment	
Keywords: Understand the Basic Characteristics and Major issues of Indian economy.		
Module II: Agricultural Sector in India		**14Hrs**
2.1	Importance of Agriculture in Development - Cropping Pattern - Land Reforms - Farm Size and Efficiency	
2.2	Agricultural Labour Problems	

2.3	Agricultural Finance and Rural Indebtedness
2.4	Agricultural Marketing - Agricultural Prices
2.5	Agricultural Co-Operatives
2.6	WTO and Agriculture.

Keywords: Analyse the Poverty and Unemployment Concepts and their trends in Indian economy.

Module III: Industrial Sector in India		**12Hrs**
3.1	Role of Industrialization - Growth and Structural Composition	
3.2	Small-Scale Industries	
3.3	Public Sector Industries - Role and Performance	
3.4	Privatization of Public Sector - Private Sector Industries and their Performance and Problems	
3.5	Industrial Labour	
3.6	Industrial Finance; Development Banks - Capital Market	
3.7	Industrial Monopoly – MRTP- New Industrial Policy.	

Keywords: Evaluate the role of agricultural and industrial sector in the Indian economy.

Module IV: Growth of Service Sector in India		**12Hrs**
4.1	Concept and Composition of Service Sector	
4.2	Service Sector in India -Major Trends in the Growth of Service Sector:Critical Issues	
4.3	Millennium Development Goals	
4.4	Sustainable Development Goals	
4.5	**Trade, Balance of Payments and Trade Policy** :Trends in India's Foreign Trade	
4.6	Balance of Payments Problems and Policies	
4.7	Foreign Direct Investment in India	

Keywords: Understand the performance of service sector in India.

Note: Course content involves 100% of theory.

Self-study Component:

1. Agricultural Policy - Agricultural Growth Under Five Year Plans- Strategies to Develop Agriculture-Capital Formation - Green Revolution - Price Policy - Food Security and Public Distribution System - Agricultural Finance- Marketing – Market Infrastructure.

2. Industrial development. Changing industrial policy regimes. Public v/s private sector – industrial finance and labour relations – Role of MNCs in industrial development – Regional disparities- Role and problems of micro, small and medium industrial enterprises – I T Industry.

3. Service sector growth – changing trends and composition of service sector-Parallel Economy - Centre State Financial Relations

Reference Books:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Indian Economy	S. Ruder Dutt & K P M Sundaram	Chand & co. Ltd	6th	2010
2	Indian Economy	Mishra &Puri	Himalaya Publication	3rd	2015

3	India in the world Economy	Deepak Lal	Oxford University press	2nd	1999
4	Economic Policy Reforms	Krueger	Oxford University press	4th	2002
5	India's Development Experience	Subramanianan S	Oxford University press		2004
6	Indian Economy since Independence	Uma Kapila	Academic Foundation	5th	2003
7	Indian Economy	,I.C.Dhingra, Sulthan	Chand & Son	4th	2010
8	Indian Economics	,Dewett, Verma and Sharma	Sharma		2009
9	Indian Economy – Problems of Development and Planning,	A.N. Agarwal, Vishwa Prakashan,	New Delhi	2nd	2009
10	"The state in a changing world"	Oxford University press	Oxford University press	----	1997
11	"Structural adjustment Programme The social issues involved"	Working paper	United nations Institute for policy research		1993

Reports:

1	Govt. of India, Ministry of Finance, Economic Surveys (of recent years).
2	The World Bank, World Development Report (of recent years).
3	The UNDP, Human Development Report (of recent years).
4	Govt. of India, Planning Commission, Drafts of 8th, 9th, 10th and 11^{th}Five Year Plans.
5	Govt. of India, Planning Commission, National Human Development Report, (2002).
6	Indira -Gandhi Institute of Development Research (IGIDR), India Development Reports, Mumbai.
7	Economic Development, Todaro . M P.& S C Smith - Pearson Education [Singapore] pvt. Ltd. Delhi, 2003.
8	C M I E reports on Indian Economy.

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II SEMESTER

Course Title	**PUBLIC ECONOMICS: THEORY & POLICY**						
Course Type	Hard Core-Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks	
		External	Duration	C3	03 Hr.	70 Marks	100
CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**						
CO-1	To gives an idea about an overview of the public sector.						
CO-2	To understand the source of public revenue.						

CO-3	To understand the source of public expenditure.	
CO-4	To make awareness about budget preparation and fiscal policy for stabilization.	

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs** **Addressed**	**CDLs**
CLO-1	Understand various Approaches about Role of Government and Principle of Maximum Social Advantage.	PSO-1	Understand
CLO-2	Understand the concept of public revenue.	PSO-1	Understand
CLO-3	Apply and analyse the incidence & approaches of taxation.	PSO-2	Analyze
CLO-4	Evaluate the concept of public debt management & fiscaland monetary policies in India.	PSO-2	Evaluate
CLO-5	Analyse the concepts of budget & fiscal federalism in India.	PSO-2	Analyze

Course Content	Duration
Module: I An Overview of the Public Sector	**14Hrs**
1.1 Economics of Public Sector: The Field of Public Finance - Private and Public Interests: Individual Rights versus Social Responsibility - Adam Smith'sRole of Government – Musgrave's Economic Role of Government.	
1.2 Principle of Maximum Social Advantage: Musgrave's Views on Principle of Maximum Social Advantage-Fundamental Theorems of Welfare Economics.	
1.3 Public Goods and the Need for Government: Public and Private Goods - Rivalry and Exclusion. Allocation of Public and Private Goods - Efficiency in Public Goods Provision - Market Failure and Externalities.	
Keywords: Understand various Approaches about Role of Government and Principle of Maximum Social Advantage.	
Module: II Public Revenue and Expenditure	**14Hrs**
2.1 **Taxation :**Theory of Taxation	
2.2 Structure and Principles of Taxation: Benefit and Ability-to-Pay Approaches	
2.3 Evaluation of Tax Reforms- Taxation Incidence and Alternative Concepts of Incidence.	
2.4 **Public Expenditure:** Theories of Public Expenditure- Structure and Growth of Public Expenditure	
2.5 Expenditure Evaluation- Expenditure Programmes for the Poor.	
Keywords: Analyse the incidence & approaches of taxation.	
Module: III Budget	**12Hrs**
3.1 Concept of PPB	
3.2 Zero-based Budgeting	
3.3 Types of Deficits -Deficit Budgeting	
3.4 Public Debt: Trends and Composition of Indian Public Debt- Debt Management	
Keywords: Evaluate the concept of public debt management &fiscal and monetary policies in India.	
Module: IV Fiscal Policy	**12Hrs**

4.1	Objectives -Fiscal Policy and Price Stability	
4.2	Full Employment	
4.3	Vertical and Horizontal Imbalance	
4.4	Finance Commissions	
4.5	Issues in Revenue Devolutions and Grants-in-aid.	

Keywords: Analyse the concepts of budget & fiscal federalism in India.

Note: Course content involves 100% of theory.

Self-study Component:

Origin of public finance-role of public finance
Public finance in under developed countries
Difference between public and private expenditure
Negative externalities and inefficiency
Principles of taxation
Difference between public debt and private debt

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Public Finance	Dr. B.P. Tyagi	Jai Prakash	2nd	*2000*
2	Public Finance in Theory and Practices,	S.K. Singh	Sultan Chand & Co	latest	2010
3	Issues in Indian Public Finance	D.K. Srivastava,	New Century	3rd	1999
4	Public Finance in Theory and Practice.	Musgrave R.A and P.A. Musgrave	McGraw-Hill	2nd	1998
5	Public Finance Principles and Policy	Anderson John E	Houghton Mifflin Company,	5th	2001

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II SEMESTER-Interdisciplinary course

Course Title		**BASIC ECONOMETRICS**						
Course Type	Hard Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15			30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To provide knowledge about the scope of econometrics
CO-2	To understand about the interrelationship between different sectors in an economy
CO-3	To introduce the basics of linear regression model
CO-4	To introduce the various econometrics problems.
Mapping of CLOs with PSOs &CDLs	

CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understands the econometrics application to economic theory.	PSO-1	Understand
CLO-2	Able to write the economic models and finds the Relationship between the variables.	PSO-3	Analyse
CLO-3	Understand and analyse the simple and multiple Regression models.	PSO-3	Analyse
CLO-4	Able to test hypothesis and interpret the results.	PSO-4	Apply
CLO-5	Able to evaluate the econometric models.	PSO-4	Evaluate

Course Content	Duration
Module: I Introduction	**12 Hrs.**
1.1. Definitions, scope and Division of Econometrics	
1.2. Methodology of econometrics and other interrelated discipline	
1.3. Basic ideas - Problem of Estimation Point and Interval Estimation	
1.4. Simple linear regression Model: OLS - Properties of the Least Squares estimates- Classical Normal Linear Regression Model (CNLRM)	
1.5. Hypothesis Testing - statistical tests of significance of the estimates.	
1.6. The test of goodness of fit ($R^{2)}$.	
Keywords: Understands the econometrics application to economictheory.	
Module: II Multiple Regression Model	**16 Hrs.**
2.1. Multiple regression model with two explanatory variables	
2.2. Estimation and testing of hypothesis	
2.3. R^2 and Adjusted R^2	
2.4. Partial correlation coefficients.	
Keywords: Able to analyse and write the economic models and finds the relationship between the variables	
Module: III Dummy Variables and Dynamic Models	**14 Hrs.**
3.1. Distributed Lag and Dynamic models.	
3.2. Dummy variable model – meaning – Importance – dummy variable trap	
3.3. ANOVA- ANCOVA models.	
3.4. Error in Variables - Time as a variable - Lagged variables	
Keywords: Able to apply test hypothesis and interpret the results	
Module: IV Special Problems in Single Equations Linear Models	**22 Hrs.**
4.1. Multicollinearity –Nature – Causes - Consequences – Detection – Remedial measures.	
4.2. Heteroscedasticity- Nature – Causes - Consequences – Detection – Remedial measures.	

4.3.	Auto-correlation - Nature – Causes - Consequences – Detection – Remedial measures.

Keywords: Able to evaluate the econometric models.

Note: Course content involves 50% of Problems and 50% of theory.

Self-Study:
1.   Regression
2.   Correlation
3.   Hypothesis testing

Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Theory of Econometrics	A. Koutsoyianns	Palgrave Publication	2nd	2001
2	Basic Econometrics	Damodar Gujarathi	Macgraw Hill Publication	5th	2007
3	Introduction to Econometrics	Maddala G S	John Wiley & Sons	3rd	2002
4	Introductory Econometrics with Applications	Ramanathan, Ramu	Thomson Learning Inc, Singapore	-	2002
5	A Text Book of Econometrics	Klein LR	Prentice Hall , Engle wood Cliffs	2nd	1974
6	Elements of Econometrics	Kmenta, Jan	Macmillian, New York	2nd	1976

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II SEMESTER- Interdisciplinary Course

Course Title	**ENVIRONMENTAL ECONOMICS**							
Course Type	SoftCore-Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To introduce economics principles related to environmental economics.
CO-2	To explore the concept of efficiency and the efficient allocation of natural resources.
CO-3	To understand the environmental policy issues and alternative instruments of environmental policies.
CO-4	To understand the concept of economic growth and environment.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the importance of environmental economics.	PSO-1	Understand

CLO-2	Understand the problems of waste management and energy problems in developing countries.	PSO-5	Understand
CLO-3	Apply and analyze the Pigovian analysis of externalities and market failure.	PSO-2	Analyze
CLO-4	Evaluate the economic growth and environmental degradation.	PSO-5	Evaluate
CLO-5	Understand the environmental Kuznets Hypothesis and sustainable development.	PSO-2	Understand

Course Content		Duration
Module: I Introduction		**16Hrs**
1.1.	Meaning and importance of environment	
1.2.	Environmental economics vs. traditional economics	
1.3.	The evaluation and growth of environmental economics.	
1.4.	Some typical environmental problems	
Keywords: Understand the importance of environmental economics.		
Module: II Introduction to Ecological Economics		**16Hrs**
2.1.	Introduction, Bio economics and Spatial Economics	
2.2.	Ecology and Economic Growth	
2.3.	Economics of Recycling, Solid Wastes, Industrial Wastes and Nuclear Wastes	
2.4.	The Problem of Wastes Management in Developing Countries	
2.5.	Energy Problems in Developing Countries	
Keywords: Understand the problems of waste management and energy problems in developing countries		
Module: III Welfare Criteria and Environmental Analysis		**16Hrs**
3.1.	Pareto Criterion	
3.2.	Pigovian Analysis of Externalities	
3.3.	Compensation Criterion	
3.4.	Property Rights and Coase Theorem	
3.5.	Environmental quality as a Public Good	
Keywords: Apply and analyze the Pigovian analysis of externalities and market failure.		
Module: IV Economics Growth and Environment		**16 Hrs.**
4.1.	The Cost of Economic growth and Environmental Degradation	
4.2.	The limit to Growth Model	
4.3.	Social limits to Growth Model	
4.4.	Environmental Kuznets Hypothesis	

4.5.	Sustainable Development	

Keywords: Evaluate the economic growth and environmental degradation.

