MANONMANIAM SUNDARANAR UNIVERSITY
DEPARTMENT OF ECONOMICS

Choice Based Credit System (CBCS)

Learning Outcomes based Curriculum Framework (LOCF) for Post-graduate Programme

M.A. ECONOMICS

(Syllabus with effect from 2023-24 admission)

MANONMANIAM SUNDARANAR UNIVERSITY

Vision

To provide quality education to reach the un-reached

Mission

- To conduct research, teaching and outreach programmes to improve conditions of human living

- To create an academic environment that honours women and men of all races, caste, creed, cultures and an atmosphere that values intellectual curiosity, pursuit of knowledge, academic freedom and integrity

- To offer a wide variety of off-campus educational and training programs, including the use of information technology, to individuals and groups.

- To develop partnership with industries and government so as to improve the quality of the workplace and to serve as catalyst for economic and cultural development

- To provide quality / inclusive education, especially for the rural and un-reached segments of economically downtrodden students including women, socially oppressed and differently abled.

DEPARTMENT OF ECONOMICS

Vision

- Strive to make the Department for Centre of Excellence in Economics Research through field based research and extension activities.

Mission

- To provide a highest platform to the students to learn and practice the modern technologies to meet the growing demands in all possible manner.

- To provide renowned department for learning, experimenting and continuing research

- Encouraging the students to understand the best of practices and standards of quantitative analysis and apply the same while developing policies that benefit the society.
- To make the learners recognize the need for engaging themselves in continuing professional development.
- Promoting students to integrate mathematical, technological ability and research-based knowledge to analyze the economic issues

I - PREAMPLE

The Department of Economics was launched 3rd August 2006 with the objectives of providing quality education in the field of economics and its related areas of research. The Department is accomplished with various research and development by taking up research and consultancy activities from various funding agencies like UGC, ICSSR, ICAR, Ministry of Health and Family Welfare, State Planning Commission, Government of Tamil Nadu for economic development of this region. The department is also enriched by the expertise lectures offered by distinguished professors from various nationally reputed institutions. At present, department offers two academic programmes.
1. M.A in Economics
2. Ph.D in Economics

The department has released 8 batches of M.A Economics students and 25 Ph.D., degree holders and most of them have secured good and covetable placement in public and private sector establishments. The Department of Economics is proactively engaging multi-disciplinary research and research projects that cover social science research like rural development, environment, health care, women studies, coastal research economics, irrigation, ground water and development economics and bio-diversity and climate change. The Department of Economics, since its inception has been organizing national seminars annually and also conducts workshops, discussions, and symposiums with the active participation of faculty and students involving academicians and experts in the concerned areas. Theses academic discussions and discourses will enable the department to nurture and emerge as the most reputed post graduate study and research centre in India. The department has done extensive research and consultancy works for policy formulation for the State of Tamil Nadu through State Planning Commission, Government of Tamil Nadu particularly for District Human Development Reports for Tirunelveli and Thoothukudi and 9 block level perspective plan under State Balanced Growth Fund (SBGF) with the funding of State Planning Commission, Govt. of Tamil Nadu and it addresses economic backwardness. In

addition, the Department of Economics has assisted as per the direction of State Council of Educational Research and Training (SCERT) for XI and XII STD Text book writing assignments of State Board (Tamil & English medium), Government of Tamil Nadu which has been highly acclaimed by various academic institutions on a par with Central Board school education standards.

ELIGIBILITY FOR ADMISSION ASSESSMENT OF STUDENTS PERFORMANCE

The academic eligibility for admission to M.A. Economics programme offered in the Department is any candidate who has passed degree in B.A (Economics)/ B.B.A. / B.B.E (Business Economics) are eligible with at least 50% marks in the Bachelor's degree and at least 50% marks in Economics or equivalent grade in the aggregate; OR Bachelor's degree with at least 60% marks in any of the allied subjects viz. Commerce, Statistics, Mathematics, Engineering or any of the Social Sciences subjects. SC/ST students will be provided a relaxation of 5% in the eligibility of marks.

RESERVATION

As per government/university rules

Admission to M.A Economics programme is purely on the basis of Entrance Examination. The Entrance Examination will be of 60 minutes duration (i.e. One hour) for 50 marks. The questions for Entrance Examination are of objective multiple choices with 50% of questions from Economics, 25% from Statistics& Mathematical Economics and 25% questions as General Awareness expecting from a graduate of a university.

TANSCHE REGULATIONS ON LEARNING OUTCOMES-BASED CURRICULUM FRAMEWORK FOR POSTGRADUATE EDUCATION	
Programme	**M.A. ECONOMICS**
Programme Code	**2101**
Duration	**PG - Two Years**
Programme Outcomes (Pos)	**PO1: Problem Solving Skill** Apply knowledge of Management theories and Human Resource practices to solve business problems through research in Global context. **PO2: Decision Making Skill** Foster analytical and critical thinking abilities for data-based decision-making. **PO3: Ethical Value** Ability to incorporate quality, ethical and legal value-based perspectives to all organizational activities. **PO4: Communication Skill** Ability to develop communication, managerial and interpersonal skills. **PO5: Individual and Team Leadership Skill** Capability to lead themselves and the team to achieve organizational goals. **PO6: Employability Skill** Inculcate contemporary business practices to enhance employability skills in the competitive environment. **PO7: Entrepreneurial Skill** Equip with skills and competencies to become an entrepreneur. **PO8: Contribution to Society** Succeed in career endeavors and contribute significantly to society. **PO 9 Multicultural competence** Possess knowledge of the values and beliefs of multiple cultures and

	a global perspective.
	PO 10: Moral and ethical awareness/reasoning
	Ability to embrace moral/ethical values in conducting one's life.
Programme Specific Outcomes (PSOs)	**PSO1 – Placement** To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions. **PSO 2 - Entrepreneur** To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations. **PSO3 – Research and Development** Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development. **PSO4 – Contribution to Business World** To produce employable, ethical and innovative professionals to sustain in the dynamic business world. **PSO 5 – Contribution to the Society** To contribute to the development of the society by collaborating with stakeholders for mutual benefit.

Template for P.G., Programmes

Semester–I	Credit	Hours	Semester-II	Credit	Hours	Semester-III	Credit	Hours	Semester–IV	Credit	Hours
1.1. Core-I	5	7	2.1. Core-IV	5	6	3.1. Core-VII	5	6	4.1. Core-XI	5	6
1.2 Core-II	5	7	2.2 Core-V	5	6	3.2 Core-VIII	5	6	4.2 Core-XII	5	6
1.3 Core – III	4	6	2.3 Core – VI	4	6	3.3 Core – IX	5	6	4.3 Project with viva voce	7	10
1.4 Discipline Centric Elective -I	3	5	2.4 Discipline Centric Elective – III	3	4	3.4 Core – X	4	6	4.4 Elective - VI (Industry / Entrepreneurship) 20% Theory 80% Practical	3	4
1.5 Generic Elective-II:	3	5	2.5 Generic Elective -IV:	3	4	3.5 Discipline Centric Elective - V	3	3	4.5 Skill Enhancement course / Professional Competency Skill	2	4
			2.6 NME I	2	4	3.6 NME II	2	3	4.6 Extension Activity	1	
						3.7 Internship/ Industrial Activity	2	-			
	20	30		22	30		26	30		23	30
Total Credit Points -91											

Choice Based Credit System (CBCS), Learning Outcomes Based Curriculum Framework (LOCF) Guideline Based Credits and Hours Distribution System for all Post – Graduate Courses including Lab Hours

First Year – Semester – I

Part	List of Courses	Credits	No. of Hours
	Core – I	5	7
	Core – II	5	7
	Core – III	4	6
	Elective – I	3	5
	Elective – II	3	5
		20	**30**

Semester-II

Part	List of Courses	Credits	No. of Hours
	Core – IV	5	6
	Core – V	5	6
	Core – VI	4	6
	Elective – III	3	4
	Elective – IV	3	4
	Skill Enhancement Course [SEC] - I	2	4
		22	**30**

Second Year – Semester – III

Part	List of Courses	Credits	No. of Hours
	Core – VII	5	6
	Core – VIII	5	6
	Core – IX	5	6
	Core (Industry Module) – X	4	6
	Elective – V	3	3
	Skill Enhancement Course - II	2	3
	Internship / Industrial Activity [Credits]	2	-
		26	**30**

Semester-IV

Part	List of Courses	Credits	No. of Hours
	Core – XI	5	6
	Core – XII	5	6
	Project with VIVA VOCE	7	10
	Elective – VI (Industry Entrepreneurship)	3	4
	Skill Enhancement Course – III / Professional Competency Skill	2	4
	Extension Activity	1	-
		23	**30**