Note: Course content involves 100% of theory

Self-study component:
Classification of Natural Resources
Common Property Resources
Joint Forest Management
Forest Act
Sustainable tourism
Biodiversity crisis

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Environmental Economics	Katak Singh and Anil Shishodia	SAGE	2nd	2010
2	Accounting and Valuation of Environment – A Preview for Developing Countries,		Moduleed Nation,		1997
3	Environmental Economics: An Indian Perspective,	Rabindra N, Bhattacharya	Oxford University Press	3rd	2012
4	Environmental Economics,		Oxford University Press,	---	2000
5	Environmental Economics in Theory and Practice,	Nick Hanley, Jason F. Shogren and Ben White	Macmillan		1991
6	Environmental and Natural Resource Economics	Tom Tietenberg,	Pearson	2nd	2005
7	Environmental Economics: Theory, Management and Policy.	Jhingan.M.L& Chandra K.Sharma		2nd	2012

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II SEMESTER- Interdisciplinary Course

Course Title	**ECONOMICS OF TOURISM**						
Course Type	Open Elective - Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15			30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able		
CO-1	To Understanding the concept of tourism and development.		
CO-2	To analyze the principles of tourism with regard to planning, organizing, and the motivation to travel.		
CO-3	To evaluate the impact of tourism on demand and supply side of various tourist centers, its impact on foreign exchange.		
CO-4	To study the impact of tourism and its impact on the employment generation.		
Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the concept of tourism and Development.	PSO-1	Understand
CLO-2	Analyze the principles of tourism with regard to planning, organizing, and the motivation to travel.	PSO-3	Analyze
CLO-3	Evaluate the impact of tourism on demand and Supply side.	PSO-3	Evaluate
CLO-4	Apply and analyze the tourism and its impact on the Employment generation.	PSO-4	Apply
CLO-5	Understand the role of various organizations, benefits of Tourism and its impact on boosting the economy.	PSO-5	Understand

Course Content		Duration
Module: 1 Introduction		**16Hrs**
1.1.	Meaning and Measurement of Tourism-Travel through ages	
1.2.	Tourism and employment generation	
1.3.	Tourism and revenue generation	
Keywords: Understand the concept of tourism andDevelopment.		
Module: II Principles of Tourism		**16Hrs**
2.1.	Planning and staff, Financial planning.	
2.2.	Organizing system-Organization structure- Authority relationship	
2.3.	Motivation to travel	
2.4.	Time factor, regional planning consideration	
Keywords: Analyze the principles of tourism with regard to planning, organizing, and the motivation to travel.		
Module: III Economics of Tourism		**16Hrs**
3.1.	Tourism: Demand and Supply.	
3.2.	Foreign exchange and balance of payment-(BOP) through international trade on Tourism.	
3.3	Inflation and rate of exchange.	

Keywords: *Evaluate the impact of tourism on demand and Supply side.*	
Module: IV Conducting empirical research or doing a project	**16Hrs**

4.1.	Role of various Organization.
4.2.	Job design.
4.3.	Socio-economic benefits and Average effects of tourism.
4.4.	Tourist arrival statistical analysis.
4.5.	Boosting Indian economy.

Keywords: Apply and analyze the tourism and its impact on the Employment generation.

Note: Course content involves 100% of theory.

Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Tourism Development: Principles & Practices	A.K. Bhatia	Sterling Publishers Pvt Ltd.	-	2002
2	Dynamics of Tourism	R.N. KAUL	Sterling Publishers Pvt Ltd.	-	1985
3	Successful Tourism Management	P.N. Seth	Sterling Publishers Pvt Ltd.	-	1985
4	Fair service, Economics of Tourism	Prague	Sterling Publishers Pvt Ltd.	-	1968
5	An Introduction to Travel and Tourism	Pramnathseth & Sushmaeth Bhat	Sterling Publishers Pvt Ltd.	-	2012

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II SEMESTER – Self –study Course

Course Title	**REVIEW OF LITRATURE**						
Course Type	Soft Core- Theory		Total Hours	32	Hours/Week	02	Credits	02
Course Code		Evaluation	Internal	C1+C2 = 10+10		20 Marks	50
			External	Duration	C3	03Hrs	30 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**		
CO-1	To provide fundamental knowledge of research.		
CO-2	To give the ability to identifying the problems in research area.		
CO-3	To understand the different types of literature.		
CO-4	To understand and apply bibliography.		
Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course LearningOutcomes(CLOs)** **On completion of the course the student will learn**	**PSOs Addressed**	**CDLs**
CLO-1	Understand significance of research area.	PSO-1	Understand

CLO-2	Identify the theoretical base for research problem.	PSO-3	Apply
CLO-3	Able to write bibliography	PSO-3	Apply
CLO-4	Evaluate the background for research problem.	PSO-4	Evaluate
CLO-5	Able to write the research proposal.	PSO-4	Apply

Course Content

Module-1	**Introduction and Sources of Literature**	**16 Hrs**
1.1	Concept of Literature Review, Purpose	
1.2	Types of sources and Basics of doing the Quality Literature Review.	
1.3	Online Literature Survey/ Review,	
1.4	Organizing and Compiling, Analyzing and identifying research gaps	

Keywords: Identify and apply the theoretical base for research problem.

Module-2	**Online Literature Data Bases**	**16Hrs**
2.1	Subscription based, Free based	
2.2	National and International Database.	
2.3	Write a Review paper	
2.4	Identify the research problem	

Keywords: Able to write the research proposal.

Note: Course content involves 100% of library work.

Reference:

Sl. No	Title of the book	Authors	Publisher	Edition	Year of publication
1	Social Research Methods	Bryman Alan	Oxford University Press	4th	2012
2	Research Methodology	Kothari C.R.	New Age International Publication	-	2004
3	Methodology of Research inSocial Sciences	Krishnawamy O.R. and Ranghanathan, M	Himalaya Publishing House	-	2010
4	Research Methodology in Economics	Kurian C.T.	Institute of Development Studies, Madras	-	1992

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II SEMESTER –Self-study Course

Course Title	**DATA COLLECTION TECHNIQUES**						
Course Type	Soft Core- Theory	Total Hours	32	Hours/Week	02	Credits	02
Course Code		Evaluation	Internal	C1+C2 = 10+10		20 Marks	50
			External	Duration	C3	03Hrs	30 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To provide fundamental knowledge of research.
CO-2	To understand the type of data.
CO-3	To understand the difference between universe and samples.
CO-4	To understand and apply different types of data collection.

Mapping of CLOs with PSOs &CDLs

CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the different types of data and techniques of data collection.	PSO-1	Understand
CLO-2	Identify the research problem and sample.	PSO-3	Apply
CLO-3	Prepare questionnaire for the research problem	PSO-3	Analyse
CLO-4	Able to enter and interpret the data.	PSO-4	Evaluate
CLO-5	Able to write the research project.	PSO-4	Apply

	Course Content	Duration
Module: I Introduction:		**16 Hrs**
1.1	Data collection methods; Types of data and their research value	
1.2	Secondary data collection	
1.3	Collecting Web data	

Keywords: Identify the research problem and sample.

Module: II Primary Data Collection		**16 Hrs**
2.1	Methods of Primary data collection	
2.2	Guidelines for constructing Questionnaire /Schedule	
2.3	Selection of appropriate methods for data collection	

Keywords: Prepare questionnaire for the research problem

Note: Course content involves 20% theory and 80% of field study.

Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Social Research Methods	Bryman Alan	Oxford University Press	4th	2012

2	Research Methodology	Kothari C.R.	New Age International Publication	-	2004
3	Methodology of Research in Social Sciences	Krishnaswamy O.R. and Ranghanathan, M	Himalaya Publishing House	-	2010
4	Research Methodology in Economics	Kurian C.T.	Institute of Development Studies, Madras	-	1992
5	Research Methods in Social Science	Majumdar P.K.	Viva Books Private Limited	-	1976
6	How to Write and Publish a Scientific Paper	Robert, A. Day	Cambridge University Press	4th	1994

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II SEMESTER-Ability Enhancement course

Course Title		**FINANCIAL ECONOMICS**					
Course Type	Soft Core- Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To understand and identify the intermediaries in the financial sector
CO-2	To be aware of the instruments in the financial sector.
CO-3	To identify the functions of Intermediaries in the Development of Capital market
CO-4	To understand the difference between primary and secondary market and assess the working of SEBI

Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** On completion of the course the student will learn to	**PSOs Addressed**	**CDLs**
CLO-1	Understand the structure and functions of financial market.	PSO-1	Understand
CLO-2	Analyse the performance of primary and secondary market.	PSO-2	Analyse
CLO-3	Evaluate the performance of monetary policy	PSO-3	Evaluate
CLO-4	Understand and analyse the functions of exchange	PSO-5	Analyse
CLO-5	Analyse the changing role of financial institutions in the process of growth and development.	PSO-4	Analyse

Course Content	Duration
Module: I Financial Economics	**16Hrs**

1.1	Structure of Financial System	
1.2	Functions of Financial Sectors	
1.3	Equilibrium of Financial Markets	
1.4	Financial System and economic development	
1.5	Criteria to Evaluate Financial sectors	

Keywords: Understand the structure and functions of financial market.

Module: II Introduction to Security Analysis		**16Hrs**
2.1	Meaning of Risk- Types of risk	
2.2	Concept and types of Return of Yield Risk	
2.3	Return Trade Off	
2.4	Valuation of Securities	
2.5	General Principles of Valuation	

Keywords: Analyse the performance of primary and secondary market.

Module: III Regulatory and Promotional Institutions		**16Hrs**
3.1	RBI, Functions, Role	
3.2	Objectives of Monetary policy and Instruments	
3.3	Commentary on Current monetary Policy	
3.4	SEBI- functions- Role in Security Market	

Keywords: Evaluate the performance of monetary policy

Module: IV Money Market and Capital Market		**16Hrs**
4.1	Instruments	
4.2	Repo and Reverse Repo rate	
4.3	Organization of Money market and Participants	
4.4	Capital Market Instruments : Primary Issue – Process - Secondary Market- Stock exchange	

Keywords: Analyse the changing role of financial institutions in the process of growth and development.

Note: Course content involves 100% of theory.

Self-Study components:
1. Introduction to Indian Financial system
2. Indian money market and its instruments
3. Indian capital market
4. RBI functions- commercial banks.

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Financial Institutions and Markets	L.M. Bhole	Tata McGraw – Hill publishing Company	-	1999
2	Indian Financial System	Pathak, V. Bahrathi	Pearson India Ltd	-	2008
3	Indian Financial System	Khan. M.Y.	Tata McGraw Hill	12th	2008
4	Development Banking and Financial Intermediaries	Desai Vasant	Himalaya Pub., House		
5	The Indian Financial System: Markets, Institutions and Services	Pathak, Bharati V.	Pearson Education India		

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II SEMESTER-Ability Enhancement course

Course Title	**GENDER ECONOMICS**						
Course Type	Soft Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To understand basic concepts of gender Economics and Feminism.
CO-2	To understand the role of women in the economy.
CO-3	To Evaluate the concept of certain protections for women security.
CO-4	To give in-depth knowledge about different gender inequality measures.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the different concept of feminism.	PSO-1	Understand
CLO-2	Understand and analyse the various theories with respect to gender development.	PSO-1	Analyse
CLO-3	Analyse the welfare economic policies for gender growth and development.	PSO-2	Analyse
CLO-4	Understand and analyse the concept of discrimination and its measurement with respect to gender.	PSO-5	Analyse
CLO-5	Evaluate the social security measures with respect to gender.	PSO-2	Evaluate

Course Content		Duration
Module: I Introduction		**16Hrs**
1.1	Introduction - Basic Concepts – Difference between Gender and Sex	
1.2	Patriarchy - Functioning of patriarchy -Feminism	
1.3	Gender Budget – WID – WAD – GAD, Eco feminism	
1.4	Gender Audit – Gender Mainstreaming	
1.5	Gender Development Index and Gender Inequality Index	
1.6	Sen's Contribution to Women's issues	

Keywords: Understand the different concept of feminism.

Module: II Theories of Women Exploitation		**16Hrs**
2.1	Theories of Women Exploitation - Marx-Engel's Theory of exploitation	
2.2	Gender based evaluation of theories of Development	
2.3	Women claims in Household – Invisibility of women's work	
2.4	Valuation of Women's Contribution to National Income.	
Module: III Women and Development		**16Hrs**
3.1	Women Labour and Employment	
3.2	Gender structure in Developed and Developing Economies	
3.3	Gender Segmentation of employment	
3.4	Factors influencing supply of and Demand for female labour – Wage discrimination	
3.5	Garry Becker's Theory – Factors influencing wage gap	
Module: IV Social Security and Social Protection		**16Hrs**
4.1	Social Security and Social Protection - Need for Social Security	
4.2	Gender analysis of existing Social Security programs- Institution in Provision of Social Security for Women	
4.3	Economic development & gender equality	
4.4	Measures to redress gaps in command over resources & political voice	

Self-Study:
Theories of Economic Development
Women in Formal and Informal Employment

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year

1	Women Work and Discrimination	Arputha Murthy Savithri	Ashish Publishing House	-	1980
2	Women's Role in Economic Development	St Bosarup Ester, George Allen and Unwin	Business and Economics	2	2013
3	Theories of Women Studies	Bowles Gloria and Dueli Klein Kenate	New York	-	1989
4	Empowering Women for Sustainable Development	Devasia Leelamma	Ashish Publishing House	-	1994
5	Women's Occupational Mobility	Dex Shirley	Macmillan Press	-	1987
6	The issues at Stake: Theory and practice in the Women's Movement in India	Gandhi, Nandita and Nandita Shah	New Delhi	-	1992.
7	Women at Work in Developing Economy	Gupta Nirmal K Sudan Falendra	K Anmol Publications,	-	1990
8	Is „Gender" Easy to Study? Some Reflections	Maithreyi Krishnaraj	Economic and Political Weekly	-	October 21, 2001
9	Women's Studies in India – A Reader	Mary E. John	Penguim Books	-	2008
10	Women in Contemporary India: Realities and Perspectives,	Sanjoy Roy	Akansha Publishing House	-	2010
11	Tracking Gender Equity Under Economic Reforms Continuity and Change in South Asia	Swapna Mukhopadhyay and Ratna M.	Kali for Women	-	2003
12	The Macro Economic Policies and The Millennium Development Goals	Vibhuti Patel	Gyan Publishing House	-	2006
13	Gender Budget – A case Study of India, Department of Economics	Vibhuti Patel	Centre for Advanced Study in Economics Working Paper UDE (CAS) 7(7)	-	2003
14	Emergence of Women's Question and Role of Women's Studies	VinaMazumdar	Occasional Paper Centre for Women's Development Studies New Delhi	--	1985

II SEMESTER-Ability Enhancement course

Course Title	**ENERGY ECONOMICS**						
Course Type	Soft Core- Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3 | 03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able		
CO-1	To Understand about the definition, types and Forms of energy.		
CO-2	To identify the classified material based and sub-sector energy source.		
CO-3	To make the students to understand the significance and role of Energy in economic Development.		
CO-4	To make students aware of the efficient use of energy.		
Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand about the definition, types and forms of energy.	PSO-1	Understand
CLO-2	Understand the importance of renewable and non-renewable energy resources.	PSO-1	Analyse
CLO-3	Analyse the energy demand factor.	PSO-2	Analyse
CLO-4	Analyse and evaluate the energy supply factor.	PSO-5	Evaluate
CLO-5	Gain knowledge on energy regulation and policies.	PSO-1	Understand

Course Content	Duration
Module: I Energy Concepts	**16Hrs**
1.1. Concepts - Definitions - Sources and Categories of Energy	
1.2. Energy Balance Tables	
1.3. Energy Data Sources- Energy System	
1.4. Energy - Economy Linkages	
1.5. Green Energy	
Keywords: Understand about the definition, types and forms of energy.	
Module II Energy Sub-Sectors	**16hrs**
2.1. Forms of Energy - Electricity, Coal, Oil and Renewable Sources.	

2.2.	Availability and Features
2.3.	Management of Energy Resources
2.4.	Energy and Environmental Sustainability

Keywords: Analysis the energy demand factor.

Module III Energy Supply and Demand Analysis		**16Hrs**
3.1.	*Energy Supply Analysis*: Availability and Supply of Different Sources of Energy - Supply Constraints - Role of Renewable Sources of Energy - Institutional Framework for Energy Supply in India	
3.2.	Supply Scenario and Investment Requirements - Alternative Energy Sources - Energy Imports - Trends and Issues - Policies of the Government.	
3.3.	*Energy Demand Analysis*: Determinants of Energy Demand – Estimating Energy Demand - Methods of Estimation - Price and Income Elasticity	
3.4.	Demand Estimation under Administered Price Regimes - Demand – Supply Gap - Energy Shortage and Crisis -	
3.5.	Need for Energy Demand Management - Renewable Energy Options.	

Keywords: Analyse and evaluate the energy supply factor.

Module IV Energy Pricing		**16Hrs**
4.1.	Need - Methods and Principles of Energy Pricing	
4.2.	Economic Efficiency and Equity Considerations	
4.3.	Pricing Under Supply Constrained Framework	
4.4.	Energy Markets	
4.5.	Regulation - Issues and Challenges.	

Keywords: Gain knowledge on energy regulation and policies.

Note: Course content involves 100% of theory.

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Handbook of Natural Resource and Energy Economics	Kneese, A. V. and Sweeny, J L	North Holland	-	1951
2	Energy Policy Analysis and Modeling	Munasinghe M & Meier P	Cambridge University Press,U K.	-	1993
3	The Economics of Energy	Paul Stevens	Edward Elgar	Vol -I and Vol -II.	2006
4	Public Sector Pricing: Theory and Applications	Sankar U	Indian Economic Association Trust for Research and Development	-	2003

III SEMESTER

Course Title		RESEARCH METHODOLOGY AND DATA ANALYSIS						
Course Type		Hard Core- Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15			30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To understand the concept and Types of Research.
CO-2	To apply the various steps in research like identifying problems in research area, finding gap and so on.
CO-3	To apply and analyse the different types of data.
CO-4	To equip the students with basic knowledge of statistical software usage in research and produce good research projects and articles.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand and analyse different types of research.	PSO-1	Understand
CLO-2	Identify the gap in research area to formulate the objectives and hypothesis related to their research area.	PSO-2	Analyse
CLO-3	Collect different sets of data as needed.	PSO-3	Analyse
CLO-4	Analyse and interpret both the qualitative and quantitative data.	PSO-4	Apply
CLO-5	Able to evaluate and write a research project and article in their interested area.	PSO-4	Evaluate

Course Content		Duration
Module: I - Foundations of Research		**22 Hrs**
1.1.	What is Research? - Meaning and Characteristics- Social Science Research- Meaning and Scope- Objectives - Reference Documentation in the library and Need for Research in Economics.	
1.2.	**Types and Methods of Research:** Classification of Research - Pure and Applied Research-Exploratory -Descriptive – Diagnostic -Evaluation-Action-Experimental Research -Statistical Methods -HistoricalResearch-Surveys-Case Study-Field Study.	
1.3.	**Planning and Objectives of Research:** Identification of Research problem	
	Review of Literature –Objectives-Hypothesis-Concepts-Research Plan-Sampling Design -Steps in Research.	
1.4	**Sampling Techniques and Data Processes** Meaning-Types -Probability sampling techniques -Non Probability sampling techniques -Choice of Sampling Technique-Sample size determination.	

| 1.5 | Introduction -Editing- Classification and Coding- Transcription | |

*Keywords: **Identify the gap in research area to formulate the objectives and hypothesis related to their research area.***

Module: II- Hypothesis Testing	**16Hrs**

| 2.1. | Univariate and multivariate data analysis - Estimation of mean and variance- Test of single sample mean – two independent means test- Testing for means of paired data- Test of single sample variance – two sample variance test. | |
| 2.2. | **Analysis of Variance:** Introduction – assumptions for Analysis of variance- Testing for the equality of k proportion means - Between treatments estimate of population variance - Within treatments estimate of population variance - Comparing the variance of estimates – the F test – multiple comparison procedures. | |

*Keywords: **Collect different sets of data as needed.***

Module: III- Non-parametric Tests	**14Hrs**

| 3.1. | Introduction- Meaning- one sample mean test – run test -Wilcoxon signed rank test - Two samples test - Independent sample test - Mann- Whitney test - Paired samples test | |
| 3.2. | Wilcoxon signed rank test- Chi Square test- Spearman rank correlation test – three or more than three samples test- Kruskal –Wallis test – Friedman test | |

*Keywords: **Analyse and interpret both the qualitative and quantitative data.***

Module: IV- Factor Analysis	**12Hrs**

| 4.1. | What is factor analysis? - Objectives of factor analysis -Designing a factor analysis- Assumptions in factor analysis- deriving factors and assessing overall fit- Interpreting the factors- validation of factor analysis. | |
| 4.2. | **Report Writing:** Types of Reports-Research Report Format-Documentation: Footnotes and Bibliography-Writing the Report-Presentation. | |

*Keywords: **Able to evaluate and write a research project and article in their interested area.***

Note: Course content involves 205 of theory and 80% of problems

Self-study:
Types of data – Measures of central tendency and Dispersion

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Social Research Methods	Bryman Alan	Oxford University Press	4th	2012
2	Research Methodology	Kothari C.R.	New Age International Publication	-	2004
3	Methodology of Research in Social Sciences	Krishnawamy O.R. and Ranghanathan, M	Himalaya Publishing House	-	2010
4	Research Methodology in Economics	Kurian C.T.	Institute of Development Studies, Madras	-	1992

5	Research Methods in Social Science	Majumdar P.K.	Viva Books Private Limited	-	1976
6	How to Write and Publish a Scientific Paper	Robert, A. Day	Cambridge University Press	4th	1994

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Completed up to this point

III SEMESTER

Course Title		**INTERNATIONAL TRADE: THEORY AND POLICY**						
Course Type	Hard Core- Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr.	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To get knowledge about importance of international trade.
CO-2	To analyse the fundamental theories of international trade.
CO-3	To be aware of international trade policies and practices.
CO-4	To understand the importance of economic integration and WTO and trade policies.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs) On completion of the course the student will learn to**	**PSOs Addressed**	
CLO-1	Understand the Nature, Scope and Importance of International Economics.	PSO-1	Understand
CLO-2	Analyse the theories international trade.	PSO-5	Analyze
CLO-3	Evaluate the gains from international trade & the measurements.	PSO-5	Evaluate
CLO-4	Understand the trade creating customs union & history of economic integration.	PSO-2	Understand
CLO-5	Analyze the objectives and functions of WTO.	PSO-5	Analyze

Course Content	Duration
Module: 1 Basic Concepts of International Trade	**14Hrs**
1.1. International Economics - The basis of International Trade- Internal and International Trade - The Importance of International Economics	

1.2.	The Standard Theory of International Trade: The Production Frontier with Increasing Costs – Community Indifference Curves - Equilibrium in Isolation - The Basis for the Gains from Trade with Increasing Costs - Trade based on Difference in Tastes.	
1.3.	Demand and Supply, Offer Curves and the Terms of Trade: Partial Equilibrium Analysis - Offer Curves - General Equilibrium Analysis - Relationship between General and Partial Equilibrium Analysis.	