Total 91 Credits for PG Courses

METHODS OF EVALUATION		
Internal Evaluation	Continuous Internal Assessment Test	**25 Marks**
	Assignments / Snap Test / Quiz	
	Seminars	
	Attendance and Class Participation	
External Evaluation	End Semester Examination	**75 Marks**
Total		**100 Marks**
METHODS OF ASSESSMENT		
Remembering (K1)	• The lowest level of questions require student store call information from the course content. • Knowledge questions usually require students to identify information in the text book.	
Understanding (K2)	• Understanding of facts and ideas by comprehending organizing, comparing, translating, interpolating and interpreting in their own words. • The questions go beyond implore call and require students to combine at together.	
Application (K3)	• Students have to solve problems by using/applying a concept learned in the classroom. • Students must use their knowledge to determine exact response.	
Analyze (K4)	• Analyzing the question is one that asks the students to breakdown something into its component parts. • Analyzing requires students to identify reasons causes or motives and reach conclusions or generalizations.	
Evaluate (K5)	• Evaluation requires an individual to make judgment on something. • Questions to be asked to judge the value of an idea, a character, a work of art, or a solution to a problem. • Students are engaged in decision-making and problem–solving. • Evaluation questions do not have single right answers.	
Create (K6)	• The questions of this category challenge students to get engaged in creative and original thinking. • Developing original ideas and problem solving skills.	

PROGRAMME OUTCOMES (PO) - PROGRAMME SPECIFIC OUTCOMES (PSO) MAPPING

PROGRAMME SPECIFIC OUTCOMES (PSO)					
	PO1	**PO2**	**PO3**	**PO4**	**PO5**
PSO1	3	3	3	3	3
PSO2	3	3	3	3	3
PSO3	3	3	3	3	3
PSO4	3	3	3	3	3
PSO5	3	3	3	3	3

Level of Correlation between PO's and PSO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value
1 – Low
2 – Medium
3 – High
0 – No Correlation

M.A., ECONOMICS

SYLLABUS

FIRST YEAR - FIRST SEMESTER

Course Components	Name of the Course	Ins. Hrs	Credits	CIA	External	Total
Core Paper-I	Advanced Micro Economics	7	5	25	75	100
Core Paper-II	Indian Economic Development and Policy	7	5	25	75	100
Core Paper-III	Statistics for Economists	6	4	25	75	100
Elective-I	1. Modern Economic Thought **(or)** 2. Rural Economics**(or)** 3. Sectoral Growth in India (**e Pathshala**)	5	3	25	75	100
Elective-II	1. Regional Economics **(or)** 2. Welfare Economics**(or)** 3. Economics of Infrastructure	5	3	25	75	100
	Total	30	20			

FIRST YEAR - SECOND SEMESTER

Course Components	Name of the Course	Ins. Hrs.	Credits	CIA	External	Total
Core Paper-IV	Monetary Economics	6	5	25	75	100
Core Paper-V	Agriculture Economics	6	5	25	75	100
Core Paper-VI	Mathematical Economics	6	4	25	75	100
Elective-III	1. Gender Economics **(or)** 2. Urban Economics**(or)** 3. Economic Thoughts of Nobel Laureates	4	3	25	75	100
Elective-IV	1. Resource Economics **(or)** 2. Economics of Climate Change**(or)** 3. MOOCs Paper (Available in Swayam)	4	3	25	75	100
Skill Enhancement Course / NME	Social Ethics and Responsibilities – Women Empowerment, Disability, Social Inclusion.	4	2	40	60	100
	Total	30	22			

SECOND YEAR - THIRD SEMESTER

Course Components	Name of the Course	Ins. Hrs.	Credits	CIA	External	Total
Core Paper-VII	Advanced Macro Economics	6	5	25	75	100
Core Paper-VIII	Health Economics	6	5	25	75	100
Core Paper-IX	Research Methodology	6	5	25	75	100
Core Paper-X	Econometric Methods	6	4	25	75	100
Elective-V	1. Population studies /Demography (or) 2. Economics of Coastal Resources (or) 3. MOOCs Paper (Available in Swayam)	3	3	25	75	100
Skill Enhancement Course	Personality Development -Facing of Interview in Private and Government Jobs	3	2	40	60	100
Internship/ Industrial activity	Skill Enhancement in Companies and Institutions	-	2	-	-	
	Total	30	26			

SECOND YEAR - FOURTH SEMESTER

Course Components	Name of the Course	Ins. Hrs.	Credit	CIA	External	Total
Core Paper-XI	International Economics	6	5	25	75	100
Core Paper-XII	Development Economics	6	5	25	75	100
Project with Viva – Voce	Project Work	10	7	25	75	100
Elective-VI	1. Economics of Social Issues **(or)** 2. Entrepreneurial Development 3. Public finance and policy in India (**e pathshala**)	4	3	25	75	100
Skill Enhancement Course / Professional Competency Skill	1.Role of MSMEs - Practice of Public and Private Companies and Banking Systems 2.Skill Development of Tally (Learning of Tally for Employability) 3.Competitive Examinations (UPSC/TNPSC/IBPS)	4	2	40	60	100
Extension Activity	Extension Activity	-	1			
	Total Credit	30	23			

SEMESTER	Hours	Credits
I	30	22
II	30	22
III	30	24
IV	30	23
Total	**120**	**91**

Papers	No. of Papers X Credits	Total Credits
Core Papers	12 X 4	48
Electives	6 X 3	18
Ability Enhancement Course	3 X 2	6
Skill Enhancement Course	4 X 2	8
Professional Competency Skill	1 X 2	2
Industry Module	1 X 3	3
Extension Activity	1 X 1	1
Project	1 X 3	3
Internship	1 X 2	2
Total		**91**

Optional Core Courses:

1. Agricultural Economics

2. Industrial Economics

3. Health Economics

4. Managerial Economics

5. Financial Economics

6. History of Economic Thought

7. Computer Application in Economics

Optional Elective Courses:

1. Economics of Infrastructure

2. Economics of Sustainable Development

3. Maritime Economics

4. Population Studies/ Demography

5. Economic Thoughts of Nobel Laureates

6. Economics of Natural Disasters

SEMESTER – I

ADVANCED MICRO ECONOMICS

Course Objectives:

1. To make the students to understand consumer behavior with the theories of Demand and Production.
2. To elaborate various market structure and the theories of distribution.

UNIT I: CONSUMER CHOICE

Cardinal and ordinal utility - Indifference curve approach – Slutsky's Decomposition of price effect into substitution effect and income effect – Consumer surplus - Marshall's and Hicksian measures – Compensatory Demand Curve- Revealed Preference Theorem- and derivation of Marginal Utility schedule for money income.

UNIT II: ECONOMICS OF INFORMATION

Informational asymmetry –- Choice under Uncertainty - N-M Index – Inter-temporal choice - Market for lemons- Adverse selection – Insurance market and adverse selection – Solution to principal agent problem- Hidden action (Moral Hazard) - Signalling and Screening.

UNIT III: MARKET STRUCTURE MODELS

  a. Perfect competition – Price and output determination – Optimum firm
  b. Monopoly – Short run and long run equilibrium - Price discrimination monopoly control, and regulation – Contestable Market
  c. Monopolistic competition–Chamberlin Model- selling costs - Excess capacity
  d. Oligopoly – Duopoly price game-dominant strategy-Nash Equilibrium Non-collusive Models - Cournot- Bertrand – Chamberlin– Edgeworth–Sweezy – Stackelberg- Oligopoly - Collusive Models - Cartels and mergers -Price leadership - Base point price system
  e. Monopsony – Price and output determination – Workable competition.

UNIT -IV: ALTERNATIVE THEORIES OF FIRM

Full Cost Pricing Rule- Limits pricing theory- Bains Theory- Sylos-Labini Model-Modigliani's Models- Input-output model -Linear programming applications in decision making- Peak Load Pricing – Administered Pricing- Purchasing Power Parity Price.

UNIT -V: DISTRIBUTION THEORIES

Neo-classical approach – Marginal productivity theory; Product exhaustion theorem; - Modern theory of distribution – Factor Pricing in imperfect product and factor markets- Determination of Wages –Labour supply and wage determination – Role of trade unions and collective bargaining- Theories of Interest- Theories of Profit.

Text Books:
1. Jhingan M.L, (2004 Reprint) Advanced Economic Theory (Vrindha Publications (P) Ltd., New Delhi.
2. Agarwal, H.S. Micro Economic Theory, (Ane's Books Pvt. Ltd.,) New Delhi.
3. Kanmony, Cyril. J, (2016) Advanced Micro Economics (Himalaya Publishing House, Mumbai.)

References:
1. Hal R. Varian (2004), Intermediate Micro Economics (East-West Press: New Delhi).
2. Ruffin Roy. J (1992), Intermediate Micro Economics Harper & Collins Publishers.
3. Koutsyiannis A. (1978), Modern Micro Economics, (Macmillan- London).

Web Resources:
1. http://open.oregonstate.education/intermediatemicroeconomics/chapter/module-1
2. http://saylordotorg.github.io/text_introduction-to-economic analysis/s16-monopoly.html
3. http://saylordotorg.github.io/text_introduction-to-economic analysis/s17-games-and -strategic-behaviour.html

Course Outcomes (Cos):
Upon Completion of this course, the Students will be able

No.	Course Outcomes	K-Levels
CO1	To illustrate and analyse the theories of consumer behavior	K1, K2, K4
CO2	To illustrate and identify the choice under uncertainty.	K2, K3
CO3	To compare how price and output is determined in different market situations and evaluate the market structures	K2, K4, K5
CO4	To identify and examine the alternative theories of firms.	K3, K4
CO5	To define, explain, and compare the theory of distribution.	K1, K2, K4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

CORE – II

INDIAN ECONOMIC DEVELOPMENT AND POLICY

Course Objectives:

1. To provide a macroeconomic understanding of the Indian Economy.
2. The students become aware of various challenges of the Indian Economy.

UNIT 1: INTRODUCTION

Growth and Structural Change Indian economy at Independence- The policy framework: statist policy, transition to market-oriented policy, role of erstwhile Planning Commission and NITI Aayog- Two phases of growth (1950-1980 and 1980 onwards), factors underlying turnaround- Structural change in Indian economy.

UNIT 2: AGRICULTURAL AND INDUSTRIAL SECTOR

Agricultural and Industrial Sectors - Agricultural Sector Performance of agricultural sector, factors determining agricultural growth - Factors underlying food inflation- Agricultural price policy and food security Industrial Growth - Industrial growth before and after reforms - Dualism in Indian manufacturing- Issues in performance of public sector enterprises and privatization.

UNIT 3: FISCAL DEVELOPMENTS

Fiscal Developments, Finance and External Sector Expenditure trends- GST: rationale and impact- Evolution of the financial sector in post-liberalization period- External sector performance: emergence of India as major exporter in services, performance of manufacturing sector.

UNIT 4:POVERTY AND INEQUALITY

Poverty and Inequality - Measuring poverty in India: Selection of poverty lines- Poverty in pre and post liberalization periods- Impact of growth on poverty- PDS vs cash transfers, feasibility of universal basic income in India - Inequality in India in pre and post liberalization periods.

UNIT 5:SOCIAL SECTOR

Social Issues Gender gap in India and trends in female labour force participation rates, factors determining female labour force participation- Employment: changing nature of employment in India, "jobless growth"- Labour in informal sector- India's graphic transition.

Text Books:
1. Sundaram K P M.,(2002),Indian Economy , 42 revised edition., S.Chand Publications
2. Misra,S, &Puri, V.,(2020.), Indian Economy, Revised Edition., S.Chand Publications

Reference Books:
1. KaushikBasu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.
2. Uma Kapila (Ed.) (2018), Indian Economy since Independence, Academic Foundation, New Delhi, 29th Edition.
3. AshimaGoyal (Ed.) The Oxford Handbook of the Indian Economy in the 21st Century: Understanding the Inherent Dynamism, Oxford University Press.

Web References:
1. https://www.adb.org/countries/india/economy
2. https://www.oecd.org/economy/india-economic-snapshot/
3. https://www.indiabudget.gov.in/economicsurvey/

Course Outcomes (Cos):

Upon Completion of this course, the Students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the Structural change in Indian economy	K_1, K_2, K_3, K_4
CO2	Assess the Performance of agricultural and Industrial sector	K_1, K_2, K_3, K_4
CO3	Ability to learn the trends in the economy	K_1, K_2, K_3, K_4, K
CO4	Understand the Impact of Poverty	K_1, K_2, K_3, K_4
CO5	Identify Social Issues like Unemployment, Gender disparities	K_1, K_2, K_3, K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	2	3
CO5	3	3	3	2	3
Weightage	15	15	15	13	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low,2 – Medium, 3 – High,0 – No Correlation

CORE – III

STATISTICS FOR ECONOMISTS

Course Objective:

1. To provide a strong foundation in statistical concepts and develop skills in data handling and research.
2. The course facilitates in inferring the intensity of relationship between multiple variables and building appropriate statistical models. The models thus formulated can be tested for their significance and can be used for forecasting

UNIT I: PROBABILITY

Probability - Addition and Multiplication Theorems - Conditional Probability - Discrete and Continuous - Random Variables - Mathematical Expectations – Bayes Theorem - Theoretical Distributions - Binomial, Poisson and Normal.

UNIT II: SAMPLING AND HYPOTHESIS TESTING

Sampling Theory - Types of Sampling - Sampling Distributions - Parameter and Statistic - Testing of Hypothesis - Level of Significance - Type I and Type II Errors - Standard Error - Properties of Estimator.

UNIT III: TEST OF SIGNIFICANCE LARGE AND SMALL SAMPLE

Difference between Large and Small Samples - Test of Significance for Large Samples - Test for Two Means and Standard Deviations - Proportion and Confidence Interval - Small Sample Test – t-test - Paired t- test - Chi-square Test- Test of Goodness of Fit.

UNIT IV: ANALYSIS OF VARIANCE

F test: Assumptions in F test - Analysis of Variance: Assumptions – One-Way and Two-Way Classifications.

UNITV: STATISTICAL DECISION THEORY

Definitions – Concepts – Maximin - Minimax - Bayes Criterion - Expected Monetary Value - Decision Tree Analysis: Symbols - Steps - Advantages and Limitations.

Text Books

1. Gupta S.P., Statistical Methods, Sultan Chand and Sons, New Delhi, 2017.

2. Anderson, Sweeney and Williams, "Statistics for Business and Economics",Cengage, 2014.

References:

1. Aggarwal. Y.P (2002), "Statistics Methods – Concepts Application and Computation", Sterling Publishers Private Ltd., New Delhi.

2. Vittal P.R., Mathematical Statistics, Margham Publications.

3. Pillai R.S.N. and Bagavathi V (2010), Statistics, Sultan & amp; Chand Sons, New Delhi.

4. Kanmony, Cyril. J, (2022) Statistical Methods (Scitech Publications, Chennai)

Web Resources

1. https://www.statista.com.

2. https://techjury.net

3. https://dss.princeton.edu/online_help/analysis/interpreting_regression.htm

Course Outcomes:
Upon Completion of this course, the Students will be able to

No.	Course Outcomes	K-Levels
CO1	Summarize the basic Probability rules and understand theoretical distributions.	K1 & K2
CO2	Acquire knowledge on the various sampling methods and testing of Hypotheses	K2 & K3
CO3	Use t test and chi square for analysis	K4
CO4	Understand the importance of one and two way ANOVA	K5
CO5	Know the various Decision making tools available	K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	2	2
CO2	3	2	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	2	3	3	2	3
Weightage	14	13	15	13	14
Weighted percentage of Course Contribution to Pos	2.8	2.6	3	2.6	2.8

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

ELECTIVE – I (1)

MODERN ECONOMIC THOUGHT

Course Objectives:
1. To trace the ideas of Modern Economists
2. To understand the contribution of the Economists.

UNIT I: CLASSICAL ECONOMIC THOUGHT
Economic ideas of Irving Fisher –The Quantity theory of Money- Theory of Interest. Joseph Alois Schumpeter - Method of Study –Theory of Economic Development- Role of Entrepreneur – Innovation-Business Cycles – Capitalism and Socialism . J.K. Galbraith – The objective of Economic Progress- Concept of Countervailing Power.

UNIT II: NEO CLASSICAL ECONOMIC THOUGHT
RagnarNurske – Foreign Resources – Capital Formation –Disguised Unemployment **,**Mrs- Joan Robinson –Imperfect Competition – F.Y .Edgeworth –Mathematical Economic Analysis –Three Dimensional Utility

UNIT III: KEYNESIAN ECONOMIC THOUGHT
Lord Lionel Robbins – Definition of Economics-Causes of Depression -Milton Friedman – Quantity Theory of Money –Permanent Income Hypothesis ,Friedman and Savage Hypothesis , Paul A.Samuelson –Impact of Keynesian Economics –Revealed Preference Theory –Business Cycles –Social Welfare Function-Samuelson's Utility Possibility Approach

UNIT IV: POST KEYNESIAN ECONOMIC THOUGHTS
Ideas of Modern Indian Economists-R.K.Mukerjee- Institutional theory of Economics-Regional Economics - Ecological Theory of Population -Planning in India, J.K.Mehta – Static and Dynamic Economics -Economics of Welfare -Economics of Growth and Development-Economics of Fast

UNIT V: INDIAN ECONOMISTS
C.N.Vakil -Planning- Wage -Goods Model-Role of Technological Progress-Poverty -Deficit Financing and Public Expenditure, V.K.R.V.Rao -Economic Activities -Institutional Development-Deficit Financing-Fiscal Policy-Human Factor in Economic Growth-Amartya Kumar Sen – Poverty and Famine ,Poverty and Inequality-Concept of Capability-Entitlement - Choice of Techniques.