Keywords: Understand the Nature, Scope and Importance of International Economics.

Module: II Fundamental Theories of International Trade		**14Hrs**
2.1.	Trade based on Comparative Advantage: David Ricardo	
2.2	Mill's Reciprocal Demand - Comparative Advantage and Opportunity Cost	
2.3	Factor Endowments and The Heckscher-Ohlin Theory: Assumptions of the Theory - Factor Intensity, Factor Abundance - Factor Endowments and Heckscher-Ohlin Theorem	
2.4	Factor Price Equilibrium Theorem - Empirical Test of Heckscher-Ohlin Model.	
2.5	Leontief Paradox	
2.6	Recent Developments in the Theories of International Trade: The Availability Doctrine - The Stolper-Samuelson Theorem - The Vent for Surplus Approach	

Keywords: Analyse the theories international trade.

Module: III International Trade Policies and Practices		**12Hrs**
3.1.	Trade Restrictions: Tariffs - Partial Equilibrium Analysis of a Tariff - The Theory of Tariff Structure - General Equilibrium Analysis of a Tariff – TheOptimum Tariff.	
3.2.	Non-Tariff Trade Barriers and the New Protectionism: Import Quotas - Voluntary Export Restraints - Technical, Administrative and other Regulations	
3.3	International Cartels - Dumping - The Political Economy of Protectionism and Strategic Trade and Industrial Policy - Outstanding Trade Problems.	

Keywords: Evaluate the gains from international trade & the measurements.

Module: IV Economic Integration and Trade Policies		**12 Hrs**
4.1.	Customs Unions and Free Trade: Introduction - Trade Creating Customs Union - Trade Diverting Customs Union - Static and Dynamic Benefits from Customs Union	
4.2.	History of Economic Integration - The European Economic Community– The European Free Trade Association	
4.3.	NAFTA - Attempts of Developing Countries towards Economic Integration –SAARC, BRICS.	
4.4.	General Agreements on Tariffs and Trade (GATT) - World Trade Organization(WTO) - Objectives and Functions of WTO	
4.5.	Trade Related Intellectual Properties (TRIPs) - Trade Related Investment Measures (TRIMs)- General Agreements on Trade in Services (GATS)	

Keywords: Analyze the objectives and functions of WTO.

Self-study topic:
1 Mercantilists Views on Trade - Trade based on Absolute Advantage: Adam Smith
1. Adam smith, Ricardo's comparative cost and opport Moduley cost, Heberler empirical evidence.
2. Free trade v/s protection for developing countries general equilibrium effect of a tariff in a large and small countries strategic trade policy.
3. Origin and development, structure of WTO. GATT, WTO and Trade agreements.
4. Trade and Environment - Trade Liberalization - Recent Developments in PRIDS and TRIMS.

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	International economics	Dominick Salvatore	John Wiley and sons	4th	2014
2	International economics	Robert J Carbaugh, Thomson	south western	2nd	2009
3	International trade	MIA Mikic	Macmillan press LTD.	--	2012

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III SEMESTER

Course Title		**THEORY OF ECONOMETRICS**					
Course Type	Hard Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To provide knowledge about the scope of econometrics
CO-2	To understand about the interrelationship between different sectors in an economy
CO-3	To introduce the basics of linear regression model
CO-4	To introduce the various econometrics problems.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understands the econometrics application to economic theory.	PSO-1	Understand
CLO-2	Able to write the economic models and finds the relationship between the variables.	PSO-3	Analyse
CLO-3	Understand and analyse the simple and multiple Regression models.	PSO-3	Analyse
CLO-4	Able to test hypothesis and interpret the results.	PSO-4	Apply

	CLO-5	Able to evaluate the econometric models.	PSO-4	Evaluate

Course Content

Module: I Introduction		**12 Hrs.**
1.1.	Definitions, scope and Division of Econometrics	
1.2.	Methodology of econometrics and other interrelated discipline	
1.3.	Basic ideas - Problem of Estimation Point and Interval Estimation	
1.4.	Simple linear regression Model: OLS - Properties of the Least Square Estimates- Classical Normal Linear Regression Model (CNLRM)	
1.5.	Hypothesis Testing - statistical tests of significance of the estimates.	
1.6.	The test of goodness of fit $(R^{2)}$.	
Keywords: Understands the econometrics application to economictheory.		
Module: II Multiple Regression Model		**16 Hrs.**
2.1.	Multiple regression model with two explanatory variables	
2.2.	Estimation and testing of hypothesis	
2.3.	R^2 and Adjusted R^2	
2.4.	Partial correlation coefficients.	
Keywords: Able to write the economic models and finds therelationship between the variables.		
Module: III Dummy Variables and Dynamic Models		**14 Hrs.**
3.1.	Dummy variable model – meaning – Importance – dummy variable trap	
3.2.	Distributed Lag and Dynamic models.	
3.3.	Error in Variables - Time as a variable - Lagged variables	
3.4.	ANOVA- ANCOVA models.	
Keywords: Able to test hypothesis and interpret the results		
Module: IV Special Problems in Single Equations Linear Models		**22 Hrs.**
4.1.	Multicollinearity –Nature – Causes - Consequences – Detection – Remedial measures.	
4.2.	Heteroscedasticity- Nature – Causes - Consequences – Detection – Remedial measures.	
4.3.	Auto-correlation - Nature – Causes - Consequences – Detection – Remedial measures.	
4.4	**Simultaneous Equation Models** :Nature - Simultaneous equation bias - Identification: Under – Exact – Over Identification	
4.5	Rules of identification - Order condition and Rank condition of identification	
4.6	Estimation of Simultaneous equations models – ILS – 2SLS – LIMLE - FIMLE	

Note: Course content involves 50% of theory and 50% of problems

Self-Study:

1. Regression
2. Correlation
3. Hypothesistesting

Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Theory of Econometrics	A. Koutsoyianns	Palgrave Publication	2nd	2001
2	Basic Econometrics	Damodar Gujarathi	Macgraw Hill Publication	5th	2007
3	Introduction to Econometrics	Maddala G S	John Wiley & Sons	3rd	2002
4	Introductory Econometrics with Applications	Ramanathan, Ramu	Thomson Learning Inc, Singapore	-	2002
5	A Text Book of Econometrics	Klein LR	Prentice Hall , Engle wood Cliffs	2nd	1974
6	Elements of Econometrics	Kmenta, Jan	Macmillian, New York	2nd	1976

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III SEMESTER

Course Title	**NATURAL RESOURCES AND ENVIRONMENTAL ECONOMICS**							
Course Type	SoftCore-Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr.	70 Marks		100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able to**
CO-1	To introduce economics principles related to natural resource and environmental economics.
CO-2	To explore the concept of efficiency and the efficient allocation of natural resources.
CO-3	To understand the environmental policy issues and alternative instruments of environmental policies.
CO-4	To understand the concept of economic growth and environment.

Mapping of CLOs with PSOs & CDLs		

CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**

CLO-1	Understand the natural resource classification and natural resource policy in India.	PSO-1	Understand
CLO-2	Understand the problems of waste management and energy problems in developing countries.	PSO-5	Understand
CLO-3	Apply and analyse the Pigovian analysis of externalities and market failure.	PSO-2	Analyze
CLO-4	Evaluate the economic growth and environmental degradation.	PSO-5	Evaluate
CLO-5	Understand the environmental Kuznets Hypothesis and sustainable development.	PSO-2	Understand

Course Content	Duration
Module: I Natural Resources	**16Hrs**
1.1. Natural Resource - Types and Classification – Resource Taxonomy and scarcity	
1.2. Conservation of Non-renewable resources	
1.3. Conservation of Renewable resources	
1.4. Natural Resource Policy in India	
1.5. Meaning and need of Green Accounting	
Keywords: Understand the natural resource classification and natural resource policy in India.	
Module: II Introduction to Ecological Economics	**16Hrs**
2.1. Introduction, Bio economics and Spatial Economics	
2.2. Ecology and Economic Growth	
2.3. Economics of Recycling, Solid Wastes, Industrial Wastes and Nuclear Wastes	
2.4. The Problem of Wastes Management in Developing Countries	
2.5. Energy Problems in Developing Countries	
Keywords: Apply and analyse the Pigovian analysis of externalitiesand market failure.	
Module: III Welfare Criteria and Environmental Analysis	**16Hrs**
3.1. Pareto Criterion	
3.2. Pigovian Analysis of Externalities	
3.3. Compensation Criterion	
3.4. Property Rights and Coase Theorem	
3.5. Environmental quality as a Public Good	
Keywords: Evaluate the economic growth and environmental degradation.	
Module: IV Economics Growth and Environment	**16 Hrs**
4.1. The Cost of Economic growth and Environmental Degradation	
4.2. The limit to Growth Model	

4.3.	Social limits to Growth Model
4.4.	Environmental Kuznets Hypothesis
4.5.	Sustainable Development

Keywords: Understand the environmental Kuznets Hypothesis and sustainable development.

Note: Course contents involves 100% of theory

Self-study component:

Classification of Natural Resources
Common Property Resources
Joint Forest Management
Forest Act
Sustainable tourism
Biodiversity crisis

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Accounting and Valuation of Environment – A Preview for Developing Countries,		Moduleed Nation,		1997
2	Environmental Economics: An Indian Perspective,	Rabindra N, Bhattacharya	Oxford University Press	3rd	2012
3	Environmental Economics,		Oxford University Press,	---	2000
4	Environmental Economics in Theory and Practice,	Nick Hanley, Jason F. Shogren and Ben White	Macmillan		1991
5	Environmental and Natural Resource Economics	Tom Tietenberg	Pearson	2nd	2005
6	Environmental Economics: Theory, Management and Policy.	Jhingan.M.L & Chandra K.Sharma		2nd	2012

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III SEMESTER

Course Title	**LABOUR ECONOMICS**						
Course Type	Soft Core -Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15		30Marks		

			External	Duration	C3	03 Hr.	70 Marks	100

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To introduce the concepts of nature, scope & evolution of labour economics.
CO-2	To understand the labour market and labour market equilibrium in the economy.
CO-3	To gives an idea about labour market force – supply of & demand for labour.
CO-4	To be aware of employment, wage and wage discrimination in the economy.

Mapping of CLOs with PSOs & CDLs

CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand labour economics concepts, nature, and scope.	PSO-1	Understand
CLO-2	Understand the labour market equilibrium, labour market rigidity and flexibility.	PSO-2	Understand
CLO-3	Analyze the determinants of labour supply and determinants of labour demand.	PSO-1	Analyze
CLO-4	Evaluate the employment and economic development and concept of wage and economic development.	PSO-5	Evaluate
CLO-5	Understand the concept of skilled labour and human capital development approach.	PSO-5	Understand

Course Content	Duration
Module: 1Introduction	**16Hrs**
1.1. Labour Economics, concept, nature & scope	
1.2. Evolution of labour Economics	
1.3. Distinct features of labour as a factor input	
1.4. Relationship between labour economics &labour problems	
1.5. Importance of labour Economics	
Keywords: Understand labour economics concepts, nature, and scope.	
Module: II Labour Market	**16Hrs**
2.1. Labour market concept- Differences between labour market & commodity market	
2.2. Labour market imperfections	
2.3. Classical, Neo-classical & modern approaches to labour market	
2.4. Labour market equilibrium- Labour market rigidity- Labourmarket flexibility	
2.5. Changing nature of labour market under globalization	

Keywords: Analyze the determinants of labour supply anddeterminants of labour demand.		
Module: III Labour Market forces- Supply of & Demand for labour		**16Hrs**
3.1.	Concept of labour supply- Determinants of labour supply	
3.2.	Supply of women & child labour	
3.3.	Changing demographic trends & labour supply	
3.4.	Labour migration & supply of labour	
3.5.	Demand for labour- Determinants of the demand for labour	
Keywords: Evaluate the employment and economic development andconcept of wage and economic development.		
Module: IV Employment & Wage		**16Hrs**
4.1.	Employment & economic development - New dimensions of employment	
4.2.	Concept of decent job, casual & permanent employment	
4.3.	Causes, consequences & measures to reduce unemployment	
4.4.	Wage concept, Wage & economic development	
4.5.	Skill development -Human capital development approach tolabour productivity	
Keywords: Understand the concept of skilled labour and human capital development approach.		
Note: Course content involves 100% of theory.		

Self-study Components

Module 1:	Panel discussion on multidisciplinary character of labour Economics - listing the problems of industrial labour & unorganized labour
Module 2:	Listing the evidences of labour market Imperfections – seminar on the implications of labour market imperfections on labour.
Module 3:	Exploring the supply position of labour in a particular region, city or a village (both organized & unorganised) - panel discussion among students on the determinants of demand for labour- To understand migratory character of labour
Module 4:	Collecting Evidences on Wage differentials and wage discrimination

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Labour Economics	Mittal A.C & Sanjay Prakash Sharma RSBA	Jaypur,	--	2005
2	Economics of	Bhagoliwal T.N Sahitya Bhavan	Agra,	2nd	1998
	Labour & Industrial Relations				

3	Labour Economics,	George J. Bayers,	McGraw Hill	--	2000
4	Contemporary Labour Economics,	Mcconnel & Stanley Brue,	McGraw Hill		2002
5	Economics of Labour, references,	Phelps Brown Ed	Yale University press	3rd	1983

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IIISEMESTER

Course Title	**INFRASTRUCTURE ECONOMICS**							
Course Type	Soft Core Theory	Total Hours	64	Hours/Week	04	Credits	04	
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To understand the concept and importance of social infrastructure and quality of living.
CO-2	To provide knowledge on the investment in education and trends in public expenditure.
CO-3	To understand the financing of health care services and importance of health insurance.
CO-4	To provide knowledge about housing demand and supply, water supply and sanitation.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the development of social infrastructure in India.	PSO-5	Understand
CLO-2	Evaluate the social rate of return on investment in education.	PSO-2	Evaluate
CLO-3	Understand the role of government in financing of healthcare services.	PSO-2	Understand
CLO-4	Analyse the role of government in providing housing services.	PSO-5	Analyze
CLO-5	Evaluate the water supply schemes, sanitation programs problems in rural areas.	PSO-5	Evaluate

Course Content		**Duration**
Module: 1 Social Infrastructure		**16Hrs**
1.1.	Concept- Importance- Social infrastructure and quality of living	
1.2.	Equity and Social concerns- Approaches to develop social infrastructure,	

1.3.	Traditional and new methods- community participation Privatization feasibility	
1.4.	Opportunities and Possibilities- Development of social infrastructure in India.	

Keywords: Understand the development of social infrastructure inIndia.

Module: II Education		**16Hrs**
2.1.	Investment in Education – Analysis of Cost and Cost Concepts	
2.2.	Measurement- trends in Public expenditure on Education- Measurement ofBenefits	
2.3.	Social rate of Return on Investment in Education- Educational Planning	
2.4.	Considerations and Issues- Privatization of Education -GATS and Higher Education	
2.5.	Issues in Governance and Management- Policy issues.	

Keywords: Evaluate the social rate of return on investment in education.

Module: III Health		**16Hrs**
3.1.	Supply and Demand for Health care services-Methods of Estimation	
3.2.	Derivation of Individual and Market Demand for Health Care Services	
3.3.	Financing of Health care Services- Role of Government- Health Insurance	
3.4.	Role of Institutions- Health Policy- issues and Concerns- Evaluation.	

Keywords: Analyse the role of government in providing housing services.

Module: IV Housing		**16Hrs**
4.1.	Housing: Demand and Supply analysis- Methods of estimation	
4.2.	Financing of housing- Public and Private Investment	
4.3.	Role of Institutions- Emerging Housing Market- Challenges and Opport Moduleies	
4.4.	Housing Policy: Priorities and concerns	
4.5.	Water Supply and Sanitation:Water Supply Schemes-Sanitation Programs	
4.6.	Problems in Rural Areas – Role of Public Sector	

Keywords: Evaluate the water supply schemes, sanitation programs problems in rural areas.

Note: Course content involves 100% of theory

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	"Infrastructure for Development, World Development Report, , New York, 1994.	Oxford University Press	Oxford University Press		1994

2	India Development Reports, Ed) , Press, New Delhi.	Parikh K.S.	Oxford University		2000
3	Economics of Infrastructure, vol. IV, New Delhi, 1976.	Indian Council of Social Science Research (ICSSR),	Indian Council of Social Science Research (ICSSR),	4th	1976
4	The Economics of Energy		Paul Stevens	Vol I & II	2000
5	Pricing in Public Sector: Theory and Applications, , New Delhi, 1992.	Sankar U	Indian Economic Association Trust for Research and Development		1992
6	Economics of Education,		Penguin Books		1971
7	Health Economics	Zweifel Peter & Freidrick Breyer,	Oxford University Press,		1997
8	Modern Transport Economics, London, 1971.	Nosten H.S, C.E.	Merrill	2nd	1971
9	"The Contributions of Infrastructure to Economic Development: A Review of Experience and Policy Implications	Kessides Christiue,	World Bank Discussion Paper		2013, 1993.
10	India Infrastructure Reports				

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Course Title	**COMPUTER APPLICATION FOR ECONOMIC ANALYSIS** **(Interdisciplinary)**						
Course Type	Soft Core- Theory	Total Hours	32	Hours/Week	02	Credits	02
Course Code		Evaluation	Internal	C1+C2 = 10+10		20 Marks	50
			External	Duration	C3 03Hrs	30 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To understand the uses of computers in economics.
CO-2	To apply excel in data entry, sorting, data import and export.
CO-3	To analyse the data using Maths & Stats and data analysis tools in excel tools.
CO-4	To present the data in table, chats and figures.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	
CLO-1	Understand usage of excel and software in economics.	PSO-1	Understand
CLO-2	Apply excel in data entry and data analysis.	PSO-3	Apply
CLO-3	Code and recode the data.	PSO-3	Apply
CLO-4	Present the data in tables, charts and figures.	PSO-4	Analyse
CLO-5	Analyse and interpret the results.	PSO-4	Analyse

Course Content	**Duration**
Module-1: Introduction	**16Hrs**
1.1 Inputting Data from the Keyboard - Creating File in Microsoft Excel - Loading of existing Data Set - Feeding Data from Raw Data File - Copying Data from MicrosoftExceltoClipboard-AddingTwoSheets/Files,EditingFiles-Printing, Saving and Copying Edited Files.	
1.2. MS–Excel uses -Generating Frequency Table, Bar Chart, Pie Chart, and Histogram. Scatter Diagrams - Saving, Retrieving Data - Printing Output.	
Keywords: Understand and Apply excel in data entry and data analysis.	
Module: II-Data Processing and Data Management	**16Hrs**
2.1. Introduction - Getting Started - Entering Data in the Data Viewer – DefiningVariables - Recoding Variables	
Keywords: Analyse and interpret the results.	
Note Course content involves 100% of practical.	

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Social Research Methods	Bryman Alan	Oxford University Press		

2	Statistics for Business with Computer Application	Edward Minieka	South-Western, USA		
3	Business Statistics	Sonia Taylor	Palgrave		
4	How to Do Just Anything on a Computer		Reader''s Digest, London		
5	A First Course in Computers	Saxena Sanjay,	Vikas Pub, House Private Ltd		

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III SEMESTER-Skill based course

Course Title	STATISTICS FOR ECONOMICS							
Course Type	Soft Core- Theory		Total Hours	32	Hours/Week	02	Credits	02
Course Code		Evaluation	Internal	C1+C2 = 10+10			20 Marks	50
			External	Duration	C3	03Hrs	30 Marks	

COURSE OBJECTIVES(COs)	
CO No.	**Course Objectives** **On completion of the course the student will be able to**
CO-1	Give the basic foundations of statistical analysis.
CO-2	Understand the different techniques for analyzing the data.
CO-3	Understand the trends with the help of statistical tools.
CO-4	Provide various tools which helps in decision making

Mapping of CLOs with PSOs&CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	
CLO-1	Give the quantitative skills to collect, analyse and Interpret the analytical data.	PSO-3	Analyse
CLO-2	Analyses the data (primary or secondary) with the help of simple statistical tools.	PSO-2	Analyse
CLO-3	Provides basics for research.	PSO-4	Apply
CLO-4	Apply and evaluate the economic models.	PSO-5	Evaluate
CLO-5	Provide an idea about probability and its applications in real life	PSO-1	Understand

Course Content			Duration
Module: 1 Theories of Distribution			**16Hrs**
1.1	Theory of Probability Distribution Functions		
1.2	Theoretical Distribution: Normal, t, Chi-Square & F Distribution		
1.3	Binominal and Poisson distribution		

Keywords: Analyses the data (primary or secondary) with the help of simple statistical tools.

Module: II Basic Statistical techniques			**16Hrs**
2.1	Measure of Central Tendencies : Mean, Median and Mode		
2.2	Measure of Dispersion: Range, Quartile, Mean deviation, Standard deviation		
2.3	Skewness and Kurtosis		
2.4	Graphical presentation and its interpretation		

Keywords: Apply and evaluate the economic models.