Text Books:

1. Dr.U.C.Kulshrestha (1994) ,History of Economic Thought ,Lakshmi NarainAgarwal
2. Dr.S.Sankaran (2006) ,A History of Economic Thought ,Margham Publications

Reference Books:
1. Eric Roll (1956) A History of Economic Thought,PrenticeHall,Inc,U.S.A,
2. Dr.PankajSrivastava (2018) Economic Thinkers , DND Publications ,Jaipur
3. M.L.Jhingan,M.Girija and L.Sasikala (2011),History of Economic Thought, Vrindha Publications

Web Resources:
1. https://ebrary.net/112930/history/a_brief_history_of_economic_thought
2. https://www.exploring-economics.org
3. https://www.econlib.org

Course Outcomes (COs):
Upon completion of this Course, the students will be able to

S.No	Course Outcomes	K-Levels
CO1	Understand modern economic concept of role of Entrepreneur Innovation, BusinessCycles and Capitalism and Socialism.	K_1, K_2, K_4
CO2	Ability to understand about Capital Formation, Disguised UnemploymentImperfectCompetition and Mathematical Economic Analysis	K_1, K_2, K_3, K_4
CO3	Understand the ideas ofPermanent Income Hypothesis, Revealed Preference Theory, Social Welfare Function and Samuelson's Utility Possibility Approach	K_1, K_2, K_4
CO4	Gain knowledge about the ideas of Modern Indian Economists-Regional Economics, Ecological Theory of Population - Economics of Growth and Development-Economics of Fast	K_1, K_2, K_4
CO5	Understand economic ideas like role of Technological Progress-Poverty - Deficit Financing and Public Expenditure, Human Factor in Economic Growth and Inequality and Concept of Capability	K_1, K_2, K_3, K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's

  (Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

    Assign the value

     1 – Low

     2 – Medium

     3 – High

    0 – No Correlation

ELECTIVE – I (2)

RURAL ECONOMICS

Course Objectives:

1. To understand rural economicdevelopment in India
2. To know about the Rural Empowerment Programs initiated by Government of India

UNIT I: INTRODUCTION TO RURAL ECONOMICS

Nature and Scope of Rural Economics - Inter-disciplinary approach of Rural Economics – Components - Structure and Characteristics -Pre and Post-independence - Rural Development: Meaning, Nature and Scope - Factors Affecting Rural Growth

UNIT II: RURAL RESOURCES AND RURAL DEVELOPMENT THEORIES

Rural Resources: Nature, Types and Magnitude - Rural Resources Management and Development - Application of Technology in Rural Development – Problems and prospects - W.W. Rostow's - Lewis-Fei-Ranis and Gandhian Approach to Rural Development.

UNIT III: RURAL DEMOGRAPHY AND OCCUPATIONAL STRUCTURE

Demography: Population Size, Sex and Age Composition - Density of Population- Population Problems and Challenges – Family Welfare Measures in Rural India - Occupational Structure: Nature of Rural Occupations - Occupational Distribution in Rural India – The Concept of Work Participation Rates.

UNIT IV: RURAL POVERTY AND UNEMPLOYMENT

Rural Poverty: Meaning, Estimates, Causes and Consequences – Unemployment: Meaning, Types and Magnitude of Rural Unemployment - Causes and Consequences - National Programmes for Rural Development - Community Development Programmes and Employment Guarantee Schemes.

UNIT V: RURAL EMPOWERMENT PROGRAMMES

Bharat Nirman, Provisions of Urban Amenities in Rural Area (PURA), Mahatma Gandhi National Rural Employment Guarantee Act - Agencies for Rural Development: Government, Semi-Government Organisations, Co-Operative Institutions, Non-Government Organisations and Voluntary Agencies for Rural Development.

Text Books:
1. Vasant Desai: Rural Development in India, Himalaya Publishing House, Mumbai, 2012.
2. Dutt and Sundaram- Indian Economy, S.Chand Publications, New Delhi, 2013-07-02.

References Books:
1. Singh, K., &Shishodia, A. (2016). Rural development: Principles, policies, and management. SAGE Publishing India.
2. Hoff, K., Braverman, A., &Stiglitz, J. E. (1993). The economics of rural organization. Oxford: Oxford University Press.
3. Hill, B., & Ray, D. (1987). Economics for agriculture: food, farming and the rural economy. Basingstoke, UK: Macmillan Education.

Web Resources:
1. https://www.kobo.com/us/en/ebooks/public-finance
2. https://www.amazon.in/PUBLIC-FINANCE-AMBAR-GHOSH-ebook/dp/B07W5F2P1Q
3. https://www.niti.gov.in/sites/default/files/2021-08/11_Rural_Economy_Discussion_Paper_0.pdf

Course Outcomes (Cos):
Upon Completion of this course, the Students will be able

No.	Course Outcomes	K-Levels
CO1	To label and interpret the nature and scope of rural economics.	K1,K2,
CO2	To define and demonstrate the theories of rural development and rural resources.	K1,K2,
CO3	To recall, outline and determine rural demography and occupation structure.	K1,K2,K5,
CO4	To organize, examine and evaluate rural poverty and unemployment.	K3,K4,
CO5	To summarize, develop and explain the rural empowerment programs.	K2,K3,K5,

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value

1 – Low, 2 – Medium, 3 – High,0 – No Correlation

SEMESTER - I

ELECTIVE – I (3)

SECTORAL GROWTH IN INDIA (e - Pathshala)

Course Objectives:
The main objectives of this course are to:
1. To understand the overall role and nature of agricultural growth for in India.
2. To acquire theoretical knowledge to understand industrial growth, various industrial policy, New economic policy and Labour market reforms in India
3. To enable the students to evaluate balance of Payments- Foreign Trade Policy- EXIM Policy (Pre and Post reform) – FERA and FEMA.

UNIT I: ROLE OF AGRICULTURE AND POLICY
Role and nature of agriculture (Cropping pattern) – Institutional framework: Land reforms-Agricultural inputs-Agricultural production and Productivity in India – Green Revolution-Agricultural Credit- Agricultural Price policy and marketing- Agriculture subsidies and food security in India- Agricultural labourer.

UNIT II: INDUSTRIAL GROWTH AND LABOUR MARKET
Industrial Growth and Planning period - Industrial Policy- Major Industries in India- Micro, Small, Medium enterprise in India – Public sector enterprises- Liberalization, Privatization, Globalization and Disinvestment- Problem of sick industries- Labour Market reforms in India.

UNIT III: SERVICE SECTOR AND CAPITAL MARKETS
Service sector: An overview- Price behaviour- Financial sector reforms- Commercial banks, Cooperative banks and RBI – Money Market- Review of Monetary Policy and Interest rate Policy- Capital Market and SBI – Institutional finance – Major Trends: Structure and Direction of Foreign Trade.

UNIT IV: BALANCE OF PAYMENTS AND EXIM POLICY
Balance of Payments- Foreign Trade Policy- EXIM Policy (Pre and Post reform) – FERA and FEMA.

UNIT V: GLOBALIZATION AND WTO
Multinational Corporations – Special Economic Zones – Macroeconomic stabilization Policy and Structural reforms in India – Globalization – India and WTO.

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	To understand the role and nature of agriculture, cropping pattern and land reforms and policy issues of agricultural credit, price policy and importance of food security in India.	K1,K2,
CO2	To understand industrial growth, various industrial policy, New economic policy and Labour market reforms in India.	K1,K2,
CO3	To analyze the overall service sector reforms, Role of RBI and Money market and Major structure and trends of Foreign trade	K1,K2,K5,
CO4	To Evaluate balance of Payments- Foreign Trade Policy- EXIM Policy (Pre and Post reform) – FERA and FEMA. To evaluate Multinational Corporations in the growth process	K3,K4,
CO5	To create macroeconomic stabilization policy and compare structural reforms in India – Globalization – India and WTO.	K2,K3,K5,

K$_1$ – Knowledge, K$_2$ - Understand, K$_3$ – Apply, K$_4$ – Analyse, K$_5$ – Evaluate, K$_6$ – Create

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's
> (Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
> > Assign the value
> > **1 – Low, 2 – Medium, 3 – High,0 – No Correlation**

ELECTIVE – II (1)

REGIONAL ECONOMICS

Course Objectives
1. To equip the analytical skills required to analyse the regional economic issues
2. To understand Regional economic growth in India

UNIT I: INTRODUCTION TO REGIONAL ECONOMICS

Nature and scope of regional economics – Regional economics and regional science – Regional and Urban Economics: Need for a separate study of regional economics – Concept and types of regions: Administrative, Planning, Agro-climatic, Economic and Functional regions.