Note: Course content involves 20% of theory and 80% of Problems

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Statistics for Business & Economics	Anderson, Sweeney & Williams	Thomson South-Western	13th	2017
2	Statistical Methods	Gupta S P.	S. Chand and Company	4th	2011
3	Quantitative Methodsfor Economists	Veerachami R.	New Age International Publication	2nd	2008
4	Statistics - An Introductory Analysis	Yamane Toro	Harper and Row Publishers	2nd	2009

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Course Title	**INTERNATIONAL FINANCE AND BUSINESS**							
Course Type	Hard Core-Theory	Total Hours	64	Hours/Week	04	Credits	04	
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To provide knowledge about international finance and international capital flows.
CO-2	To aware about the foreign exchange market systems.
CO-3	To understand the theories of foreign exchange rate.
CO-4	To provide knowledge about Central bank and balance of payment determinants.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the importance of international finance and International capital flows.	PSO-5	Understand
CLO-2	Evaluate the functions of foreign exchange market and International money market.	PSO-5	Evaluate
CLO-3	Apply and analyze the foreign exchange rate theories.	PSO-3	Analyze
CLO-4	Understand the international financial market integration.	PSO-5	Understand
CLO-5	Analyze the role of central bank in managed exchange rate and balance of payment determinants.	PSO-2	Analyze

Course Content		**Duration**
Module: IInternational Finance		**12 Hrs**
1.1	International Money and Finance - Circular Flow of Income and Product	
1.2	International Capital Flows - Motives and Effects of International Capital Flows -Multinational Corporations	
1.3	Labour Migration - Motives and Effects of International Labour Migration.	
1.4	Balance of Payments and accounting principles	
Keywords: Understand the importance of international finance and international capital flows.		
Module: II Foreign Exchange Markets		**14Hrs**

2.1.	Functions of Foreign Exchange Markets - Exchange Rates and the Markets for Foreign Exchange	
2.2	Foreign Exchange Risks Hedging and Speculation.	
2.3	Demand and Supply of Currencies - Introduction to Foreign Exchange Rate Theories	
2.4	International Money Markets- Gold Standard - Bretton Woods System – Flexible Exchange Rate System	
2.5	Composite Currencies: Special Drawing Rights and European Currency Module -Foreign Exchange Arbitrage	

Keywords: Evaluate the functions of foreign exchange market and international money market.

Module: III International Financial Instruments		**14Hrs**
3.1.	The price adjustment mechanism with flexible and fixed exchange rates-stability of foreign exchange market-The J-curve effect- Adjustment under the gold standard.	
3.2.	International Financial Market Integration: International Capital Markets - International Money Markets - Vehicle Currencies	
3.3.	Capital Market Integration - International Banking and Payment System.	

Keywords: Apply and analyze the foreign exchange rate theories.

Module: IV Central Banks, Exchange Rates, and Balance of Payments Determination		**12Hrs**
4.1.	Role of the Central Banks**:** Managed Exchange Rates: Foreign Exchange Interventions	
4.2.	Traditional Approaches to Exchange-Rate and Balance of Payments Determination: Exports, Imports and the Demand for and Supply of Foreign Exchange	
4.3.	Elasticity Approach - Absorption Approach - Monetary and Portfolio Approaches to Exchange Rate and Balance of Payment Determination.	
4.4.	**Open Economy** : An Open Economy Framework - Economic Policy with Fixed Exchange Rates	
4.5.	Economic Policy with Floating Exchange Rates - Policy Co-ordination	
4.6	Monetary Union and Target Zones - Monetary and Fiscal Policy under Fixed Exchange and Floating Exchange Rates.	

Keywords: Analyze the role of central bank in managed exchange rate and balance of payment determinants.

Note: Course contents involves 100% of theory.

Self-Study Topic:
Exchange rate determinants, fixed exchange rate, flexible exchange rate system.
IMF and World Bank: role present function of IMF and World Bank.
IMF and developing countries. World Bank and developing world, Asian development bank.

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	International economics	Dominick Salvatore	John wiley and sons.	5th	2016

2	International economics	Robert J Carbaugh, Thomson	South western.	2nd	2005
3	International trade	MIA Mikic,	Macmillan press LTD.	--	2008
4	Global Financial Management,	Thomas J. O" Brien			1999

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IVSEMESTER

Course Title	**MANAGERIAL ECONOMICS**							
Course Type	Hard Core- Theory	Total Hours	64	Hours/Week	04	Credits	04	
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks		100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To understand the scope and objectives of Managers and entrepreneur.
CO-2	To analyse the objectives, theories and profit of Firm.
CO-3	To evaluate the various projects.
CO-4	To understand the internet or online business environment.
Mapping of CLOs with PSOs &CDLs	

CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	
CLO-1	Understand the role of managers, entrepreneur and Various theories of Firm.	PSO-1	Understand
CLO-2	Evaluate the various theories of Profit.	PSO-2	Evaluate
CLO-3	Analyse and forecast the demand for the products.	PSO-3	Analyse
CLO-4	Apply and evaluate various projects.	PSO-4	Apply
CLO-5	Analyse and evaluate the K-enterprise.	PSO-5	Evaluate

Course Content	**Duration**
Module: I Managerial theories	**12 Hrs**
1.1 Role of Managerial Economists, significance of managerial economics	
1.2 Firm organization: sole proprietorship, partnership, Joint Stock Company, corporation, co-operatives.	
1.3 Theory of firm; profit maximization, Baumol's sales revenue maximization model, managerial utility model- Williamson model, Marries model of managerial enterprises	

1.4	Behavioral theories; Simons satisfying model, Cyert and March's behavioral theory of the firm.		

Keywords: Understand the role of managers, entrepreneur and various theories of Firm.

Module: II Demand forecasting and Price practices and strategies		**12 Hrs**
2.1	Demand forecasting: purpose of forecasting demand, Determining scope of forecasting,	
2.2	Methods of demand forecasting survey method, statistical method.	
2.3	**Price practices and strategies** :Cost oriented pricing,	
2.4	Cost-plus pricing marginal cost pricing rate of return and competition oriented pricing, Going rate pricing, profit policy, planning and forecasting.	
2.5	Break-even analysis planning for profit.	

Keywords: Analyse and forecast the demand for the products.

Module: III- Capital budgeting		**13Hrs**
3.1	Meaning and importance of capital budgeting,	
3.2	Benefit and cost analysis, steps for capital project evaluation,	
3.3	Modern techniques for investment appraisal.	

Keywords: Apply and evaluate various projects.

Module-IV: K- Economy		**13Hrs**
4.1	Meaning, Knowledge as a factor of production	
4.2	Features- knowledge management- Internet economics	
4.3	Internet infrastructure- The Internet/Knowledge application infrastructure	
4.4	The internet commerce- K-profit- K enterprise portfolio analysis	

Keywords: Analyse and evaluate the K-enterprise.

Note: Course content involves 30% of Problems and 70% of theory.

Self-study topics

Theory of pricing: Monopolistic competition, duopoly, oligopoly, profit theory, residual claimant theory, wage theory of profit, dynamic surplus theory, innovation theory role government in business.

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Managerial economics analysis and problems and cases	P.L. Mehta	Sulthan and Chand and sons	-	2016
2	Business and managerial economics in global context	Sampat Mukherjee	New central book agency (p) Ltd	-	2009

3	Managerial Economics: Applications, Strategy and Tactics	McGuigon R. James, R. Charles Moyer, Frederick H Deb, Harris	South Western, USA	-	2002
4	Managerial Economics in a Global Economy	Salvatore Dominick	McGraw Hill Inc, New York	-	1993
5	Managerial Economics: Principle sand World Wide Application	Salvatore Dominick	Oxford University Press	6th	2007

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IV SEMESTER

Course Title	WELFARE ECONOMICS						
Course Type	Hard Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To understand the concept of individual and social welfare function.
CO-2	To analyse the various welfare theories.
CO-3	To evaluate the various general equilibrium models.
CO-4	To understand the various choice theories and models.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand concept of individual and socialwelfare function.	PSO-1	Understand
CLO-2	Analyse the various welfare theories.	PSO-2	Analyse
CLO-3	Evaluate the various generalequilibrium models.	PSO-2	Evaluate
CLO-4	Understand the various choicetheories and models.	PSO-5	Understand
CLO-5	Construct the welfare models.	PSO-4	Apply

Course Content	Duration
Module:1 Pre- Paretian Welfare Economics	**14Hrs**
1.1 Growth of GNP as criterion of welfare - Benthamite criterion- Cardinalist criterion	
1.2 Marshallian Welfare Economics-Consumer's Surplus; Measurement of Consumer's Surplus –Hicks's Consumer's surpluses.	

1.3	**Paretian Welfare Economics :** Pareto optimality- Optimum exchange	
	conditions- The production optimum, The consumption optimum	
1.4	Concept of contract curve	
1.5	Infinite number of non-comparable optima vs. unique social optimum	

Keywords: Understand concept of individual and social welfare function.

Module: II Paretian Welfare Economics II		**12Hrs**
2.1	Compensation criteria of Barone, Kaldor and Hicks; The Scitovsky double criterion	
2.2	Concept of community indifference map-Samuelson „s utility possibility curve	
2.3	Value judgments and welfare economics; Bergson's social welfare function	
2.4	Arrow's Impossibility theorem.	

Keywords: Analyse the various welfare theories.

Module: III General Equilibrium Theory		**12Hrs**
3.1	Interdependence in the Economy - Partial and General Equilibrium Analyses	
3.2	Walrasian Excess Demand and Input - Output Approaches to General Equilibrium - Existence, Uniqueness and Stability of Equilibrium.	
3.3	Simultaneous Equilibrium - General Equilibrium and Allocation of Resources	
3.4	Prices of Commodities and Factors - Factor Ownership and Income Distribution.	
3.5	Relationship between Relative Commodity and Factor Prices (Stolper-Samuelson Theorem)	
3.6	Relationship between Output Mix and Real Factor Prices, Effect of Changes in Factor Supply in Closed Economy (Rybczynski Theorem) – Production and Consumption.	

Keywords: Evaluate the various general equilibrium models.

Module: IV Choice Theory		**12Hrs**
4.1.	Externalities and Market Failures - Welfare Economics and Social Choice Theory.	
4.2.	Problem of Public Goods - Pigouvian Welfare Economics - Second Best Optima – Sen's Contributions to Welfare Economics - Collective Choice and Social Welfare.	

Keywords: Construct the welfare models.

Note: Course content involves 100% of theory

Self-study Component:
Measurement of Economic Welfare - Definition - Utilitarian Economics (Pre-Paretian Welfare Economics)
Interdependence in the Economy – Partial and General Equilibrium Analyses; Marshallian Welfare Economics: Consumer's Surplus; Measurement of Consumer's Surplus – Difficulties involved, Criticism;

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Social choice and Individual Values	Arrow, K. J	Yale University Press	-	1951
2	Welfare Economics and the Theory of the State	Baumol. W. J	Longmans, London	2nd	1965
3	Welfare Economics	Baumol. W. J.	Edward Elgar Publishing Ltd. U.K	-	2001
4	Welfare Economics	Myint. H.	Macmillan, London	-	1948
5	Economic Theory and the Welfare state	Nicholas, B.	Edward Elgar Publishing Ltd., U.K	-	2001
6	The Economics of Welfare	Pigou, A. C.	Macmillan	4th	1962
7	Modern Microeconomics	Koutsoyiannis	Macmillan, London	-	1997
8	Microeconomics Theory and Applications	Dominick Salvatore	Oxford University Press	-	2003

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IV SEMESTER

Course Title		**TERM PROJECT**						
Course Type	Soft Core Theory	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To make them identify the problem area of research work.
CO-2	To provide knowledge on the variables and find the same with their respective area of research.
CO-3	To understand and to construct the objectives and the hypothesis of the research.
CO-4	To provide knowledge about how to prepare research project.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the practical aspect of the research.	PSO-4	Understand

CLO-2	Evaluate the problem area of the research.	PSO-4	Evaluate
CLO-3	Understand the collection and interpretation of the research data.	PSO-3	analyze
CLO-4	Able to publish the research article.	PSO-4	Evaluate
CLO-5	Use the statistical tools in the research project.	PSO-3	Apply

	Course Content	**Duration**
Term Project Evaluation		
	Right from the initial stage of defining the problem, the candidate has to submit the progress reports periodically and also present his / her progress in the form of seminars in addition to the regular discussion with the guide. Components of evaluation are as follows: Component – I (C_1): Periodic Progress and Progress Reports (15) Component – II (C_2): Results of Work and Draft Report (15) Component – III (C_3): Final Viva Voce and evaluation (70). The report evaluation is for 40 and the Viva –voce examination is for 30.	
Note : Course content involves 100% of Practical		

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References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Statistics for Business & Economics	Anderson, Sweeney & Williams	Thomson South-Western	13th	2017
2	Statistical Methods	Gupta S P.	S. Chand and Company	4th	2011
3	Quantitative Methods for Economists	Veerachami R.	New Age International Publication	2nd	2008
4	Statistics - An Introductory Analysis	Yamane Toro	Harper and Row Publishers	2nd	2009

IV SEMESTER

Course Title	**APPLIED ECONOMETRICS**						
Course Type	Soft Core- Theory		Total Hours	64	Hours/Week	04	Credits	04
Course Code		Evaluation	Internal	C1+C2 = 15+15		30 Marks	100
			External	Duration	C3	03Hrs	70 Marks	
CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**							

CO-1	To provide knowledge about the application of econometrics.
CO-2	To apply and analyse the time series analysis.
CO-3	To evaluate the time series models
CO-4	To conduct the empirical research or doing a project.

Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs** **Addressed**	**CDLs**
CLO-1	Understands the econometrics application to economic theory.	PSO-1	Understand
CLO-2	Evaluate the time-series models.	PSO-3	Evaluate
CLO-3	Apply the error correction for time series model.	PSO-3	Analyse
CLO-4	Test hypothesis and interpret the results.	PSO-4	Apply
CLO-5	Evaluate the econometric models and empirical analysis.	PSO-4	Evaluate

Course Content	**Duration**
Module: 1 Time Series Analysis	**16Hrs**
1.1. Introduction - Stationary and Non-stationary series	
1.2. Testing of a Module root - Co integration-Error Correction Model	
1.3. Introduction for ARCH and GARCH Modeling.	
Keywords: Understands the econometrics application to economictheory.	
Module: II Demand Analysis	**16Hrs**
2.1. Single Demand equation Model.	
2.2. Dynamic demand analysis	
2.3. Empirical Analysis of Demand for Money; Estimation of Production Function.	
2.4. Cobb- Douglas-CES production function: Trans-log- Phillips Curve	
Keywords: Evaluate the time-series models.	
Module: III Logistic Regression Models	**16Hrs**
3.1. Logit Model	
3.2. Probit Model	
Keywords: Test hypothesis and interpret the results.	
Module: IV Conducting empirical research or doing a project	**16Hrs**
4.1. What is an empirical research project? - What is it for? - Selecting the topic.	
4.2. Review of literature - Permutation of General Model	

4.3.	Empirical works conducted for Indian Economy	
4.4.	Demand analysis - Production Function analysis	
4.5.	Application of Econometrics in Agriculture.	

Keywords: Evaluate the econometric models and empirical analysis

Note: Course content involves 20% of theory and 80% of problems.

Reference:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	An Introduction to Applied Econometrics a time series approach	Kerry Patterson	Macmillan Press LTD	-	2000
2	Introductory Econometrics for finance	Chris Brooks	Cambridge University Press	-	2002
3	Applied Econometrics	Meghnad Desai	Mehra Hill Publishing company Ltd	-	1997
4	Introductory Econometrics with Applications	RamuRamanthan	Thomson- South-western Bangalore	-	2002

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IV SEMESTER

Course Title	**HUMAN DEVELOPMENT: DIMENSIONS AND DISPARITIES**							
Course Type	Soft Core Theory	Total Hours	64	Hours/Week	04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks	
		External	Duration	C3	03 Hr.	70 Marks	100

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able**
CO-1	To understand the concept of human development and measuring human development.
CO-2	To provide knowledge about relationship between economic growth and human development.
CO-3	To understand the consumption and the links with human development.
CO-4	To provide knowledge about new dimensions of human security and human rights and human development.
Mapping of CLOs with PSOs & CDLs	
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	

CLO-1	Understand the nature, scope and significance of human development.	PSO-5	Understand
CLO-2	Analyse the relationship between economic growth and human development.	PSO-5	Analyze
CLO-3	Understand the role of government in financing of health care services.	PSO-3	Understand
CLO-4	Understand the struggles for human freedoms and human rights.	PSO-5	Understand
CLO-5	Evaluate the Millennium Development Goals and Challenges in meeting the goals.	PSO-5	Evaluate

Course Content	Duration

Module: 1 Introduction to Human Development		**16Hrs**
1.1.	Concept of Human Development - Defining Human Development – Measuring Human Development.	
1.2.	HDI - Human Poverty Index - Gender Development Index (GDI) Gender Empowerment Measure (GEM)	
1.3.	Changes in and Implications of HDI and GDI across the Countries	
1.4.	Need for and Significance of Separate Study of Human Development	
1.5.	Nature and Scope and Major Concerns of Human Development as a Branch of Economics	

Keywords: Understand the nature, scope and significance of human development.

Module: II Economic Growth and Human Development		**16Hrs**
2.1.	Relationship between Economic Growth and Human Development	
2.2.	Sustained Human Development - Disrupted Human Development	
2.3.	Missed Opportunities for Human Development- Efficiency in Human Development	
2.4.	Financing Human Development	
2.5.	Growth as a Means to Human Development - Human Capabilities Approach to Development	

Keywords: Analyse the relationship between economic growth and human development.

Module: III Consumption, New Technologies and Human Development		**16Hrs**
3.1.	Consumption from a Human Development Perspective- Concepts of Consumption - Factors Affecting Consumption Options	
3.2.	Consumption and the Links with Human Development	
3.3.	Environmental Sustainability and Human Development	
3.4.	Unequal Human Impacts of Environmental Damage	
3.5	New Technologies and Human Development	

Keywords: Understand the role of government in financing of health care services.

Module: IV Human Development in the New Millennium	**16Hrs**

4.1.	New Dimensions of Human Security	
4.2.	Human Rights and Human Development - Interlinks	
4.3.	The Struggles for Human Freedoms	
4.4.	Promoting Rights in Human Development	
4.5.	The Millennium Development Goals: Concept and Goals	
4.6.	Priority Challenges in Meeting the Goals	
Keywords: Evaluate the Millennium Development Goals and challenges in meeting the goals.		
Note: Course content involves 100% of theory		

Self-Study Component

1. Human development index
2. Sustainable development goals

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Reflections on Human Development,	Haq , Mahbub, Ul	OUP	--	1995
2	The Quality of Life	Nussabaum Martha C and Sin, Amartya	Clarendon Press, Oxford	2nd	1996
3	Theory of Justice,	Ranils	Harvard University Press	3rd	1971
4	Commodities and Capabilities,	Sen, Amartya K	North-Holland, Amsterdam.	1st	1985
5	Development As Freedom,	Sen, Amartya K	Oxford University Press	2nd	2000
6	Human Development Reports,	Moduleed Nations Development Programme	Oxford University Press, Oxford.		1990

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IV SEMESTER- Skill based course

Course Title	SOFTWARE USAGE FOR ECONOMICS						
Course Type	Soft Core- Theory		Total Hours	32	Hours/Week	02	Credits	02
Course Code		Evaluation	Internal	C1+C2 = 10+10		20 Marks	50
			External	Duration	C3	03Hrs	30 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	To understand the usage of Software like SPSS, Eviews and STATA in economics.
CO-2	To enter the different types of data in the software.
CO-3	To calculate the models with the different quantitative applications in the software.

CO-4	To analyse, interpret and present the data.		
Mapping of CLOs with PSOs &CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs** **Addressed**	**CDLs**
CLO-1	Understand usage different software in economics.	PSO-1	understand
CLO-2	Enter the different sets of data and analyse it.	PSO-3	Apply
CLO-3	Able to code and recode the data.	PSO-3	Apply
CLO-4	Able to apply, analyse and evaluate the different economic models	PSO-5	Evaluate
CLO-5	Able to interpret and present the data in the form of projects.	PSO-4	Analyse

Course Content	**Duration**
Module: I Data Estimation	**16Hrs**
1.1. Data Analysis with Statistical Software -Calculation of Probability, Calculation of Central Tendencies : Arithmetic Mean, Median, Measure of Dispersion Standard Deviation and Range, Contingency Table, Chi-square and Cramer's V, Pearson's r, and Spearman's rho	
1.2. Estimation of Correlation Coefficient Zero Correlation Matrix -Partial	
Correlation - Estimation of Simple Regression - Ordinary Least Squares - Estimation of Multiple Regressions.	
Keywords: Enter the different sets of data and analyse it.	
Module: II Test of Statistical Significance	**16Hrs**
2.1. Test of Statistical Significance - „t" Test - F Test - ANOVA Test - Chi- Square Test Construction of Index Numbers - Deflating a Series by Price Indexes - Time Series Analysis and Forecasting.	
Keywords: Able to apply, analyse and evaluate the different economic models	
Note: Course content involves 100% of Practical	

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Social Research Methods	Bryman Alan	Oxford University Press	-	2009
2	Statistics for Business with Computer Application	Edward Minieka	South-Western, USA	-	2000
3	Business Statistics	Sonia Taylor	Palgrave	-	2001
4	How to Do Just Anything on a Computer	-	Reader"s Digest, London	-	2000
5	A First Course in Computers	xena Sanjay,	Vikas Pub, House Private Ltd	-	2009

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<center>**IV SEMESTER- Skill based course**</center>

Course Title		**WRITING AND PUBLICATION**						
Course Type	Soft Core- Theory	Total Hours	32	Hours/Week	02	Credits	02	
Course Code		Evaluation	Internal	C1+C2 = 10+10		20 Marks		50
			External	Duration	C3	03Hrs	30 Marks	

CO No.	Course Objectives (COs) On completion of the course the student will be able to		
CO-1	Understand the importance of research in the subject		
CO-2	Analyse the different types of writing for publication.		
CO-3	Learn to write the research article and proposals		
CO-4	Learn to publish the articles		
Mapping of CLOs with PSOs &CDLs			
CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the importance of writing skills	PSO-1	understand
CLO-2	Learn the different formats of research writing.	PSO-3	Analyse
CLO-3	Write the research proposal	PSO-3	Apply
CLO-4	Publish the research articles.	PSO-5	Apply

Course Content	Duration
Module: I Writing for Publication	**16Hrs**
1.1. Cover letters	
1.2. Formatting and Editing	
1.3 Conference Proposals and Presentation	
1.4 Writing Research Proposal	
Keywords: Learn the different formats of research writing.	
Module: II Publication	**16Hrs**
2.1. Publishing Articles in Academic Journals	
2.2 Publishing Books and in Books	
2.3 Other Sorts of Publishing	
Keywords: Publish the research articles.	
Note: Course content involves 100% of theory	

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Writing for Publication: Tradition and tools that support scholars	Mary Renck Jalongo, Olivia .N. Saracho	Springer	-	2016
2	Writing for Scholarly Publication	Anne Sigismund Huff	SAGE Publication	-	-
3	Writing for Publication	Debbie Epstein, Jane Keneway and Rebecca Boden	SAGE Publication	-	2005

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Generic Elective Courses Offered for Other Departments
II SEMESTER

Course Title	**INDIAN ECONOMY**							
Course Type	Open Elective Paper	Total Hours	32	Hours/Week	02	Credits	02	
Course Code	Evaluation	Internal	C1+C2=15+15			20Marks		
		External	Duration	C3	0Hr	30 Marks		50

CO No.	Course Objectives (COs) On completion of the course the student will be able
CO-1	Understand the concept of features of Indian economy and Human development status in India.
CO-2	Analyse the planning models in India.
CO-3	Understand the population explosion, demographic dividend and population policy.
CO-4	Provide knowledge about concept and measurement of poverty and unemployment.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs) On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the concept of Indian public finance and FDI in India.	PSO-2	Understand
CLO-2	Able to understand the objectives and features of Indian planning.	PSO-2	Understand
CLO-3	Analyze the Indian population growth and demographic dividend.	PSO-5	Analyse
CLO-4	Able to understand the poverty alleviation and employment programme.	PSO-5	Analyse
CLO-5	Evaluate the structural adjustment programmes and stabilization programmes.	PSO-2	Evaluate

Course Content	Duration

Module: 1 An overview of the Indian Economy		14Hrs
1.1.	Features of Indian Economy – Indian economy on the eve of Independence	
1.2.	National income, savings & capital formation – Sectoral composition ofIndian economy	
1.3.	Human development status in India – Infrastructure development	
1.4.	Regional imbalances in development – Indian public finance – Inflation inIndia	
1.5.	FDI in India.	

Keywords: Able to understand the objectives and features of Indianplanning.

Module: II Planning in India		14Hrs
2.1.	Rationale, Objectives & features of Indian planning – planning machinery	
2.2.	Plan formulation, execution & evaluation	
2.3.	Planning Models, Mahalanobis & P.R. Brahmananda& C.N Vakil Model	
2.4.	Regional planning in India – 11thfive year plan, salient features & objectives	
2.5.	60 years of planning in India – planning under globalisation.	

Keywords: Evaluate the structural adjustment programmes and Stabilization programmes

Note: Course content involves 100% of theory.

Self-Study Components

Features of underdeveloped economy - problems of Agriculture, Industry & Infrastructure – Population & economic development – Controlling of population growth – Nexus between poverty & environment – Importance of small scale Industries – Growth & income distribution – employment concept – employment & economic development – planning commission – new industrial policy – role of foreign trade in economic development- occupational structure – Trade liberalization – Monitory & fiscal policy – WTO & GATS – banking structure – VAT-MODVAT- CENVAT- GST

References

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Indian Economy	K.P.M. Sundaram	S. Chand & company Ltd,	3rd	2008
2	Indian Economy – Its Development Experience.	Misra S.K. &Puri V.K.,	Himalaya publishing house,	2nd	2007
3	Indian Economy: Some issues & answers	Acharya Shankar,	Academic foundation		2003
4	Indian Economy since Independence,, New Delhi, 2003.	Kapila Uma	Academic foundation,	1st	2003

5	Economic Policy Reforms & Indian Economy	Kruger O Anne	Oxford University press,		2003
6	R.B.I – Report on Currency &Finance				
7	Government of India Economic Survey,		Ministry of Finance		
8	Planning Commission – 11ᵗʰfive year plan,			Latest	

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<center>**II Semester**</center>

Course Title		**Banking System in India**						
Course Type	**Open Elective Paper**	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100

CO No.	Course Objectives (COs) On completion of the course the student will be able to
CO-1	Understand the concept and importance of the Indian Banking system.
CO-2	Analyse the role of banking sector in India.
CO-3	Understand the historical background of the banking sector in India.
CO-4	Provide knowledge about Reserve Bank of India, Commercial Banks and Regional Rural Banks in India.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the importance of the banking system in India.	PSO-5	Understand
CLO-2	Evaluate the role of reserve bank of India in the economy.	PSO-5	Evaluate
CLO-3	Analyze of assets and liabilities of scheduled Commercial Banks in the banking system.	PSO-1	Analyze
CLO-4	Able to understand the role and structure of the regional rural banks in India.	PSO-5	Understand
CLO-5	Evaluate the development of the cooperative banks and role of RBI in cooperatives.	PSO-2	Evaluate

Course Content	**Duration**
Module: 1 Introduction to Banking System in India	**16Hrs**
1.1. Introduction - Historical Background	
1.2. Banking Prior to 1950 - Development of Banking since 1950	
1.3. Nationalization of Banks (1969)	

1.4.	National Credit Council	
1.5.	Banking Commission	

Keywords: Understand the importance of the banking system in India

Module: II Role of Banking sector in India		**16Hrs**
2.1.	Introduction - Origin and Development	
2.2.	Structure and Management - Functions and Working of Reserve Bank of India	
2.3.	Role of Reserve Bank of India in the Economy.	
2.4.	*Commercial Banks:* Role, Functions - Financial Services-Analysis of assets and Liabilities of Scheduled Commercial Banks - inter Bank Borrowings.	
2.5.	*Regional Rural Banks:* Objectives - Role of RRBs - RBI Assistance - Evaluation of RRBs.	
2.6.	*Cooperative Banks:* Introduction - Organization Structure and Development of Cooperatives - Role of RBI in Cooperative Banks - National Bank for Agriculture and Rural Development (NABARD).	

Keywords: Evaluate the role of reserve bank of India in the economy.

Note: Course content involves 100% of theory

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Indian Financial System	Khan, M. Y.	Tata McGraw-Hill Education,	2nd	2010
2	Indian Financial System,	Machiraju H.R.	Vikas Publishing House PVT Ltd.,	3rd	2015
3	Indian Banking	Parameswaran R and Natarajan S	S.Chand and Co, New Delhi.		2016
4	The Indian Financial System: Markets, Institutions and Services,	Pathak, Bharati V.	Pearson Education India.	2nd	2005
5	Indian Financial System,	Vasant Desai,	Himalaya Publishing House,	5th	2017

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Generic Elective Course (For Other Departments)
III Semester

Course Title		**Demography**						
Course Type	**Open Elective Paper**	Total Hours	64	Hours/Week		04	Credits	04
Course Code	Evaluation	Internal	C1+C2=15+15			30Marks		
		External	Duration	C3	03 Hr	70 Marks		100
CO No.		**Course Objectives (COs)**						

		On completion of the course the student will be able
CO-1		To understand the concept and importance of the demography.
CO-2		To analyse the components of population growth and their interdependence.
CO-3		To understand the measures of population change and sources of population data.
CO-4		To provide knowledge about economic and social implications of sex and age structure and demographic dividend.

Mapping of CLOs with PSOs & CDLs

CLOs No.	Course Learning Outcomes(CLOs) On completion of the course the student will learn to	PSOs Addressed	CDLs
CLO-1	Understand the importance of the growth, structure and distribution of population.	PSO-5	Understand
CLO-2	Understand the Determinants of Sex and Age Structure.	PSO-5	Evaluate
CLO-3	Analyze the components of population growth and their Inter dependence.	PSO-1	Analyze
CLO-4	Understand the determinants of Sex and Age structure.	PSO-5	Understand
CLO-5	Evaluate the patterns of Sex and Age structure in more Developed and less developed countries.	PSO-2	Evaluate

Course Content	Durtation
Module: 1 Introduction	**16Hrs**
1.1. Meaning and Scope of Demography	
1.2. Components of Population Growth and their Interdependence	
1.3. Measures of Population Change	
1.4. Growth, Structure and Distribution	
1.5. Sources of Population Data.	

Keywords: Understand the importance of the growth, structure and distribution of population.

Module: II Sex and Age Structure	**16Hrs**
2.1. Patterns of Sex and Age Structure in More Developed and Less Developed Countries	
2.2. Determinants of Sex and Age Structure	
2.3. Age Structure	
2.4. Economic and Social Implications of Sex and Age Structure	
2.5. Demographic Dividend.	

Keywords: Evaluate the patterns of Sex and Age structure in more developed and less developed countries.

Note: Course content involves 100% of theory

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Population Projections and Their Accuracy,	Agarwal U.D.	B.R.Publishers, New Delhi.	2nd	2005
2	Principles of Population Studies	Bhende A and Kanitkar T.	Himalaya Pub., House, Mumbai	5th	2010
3	Principles of Demography	Bogue D.J.	John Wiley New York.		2001
4	Fundamentals of Demography	Hans Raj	Surjeet Publications, Delhi.		1999
5	An Introduction to Study of Population,	Misra B.D.	South Asian Publishers, NewDelhi.	4th	2014

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III SEMESTER

Course Title	**ENVIRONMENTAL ECONOMICS**							
Course Type	Open Elective Paper	Total Hours	32	Hours/Week	04	Credits	04	
Course Code	Evaluation	Internal	C1+C2=15+15			20 Marks		
		External	Duration	C3	03 Hr	30 Marks		50

CO No.	**Course Objectives (COs)** **On completion of the course the student will be able to**
CO-1	Understand the concept and importance of the study of environmental economics.
CO-2	Analyse the environmental pollution and types of pollution
CO-3	Understand the environmental accounting and various approaches to environmental accounting.
CO-4	Provide knowledge about global environmental policy and international action for environmental protection.

Mapping of CLOs with PSOs & CDLs			
CLOs No.	**Course Learning Outcomes(CLOs)** **On completion of the course the student will learn to**	**PSOs Addressed**	**CDLs**
CLO-1	Understand the importance of the study of Environmental Economics	PSO-5	Understand
CLO-2	Understand the Impact of population growth on Environment.	PSO-5	Evaluate
CLO-3	Analyze the Green accounting & Green Economics.	PSO-1	Analyze
CLO-4	Understand the Concept of Environmental Accounting.	PSO-5	Understand
CLO-5	Evaluate the environmental policy in India and global Environmental policy.	PSO-2	Evaluate

Course Content		Duration
Module: 1 Introduction to Environmental Economics		**16Hrs**
1.1.	Environmental Economics its nature & scope	
1.2.	Importance of the study of Environmental Economics	
1.3.	Sustainable development Concept & strategies to achieve sustainable development	
1.4.	Environment & Economic development – Kuznets Environmental curve	
	Material balanced principle-(Entropy law) – Environmental stress – Externalities.	
Keywords: Understand the Impact of population growth on Environment.		
Module: II Environmental Pollution		**16Hrs**
2.1.	Concept of Environmental pollution	
2.2.	Impact of population growth on Environment with reference to output growth and environment	
2.3.	Types of pollution Air, Water, Noise, Chemical, thermal and degradation of land& habitant – causes & consequences - climate change & Global warming.	
Keywords: Evaluate the environmental policy in India and global environmental policy.		
Note: Course content involves 100% of theory.		

References:

Sl. No	Title of the book	Author	Publisher	Edition	Year
1	Environmental Economics,	Kolstad- Charles	Oxford University press	2nd	2001
2	Environmental Protection Challenges & Issues	MahajanV.S, Deep &Deep	New Delhi		
3	Environmental Economics. In theory & practice publication	Nick, Hantey, Manasa	New Delhi		2003
4	Environmental Economics,	Rabindra N Bhattacharya	Oxford University press	5th	2014
5	Environmental Economics Readers in Economics	Shankar U	Oxford University press		2008
6	United Nations Accounting & Valuation of Environment Vol I & II A premier for Developing countries		ESCAP		

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Blue Print of the Question Paper for I-IV Semesters

St. Philomena's College (Autonomous), Mysore			
M.A. Economics			
Time: 3 Hours			**Max Marks: 70**
PART-A			
1		**Answer any FIVE of the following:**	**5x2=10**
	a		
	b		
	c		
	d		
	e		
	f		
	g		
	h		
PART-B			
Answer any SIX of the following:			**6x5=30**
2			
3			
4			
5			
6			
7			
8			
9			
PART- C			
Answer any THREE of the following:			**3x10=30**
10			
11			
12			
13			
14			