UNIT II: APPROACHES TO REGIONAL GROWTH

Approaches to regional growth: Models of regional, inter-regional and multi-regional models; Export base models – Location Theory - Gravity models – Shift-share analysis

UNIT III: THEORIES OF REGIONAL ECONOMIC GROWTH

Neoclassical models – Dualistic models: Social dualism – Labour surplus model of Arthur Lewis- Migration and development: Harris-Todaro – Core-Periphery models: Myrdal's Cumulative Casuation Hypothesis – Regional Input-output models - New Economic Geography models: Paul Krugman's model of industrial location and development

UNIT IV: REGIONAL ECONOMIC GROWTH IN INDIA

Administrative regions in India: State, District, Taluk and Village; Urban and Rural regions - Concept, definition and measure of State Income (GSDP) – Rural and urban GDP – Differences in estimation of national income (GDP) and State Income (GSDP) - Measurement of interregional economic growth at State level

UNIT V: REGIONAL ASPECTS OF STABILIZATION AND GROWTH POLICY

Post-war Regional Cyclical Behaviour and Policy Measures for Stabilization, Theories to Explain Regional Differences in Growth, Fiscal Programmes, Tax and Transfer Programmes, Fiscal Responses of Power Level Governments, Regional Orientation to Policy Programmes and Central Responsibility.

Text books
1. Capello Roberta. (2016). Regional Economics. Routledge (New York).
2. Temple, M. (1994). *Regional economics*. St. Martin's Press.

References

1. Harry W Richardson (1973): Regional Growth Theory, Macmillan.
2. Harry W. Richardson. (1970). Elements of Regional Economics. Penguin Books (New York).
3. Harry W Richardson (1969): Regional Economics: Location theory, Urban structure and regional change, Weidenfeld& Nicolson (London)

Web resources

1. http://www.rri.wvu.edu/WebBook/Giarratani/contents.htm
2. https://researchrepository.wvu.edu › cgi › viewcontent
3. https://ddceutkal.ac.in › Syllabus › MA_Economics

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	understand the Nature and scope of regional economics and its need	K1, K3, k4
CO2	Discuss the Models of regional, inter-regional and multi-regional models	K4,K5
CO3	Evaluate the various theories of regional economic growth	K2, K3,K4
CO4	Describes the Measurement of interregional economic growth at State level	K4,K4
CO5	apply Regional Aspects of Stabilization and Growth Policy	K1,K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	3	3	2	3
CO2	3	2	2	3	2	3
CO3	3	2	3	2	2	2
CO4	3	3	3	2	3	3
CO5	3	2	2	2	3	2
Weightage	14	12	14	14	12	13
Weighted percentage of Course Contribution to Pos	2.8	2.4	2.8	2.8	2.4	2.6

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value

       1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

ELECTIVE – II (2)

WELFARE ECONOMICS

Course Objective:

1. To enable students to understand the fundamentals as well as development in the field of Welfare Economics.
2. To show the importance of welfare Economics compared to that of wealth Economics

UNIT 1:INTRODUCTION TO WELFARE ECONOMICS

Welfare Economics:Meaning- Concepts: Individual and Social Welfare- Value Judgments- Preferences and Utility - Utility function: Properties - Interpersonal comparisons of utility: degrees of interpersonal comparability. –Social Welfare Function: –Bentham's Utilitarianism- Pigouvian Welfare Economics.

UNIT II: APPROACHES TO WELFARE

Cardinal and Ordinal Approaches- Hicks's Four Measures of Consumers' Surplus- Partial and General Equilibrium- Edgeworth Box Diagram- General Equilibrium of Production and Exchange.

UNIT III: PARETO OPTIMALITY CONDITIONS

Pareto-Optimality Criterion -Definition-Marginal Conditions of Pareto Optimum – Perfect Competition and Pareto Optimality- Exceptions –Externalities – Public Goods and Market Failure – Theory of Second Best.

UNIT IV: NEW WELFARE ECONOMICS

New Welfare Economics – Kaldor- Hicks Compensation Criterion – Utility Possibility Curve - Shortcomings – Scitovsky Paradox – Scitovsky's Double Criterion of Welfare– Little's Criterion.

UNIT V: THEORIES OF SOCIAL CHOICE

Utility Possibility Curve and Frontier Grand Utility Possibility Curve- Iso Welfare Curves- Arrow's Impossibility Theorem –AmartyaSen and Capability Theorem – Rawls Theory of Social Justice

Text Books

1. Verma K.N (2012) Microeconomic Theory ,Vishal Publishing House
2. Per –OlovJohannson(2009) An introduction to Modern Welfare Economics, Cambride University Press

References

1. Arrow, Kenneth J (1963) Social Choice and Individual Values, Cowles Foundation Monograph 12, 2nd ed. Yale University
2. Bossert, Walter and Kotaro Suzumura (2010) Consistency, Choice and Rationality, Harvard University Press: Cambridge MA
3. Broadway, R.W. and N. Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
Web Resources

1. https://conceptually.org/concepts/pareto-principle

2. https://web.stanford.edu/~jdlevin/Econ 202/General Equilibrium.pdf

3. https://policonomics.com/lp-welfare-economics1-general-equilib…

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Summarize the Contribution to Welfare Economics	K1,K2
CO2	Analyse the different approaches to Welfare Economics	K3,K4,
CO3	**Interpret** the development of Pareto Optimality Conditions	K1,K2,K3
CO4	Explain the compensation Criteria of Economics	K2,K5
CO5	Evaluate theories of Social Choice.	K2,K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	3
CO2	2	3	2	3	2
CO3	3	3	2	3	2
CO4	2	3	2	3	2
CO5	2	3	2	3	3
Weightage	12	15			
Weighted percentage of Course Contribution to Pos	2.4	3	2	3	2.4

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix) Assign the value
1 – Low,2 – Medium, 3 – High,0 – No Correlation

ELECTIVE – II (3)

ECONOMICS OF INFRASTRUCTURE

Objective:

1. The main objective of this course is to familiarize the students with role of infrastructure in economic development and growth and key issues in financing, governance and inter-regional disparities.
2. This paper also aims to exposit main categories of infrastructure, including physical and social with special reference to the Indian situation.

UNIT I: INTRODUCTION

Introduction - Infrastructure and economic development — Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load – Off-Load Problem – Dual Principle Controversy; Economies of scale of Joint supply; Marginal Cost Pricing vs. other methods of pricing in public utilities.

UNIT II: TRANSPORT ECONOMICS

Transport Economics – The structure of Transport Costs and Location of Economic Activities. Demand for Transport – Models of Freight and Passenger Demand – Model Choice; Cost Functions in the Transport Sector – Principle of Pricing – Special Problems of Individual Modes of Transport; Inter-modal condition in the Indian Situation.

UNIT III: ENERGY ECONOMICS - I

Energy Economics – Primacy of Energy in the Process of Economic Development – Factors Determining Demand for Energy; Effects of Energy Shortages – Energy Conservation – Renewable and Nonconventional Sources of Energy – Energy Modelling– The Search for an Optimal Energy Policy in the Indian Context.

UNIT IV: ENERGY ECONOMICS - II

Electricity, Gas and Water Supply- Bulk Supply and Pricing of Electricity – The Relative Economics of Thermal, Hydel and Nuclear Power Plants – The Case for a National Power Grid – Financing Water Utilities – Urban and Rural Water Supply – The Exploitation of Natural Gas – Pricing Problem.

UNIT V: SOCIAL INFRASTRUCTURE

Social Infrastructure – Education and Economic Growth – The Case for Universal, Free, Primary Education; Structure of higher education and problems of its financing in India – Human Resources and Human Capital Development - Health dimensions of development; Determinants of Health - poverty, malnutrition, illiteracy and lack of information; Demand and supply of health care; Financing of health care; Inequalities in health - class and gender perspectives; Institutional issues in health care delivery.

Text Books:

1. Becker, G.S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.

2. Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.

References:

1. India Infrastructure Report, Urban Infrastructure, 3i Network, 2006
2. Jha, R., Chandiramani, J., Perspectives in Urban Development: Issues in Infrastructure, Planning and Governance, Capital Publishing Company, New Delhi, 2012.
3. McKinsey Global Institute. Urban World: Mapping the economic power of cities. McKinsey & Company. 2011.

Web Reference:

1. www.niua.org
2. https://censusindia.gov.in/
3. https://onlinecourses.nptel.ac.in/noc22_hs64/preview

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	To define and explain the consequences of growth on the demand for infrastructure and dual principal controversies	K1, K2
CO2	To demonstrate and identify the importance of the cost and mode of transportation	K2, K3, K5
CO3	Illustrate, explain and examine the role of energy and its infrastructure in economic development	K2, K4, K5
CO4	Examine how the power supply and explain and dissect its pricing problems	K1, K2, K4. K5
CO5	Explain, discuss and analyse the social Infrastructure and its relevance in the economy	K2, K4, K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	3	3	3
CO2	3	2	2	3	3
CO3	2	3	2	3	2
CO4	3	3	2	3	3
CO5	3	3	3	3	3
Weightage	14	13	12	15	14
Weighted percentage of Course Contribution to Pos	2.8	2.6	2.4	3	2.8

Level of Correlation between PO's and PSO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

SEMESTER – II

CORE – IV

MONETARY ECONOMICS

Course Objectives:

1. The course is devoted to the main issues in modern monetary economics.
2. The factors behind money demand and supply are studied through the set of comprehensive monetary models.

UNIT I: CLASSICAL THEORIES OF MONEY

Demand for Money Quantity theories of money – Fisher and Cambridge- Keynesian monetary theory- James Tobin's portfolio analysis of money demand- Don Patinkin`s Integration– Real Balance Effect- Milton Friedman's reformulated quantity theory.

UNIT II: SUPPLY OF MONEY

Supply of Money Types and determinants of money supply – money multiplier- Theories of interest rate – classical – Keynes – Hicks – Hansen.

UNIT III: MONEY AND CAPITAL MARKET

Money and Capital Market Significance and functions of Money market and capital market- Role of financial intermediaries – Effects of financial intermediation- Non-banking financial institutions – Gurley and Shaw theory.

UNIT IV: BANKING AND ITS FUNCTIONS

Banking Functions of Commercial banks - Credit creation – process and limitations Role of Commercial banks after nationalization – after reforms- Role of RBI – Regulation of money supply and credit- Narasimham Committee Reports– 1991 and 1998- RaguramRajan Committee Report -2007.

UNIT V: MONETARY POLICIES

Monetary Policy Objectives and Instruments of Monetary policy– Limitations of monetary policy- Monetarism and Keynesianism – Comparison - Supply side policies.

Text Books:

1. Bain, Keith and Howells, Peter: Monetary Economics: Policy and its theoretical Basis, Palgrave Macmillian, 2nd Edition, 2009
2. Mishkin .S. Frederic-The Economics of Money ,Banking and Financial Markets, Pearson Publication, 11th Edition, 2015

References:
1. Jhingan, M.L. (2005), Monetary Economics[Konark Publication, New Delhi].
2. Sundaram, K.P.M. (2003), Money, Banking and International Trade [Vikas, New Delhi].
3. Vaish, M.C. (2004), Money, Banking and International Trade [New Age International, New Delhi].

Web Resources:
1. https://www.amazon.in/Handbook-Monetary-Economics-Benjamin-Friedman-ebook/dp/B00EXOTZ96

2. https://link.springer.com/book/10.1057/9780230280854

3. https://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	To list out and outline the theories of money.	K1,K2,
CO2	To explain construct and distinguish various determinate of money supply and multiplier.	K2,K3,K4,
CO3	To label, explain and evaluate the capital market.	K1,K2,K5
CO4	To define, illustrate and importance of banking sector.	K1,K2,K5,
CO5	To interpret and make use of monetary policy.	K2,K3,

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's
> (Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
> Assign the value
> **1 – Low, 2 – Medium, 3 – High, 0 – No Correlation**

CORE – V

AGRICULTURAL ECONOMICS

Course Objectives
1. To provide knowledge base on the features and issues of Agriculture.
2. The course enables the students to understand and evaluate the cropping pattern in an Economy

UNIT I:AGRICULTURAL ECONOMICS
Introduction, Scope and Significance of Agricultural Economics- Inter-Sectoral Linkages – Production Function Analysis - Relevance to Farm Production Economics- Productivity Trends; Low production and Productivity: Causes, Consequences and Measures- Farm size, productivity and efficiency in Indian Agriculture-A.K. Sen's Hypothesis- Role of Technology in Agriculture - Structural Changes in Agriculture.

UNIT II: AGRICULTURAL LABOUR
Agricultural Labour: Definition and Characteristics – Rural Labour Market- Rural Unemployment: Types, Consequences and Remedial Measures- Agricultural Wages in India – Male -Female Wage Differentials.

UNIT III: AGRICULTURAL PRICES AND FINANCE
Agricultural Prices-Reasons for Fluctuations in Prices-Procurement /Support Prices-Minimum Support Price - Buffer Stocks- Commission for Agriculture Cost and Prices: objectives, functions and role in stabilization of Agriculture Prices- Commodity Markets-Agricultural Finance: Meaning, Types, Sources- and Commercial Banks and NABARD- Farm Capital - Meaning, Types, and Marginal Efficiency of Farm Capital and Capital formation in Agriculture

UNIT IV INFORMATION TECHNOLOGY AND AGRICULTURE
Role of Information Technology and telecommunication in marketing of agricultural commodities – Weather Forecasting- electronic auctions- Digital Mandi -Kisan Call Centres -e-Choupal- Use of Geographic Information System and Global Positioning System- Remote Sensing and Drones

UNIT V:GLOBALISATION AND IMPACT ON AGRICULTURE
Role of MNCs- Globalisation of Indian Economy: Problems and Prospects of Indian Agriculture-Impact of WTO on Indian Agriculture- Agreement on Agriculture (AoA) -WTO Agriculture Subsidies Boxes and Criticisms.
Learning Resources

Textbooks

1. Subba Reddy S ,Raghu Ram P ,T.V NeelakantaSastry and I.Bhavani Devi(2019   ) Agricultural Economics , Second Edition ,Oxford & IBH Publishing Co Pvt.Ltd
2. Dantwala M.L (ed) (1991), Indian Agricultural Development since Independence(Oxford and IBH Publishing company private limited, New Delhi).

References:

1. Barkley, A., & Barkley, P. W. (2016). Principles of agricultural economics. Routledge.
2. Sloman, J., Norris, K., & Garrett, D. (2013). Principles of economics. Pearson Higher Education AU.
3. Colman, D., & Young, T. (1989). Principles of agricultural economics: markets and prices in less developed countries. Cambridge University Press.

Web resources:
1. http://www.rvskvv.net › images › Principles-of-Agri...
2. https://zalamsyah.files.wordpress.com › 2018/02 › 2...
3. http://archive.mu.ac.in › myweb_test › M.A. PAR...

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the Relevance of Agricultural Economics	K1, K2, K4
CO2	Review the role of Agricultural Labour	K4, K5
CO3	Analyze the trends in Agricultural Prices and the importance of Finance in the Agricultural Sector	K1, K3, K4
CO4	Evaluate the importance of Marketing in Agriculture	K1, K3
CO5	Identify the impact of Globalisation and WTO on Indian Agriculture	K5, K4

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	3	3	2	3
CO2	3	3	2	2	3	2
CO3	3	3	2	2	3	3
CO4	3	3	2	2	3	2
CO5	3	2	2	2	3	2
Weightage	14	14	12	13	14	12
Weighted percentage of Course Contribution to Pos	2.8	2.8	2.4	2.6	2.8	2.4

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

MATHEMATICAL ECONOMICS

Course Objectives:

1. The paper aims to introduce students to the basic building blocks of mathematical analysis used in modern economic theory.
2. To equip the students with mathematical tools and to optimize both static and dynamic economic environment.

UNIT I: INTRODUCTION TO LINEAR ALGEBRA

Sets-Basic concepts-Ordered sets-Relations-Order relations-Metric Spaces-open and closed sets–Convergence - Linear Algebra , Vectors, matrices, inverse, simultaneous linear equations, Cramer's rule for solving system of linear equations, input-output model, Hawkins - Simon condition, open and closed models , quadratic equation, characteristic (eigen) roots and vectors

UNIT II: DIFFERENTIAL CALCULUS

Introduction to Functions, Limits and Continuity, Derivatives –Concept ofmaxima& minima, elasticity and point of inflection. Profit & revenue maximization under perfect competition, under monopoly.Maximizing excise tax revenue in monopolistic competitive market, Minimization of cost etc.

UNIT III: OPTIMIZATION TECHNIQUES WITH CONSTRAINTS

Functions of several variables, Partial and total, economic applications, implicit function theorem, higher order derivatives and Young's theorem, properties of linear homogenous functions, Euler's theorem, Cobb – Douglas Production Function - Constrained Optimization-Lagrangian Multiplier Technique- Vector and Matrix Differentiation -Jacobian and Hessian Matrices- Applications-Utility maximization, Profit maximization and Cost minimization.

UNIT IV: LINEAR AND NON-LINEAR PROGRAMMING

Optimization with Inequality Constraints- Linear Programming–Formulation-Primal and Dual-Graphical and Simplex method-Duality Theorem-Non-Linear Programming-Kuhn-Tucker Conditions- Economic Applications.

UNIT V: ECONOMIC DYNAMICS

Differential Equations-Basic Ideas-Types-Solution of Differential Equations (Homogenous and Exact)-Linear Differential Equations with Constant Coefficients (First and Second Order)-Applications- Solow's Model-Harrod-Domar Model-Applications to Market models- Difference Equations - Types-Linear Difference Equations with Constant Coefficients (First and Second order) and solutions – Applications- Samuelson's Accelerator-Multiplier model-Cobweb model.

Textbooks:

1. Geoff Renshaw,(2016)Maths for Economics, 4E Oxford University Press.
2. Mabbet A J(1986) Workout Mathematics for Economists, Macmillan Master Series, 4th Edition London**.**

References:

1. Carter, M. (2001). Foundations of Mathematical Economics, MIT Press.
2. Chiang, A. C. and Wainwright, K. (2005). Fundamental Methods of Mathematical Economics, McGraw-Hill Education.
3. Dowling E. T., Mathematics for economists, Schaum Series (latest edition).

Web Resources
1. https://www.udemy.com/course/mathematics-for-economists-functions-and-derivatives/
2. https://www.classcentral.com/course/swayam-mathematical-economics-14187
3. https://www.coursera.org/learn/introduction-to-calculus

Course Outcomes (Cos):
Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the mathematical structure of standard economic theoretical framework	K1, K2, K4
CO2	Equip students with mathematical tools to solve optimization problems appear in economic theory	K2, K4, K5
CO3	Equip students with tools to read the technical writing appear in standard economic journals	K1, K3, K4
CO4	analyse the dynamics of macroeconomic policies in an economy	K1, K2, K4
CO5	analyse mathematically the dynamics of the growth process in an economy	K3, K2,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low
2 – Medium
3 – High
0 – No Correlation

ELECTIVE – III (1)

GENDER ECONOMICS

Course Objectives:
1. To evaluate sources of socio-economic and demographic information for analyzing the impact of the gender factor on demographic processes and economic development
2. It enables to foresee the contributions of women as active economic agents and strategies to empower women and reduce gender inequalities.

UNIT I: INTRODUCTION

Definition- Objectives of Gender Studies - Importance of gender Studies -Women and work: unpaid, underpaid and casual work - Women in primary, secondary and tertiary sectors - Classification of work in Indian census and NSSO – Main workers, marginal workers, non-workers - Invisibility of women's work, problems in measurement - Non-recognition of women's work in national income accounting

UNIT II: GENDER INEQUALITY IN LABOR MARKET

Segmented Labor Market and Occupational Segregation - Gendered jobs and Social Inequality - Sex Segregation at Work Place - Globalisation and its impact on gender - Issues of wage discrimination and exploitation in unogranised sector - Women's participation in organised sector - Gender Discrimination - Gender issues at the work place

UNIT II: SOCIAL EMPOWERMENT

Women in Higher Education - Gender issues in Health, Environment, Family welfare Measures - Indecent representation of Women in media - Women in Difficult circumstances; Constitutional.

UNIT III: ECONOMIC EMPOWERMENT

Introduction - organized sector, unorganized sector - Role of Women in Economic Development – Female Poverty and Poverty alleviation programmes - Status of Women farmers and land rights - Women Entrepreneurs - Impact of Globalization on working women - National Policy for the empowerment of women 2001.

UNIT V: SOCIAL ISSUES AND WOMEN IN INDIAN PLANNING

Issues in the Unorganized sector of Employment - Women's work: Status and problems - problems of Dalit women - Invisibility of women in official data system - Absence of gender disaggregated data - Initiatives towards recognition of women as agents of development from sixth five year plan.

Text books

1. Eswaran, M. (2014). *Why gender matters in economics*. Princeton University Press.

2. Becchio, G. (2019). *A History of Feminist and Gender Economics*. Routledge.

References
1. Humphries, J. (1995). *Gender and economics*. Edward Elgar Publishing.
2. Dijkstra, G., &Plantenga, J. (2013). *Gender and economics: a European perspective*. Routledge.
3. Negra, D., &Tasker, Y. (2014). Introduction. Gender and recessionary culture. In *Gendering the Recession* (pp. 1-30). Duke University Press.

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the Gendered jobs and Social Inequality	K1, K3
CO2	describes the Issues of wage discrimination and exploitation in unogranised sector	K3,K4
CO3	Explain the Gender issues in Health, Environment, Family welfare Measures	K4,K5
CO4	Evaluate the Impact of Globalization on working women and National Policy for the empowerment of women 2001	K1, K3,K4
CO5	Assess the Initiatives towards recognition of women as agents of development from sixth five year plan.	K1,K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	3	3	2	3
CO2	2	2	2	3	2	3
CO3	3	2	3	3	2	3
CO4	2	2	2	2	3	3
CO5	3	2	3	2	3	2
Weightage	12	11	14	15	12	14
Weighted percentage of Course Contribution to Pos	2.4	2.2	2.8	3	2.4	2.8

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

SEMESTER- II

ELECTIVE – III (2)

URBAN ECONOMICS

Course Objectives
1. To equip with theory and measurement of urban economic growth and development, spatial structure of cities and urbanization.
2. The course outlines the issues of urban poverty and its impact on urbanization.

UNIT I: INTRODUCTION
Definition and Scope of Urban Economics - Sources of Urban Growth –International migration, Trends in growth of urban population in the world - Urban reclassification and physical expansion of urban boundaries –Urbanization and agglomeration economies – industrialization and services sector growth –Urbanization and urban economic growth – Urbanization and globalization.

UNIT II: ECONOMICS OF URBANIZATION
The Process of urbanization: Nature and dimensions, factors initiating and perpetuating urbanization process - Characteristics of an economy passing through different stages of urbanization - Classification of urban areas by demographic, geographical and economic criteria-Process of sub-urbanization

UNIT III: THEORIES OF URBAN GROWTH AND SPATIAL STRUCTURE
Christaller's Central Place Theory - The Human Ecological Approach to Urban Growth - Urban Size: Ratchet-Rank Size Rule - Migration and urban economic growth: Harris-Todaro Model – Concepts of City Structure - The Minimization of Costs of Friction Hypothesis -Location Equilibrium of an Urban Firm - The Concentric Zone Hypothesis - Urban Residential Land Use Models: Alonso, Muth, Siegel, Park Burgess.

UNIT IV: URBANIZATION AND LABOUR MARKET
Urbanisation and Labour Market - Pull and Push Factors for Urbanisation in India - High Wages and Improved Infrastructure - Employment Opportunities and Educational facilities - Growth of formal and Informal economic activities - Labour Force Participation and Distribution of Workers.

UNIT V: URBAN PROBLEMS AND URBAN PLANNING
Over Population and congestion - Urban housing problem - Urban environment: Air, Water and Noise Pollution - Urban poverty and inequality - Urban Infrastructure: transport Water Supply, Sanitation and Solid waste management - Need for Urban Planning: Objectives and Techniques - Emerging Planning Process - Comprehensive Development Plan – Master Plan – Jawaharlal Nehru National Urban Renewal Mission - Smart Cities.

Text books

1. Shukla, V. (1996) Urbanization and Economic Growth, Himalaya Publishers Pvt. Ltd (New Delhi).
2. Robert L Bish and Hugh O Nourse (1975), Urban Economics and Policy Analysis, McGraw Hill Kogakusha Ltd (Tokyo).

References

1. O' Sullivan (2012), Urban Economics, McGraw Hill Higher Education (Boston).
2. Edwin S. Mills. (1987). Handbook on Regional and Urban Economics, Volume 2: Urban Economics. North-Holland (Amsterdam).
3. Duranton, G., & Strange, W. C. (1986). *Handbook of regional and urban economics: applied urban economics* (Vol. 3). Elsevier.

Web resources

1. https://link.springer.com › bfm:978-1-349-15661-0 › 1.pdf
2. https://www.academia.edu › Urban_economics_Arthur_O..
3. https://www.ysk-books.com › show › book › regional-a..

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	understand scope of urban economics and urban economic growth	K1, K2, K3
CO2	Describe the process of urbanisation and classification or urban areas	K3, K5
CO3	Evaluate the various theories of urban growth and spatial structure	K2, K4
CO4	Explain the urban Labour Market, Labour Force Participation and Distribution of Workers	K1, K2
CO5	Familiarize the urban problems and planning process.	K1, K4, K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	3	3	2	3
CO2	3	3	3	3	2	3
CO3	3	2	3	2	2	3
CO4	3	2	2	2	3	3
CO5	3	2	2	2	3	3
Weightage	14	12	13	14	12	15
Weighted percentage of Course Contribution to Pos	2.8	2.4	2.6	2.8	2.4	3

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low
2 – Medium
3 – High
0 – No Correlation

ELECTIVE – III (3)

ECONOMIC THOUGHT OF NOBEL LAUREATES

Course Objectives:

1. This course makes the students to acknowledge the various thoughts of Economist and the helps them to reason and understand current economics better

2. This course provides space for have various dimensional evolution of economics

UNIT I: INTRODUCTION AND MICROECONOMICS

Origin of Prize in Economic Sciences – Nomination and selection process of Nobel Laureates-Economics Prize Awards by Classification-First Nobel Laureates: Ragnar Frisch and Jan Tinbergen- Paul A. Samuelson -John R.Hicks and Kenneth J Arrow : Equilibrium and Welfare Theory-Leonid V. Kantorovich and Tjalling C. Koopmans - Ronald Coase : Transaction Costs.

UNIT II: MACROECONOMICS AND INTERNATIONAL ECONOMICS

Gunnar Myrdal and Friedrich Hayek- Milton Friedman- Lawrence R Klein - Franco ModiglianiBertil Ohlin and James E Meade- James Tobin -Franco Modigliani

UNIT III: PUBLIC ECONOMICS ECONOMIC DEVELOPMENT AND GROWTH

Simon Kuznets-Theodore W. Schultz-W.Arthur Lewis -Robert M.Solow – James M Buchanan

UNIT IV: BEHAVIOURAL ECONOMICS

Herbert A.Simon: Decision-Making Process within Economic Organizations -Gary Becker: Motives and Consumer Mistakes-Daniel Kahneman and Amos Tversky: Prospect Theory and Anchoring Bias **-**Robert J. Shiller: Analysis of Asset Prices **-**Richard Thaler: Predictable Irrationality that defy economic theory, Nudge Theory

UNIT V: INDIAN NOBEL LAUREATES AND WOMEN NOBLE LAUREATES

Indian Nobel Laureates – AmartyaSen – Abhijit Banerjee – ElinorOstrom – Economics of Common Pool Resources and Esther Duflo.

Text books:

1. Howard R. Vane and Chris Mulhearn (2005) The Nobel Memorial Laureates In Economics, An Introduction to Their Careers and Main Published Works, Edward Elgar Publishing Limited
2. Bernard S. Katz (2017) Nobel Laureates in Economic Sciences: A Biographical Dictionary (Routledge Library Editions: The History of Economic Thought Book 7) 1st Edition,Routledge

References:

- Lindbeck, Assar (ed.) (1992), Nobel lectures in economic sciences 1969-1980, World Scientific,London.
- Maler,Karl-Goram (ed.) (1992), Nobel lectures in economic sciences 1981-1990, World Scientific, London.
- Puttaswamaiah (1995), Nobel Economists, Vol.2 1975-85, Indus Publishing Company, New Delhi.
  www.nobelprize.org/prizes/lists/video-prize-lectures-fromlaureates-in-economic-sciences/

Web Resources

1. https://www.chicagobooth.edu/faculty/nobel-laureates
2. www.nobelprize.org/prizes/lists/video-prize-lectures-fromlaureates-in-economic-sciences/
3. https://www.nobelprize.org/prizes/lists/all-prizes-in-economic-sciences/

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	To recall and show the origin of prizes give to the noble laureate in Economic science	K1, K2
CO2	To explain and identify the post Keynesian economist	K2, K3
CO3	To Examine and make use of Economics of growth model to understand the current economy	K3, K4
CO4	To analyze the importance and evaluate of behavioral economist	K4, K5
CO5	To assess and discuss about the Indian economist in international economics and economy	K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	3	2
CO2	3	3	2	3	3
CO3	3	3	3	2	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
Weightage	15	14	13	14	12
Weighted percentage of Course Contribution to Pos	3	2.8	2.6	2.8	2.4

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

SEMESTER- II

ELECTIVE – IV (1)

RESOURCE ECONOMICS

Course Objectives:
1. To trace the resources in the country
2. To understand the quality of the available natural resources.

UNIT I: INTRODUCTION

Land Resources in India - Types of soil- Land resource Classification -Forest ,Barren land, Pastures and grazing land, cultural Waste Land, Fallow Land, Agricultural Land -Net Sown Area - Land degradation and soil Erosion-Preventive Measures.

UNIT II: ROLE OF RESOURCES IN ECONOMIC DEVELOPMENT

Forest Resources-Role of Forests in Economic Development-Forest cover in India-Deforestation-Effects of Deforestation-Urban Forestry - Objectives of Urban Forestry- Social Forestry-Constraints in Social Forestry - Collective Participatory Forest Management – Recent National Forest Policy Act

UNIT III: WATER RESOURCES IN INDIA

Water Resources in India -Surface Water –Ground Water –Water Demand and Utilisation- Water Resource Planning- Multi –objective Approach-Benefit Cost Ratio-Capital outlay-Environmental Impact Assessment (EIA)-Manageability of the project-Sustainable Water Management-Recent National Water Policy

UNIT IV:MINERAL RESOURCES

Mineral Resources- Metallic Minerals-Non Metallic Minerals –Mineral Fuels-Environmental Costs of Extracting Mineral Resources-Environmental Impacts of Mineral Resource Extraction and Use-Mineral Conservation and Development Rules (1988)

UNIT V:CONSERVATION AND MANAGEMENT OF NATURAL RESOURCES

Conservation and Management of Natural Resources - Meaning and objectives of Conservation. Conservation of Renewable Resources: Soil conservation- Water conservation-Forests conservation-Fish Conservation-Biodiversity Conservation. Conservation of Non Renewable Resources: Energy Conservation-Mineral Conservation

Text Books:
1. M.L.Jhingan, ChandarK.Sharma (2007) Environmental Economics Theory, Management and Policy, Vrindha Publications, New Delhi
2. G.Paneerselvam (2008) Economics of Natural Resources in India,AbhijeetPublications, New Delhi

Reference Books:
1. Jon .M.Conrod (2010), Resource Economics ,Cambridge University Press,U.K
2. John C.Bergstrom& Alan Randall (2010), Resource Economics –An Economic Approach to Natural Resource and Environmental Policy, Edward Elgar Pub,Ltd
3. Judith Rees (2019) Natural Resources Allocation Economics and Policy,Routledge,UK

Web Resources:
1.https://www.india.gov.in/topics/environment-forest/natural-resources
2.https://ibm.gov.in/writereaddata/files/09182018162439Mineral%20Scenario%20pdf.pdf

Course Outcomes (COs):

Upon Completion of this course, the students will be able to

S.No	Course Outcomes	K-Levels
CO1	Ability to understand land resources in India and the issues related to it	K_1, K_2, K_3K_4
CO2	Assess the availability of Forest resources and understand the methods to conserve the resources	K_1,K_2, K_3 K_4
CO3	Understand the water resources in the country and related environmental issues	K_1,K_2, K_3K_4
CO4	Trace the mineral resources in the country	K_1, K_2, K_3K_4
CO5	Ability to know about conservation of Natural Resources	K_1,K_2,K_3,K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

ELECTIVE – IV (2)

ECONOMICS OF CLIMATE CHANGE

Course Objectives
1. The objective of this course is to analyses climate change from an economic perspective.
2. The problem is characterized as one of regulating a global stock externality in an intertemporal setting and in the presence of uncertainty and irreversibility.

UNIT I:INTRODUCTION

Science of climate change; global and regional climate predictions; uncertainty in science; physical impacts of climate change – agriculture, sea level rise, health, extreme events; policy debate.

UNIT II:CLIMATE CHANGE POLICY - MITIGATION

Efficiency, public goods, externalities; environmental policy instruments – emissions trading, carbon tax, emission trading versus tax; stock pollutants and discounting; decisions under risk and uncertainty;

Unit III:Integrated Assessment

Costs and benefits of greenhouse gas mitigation; integrated assessment models; simulation exercises based on DICE model and its variants; sensitivity and uncertainty analysis; Stern review.

UNIT IV:CLIMATE CHANGE POLICY - ADAPTATION

Climate change impact assessment – applications for agriculture, sea level rise and health; vulnerability assessment; economics of adaptation; measurement of adaptation cost; issues in financing adaptation.

UNIT V:CLIMATE CHANGE NEGOTIATIONS AND EQUITY

Criteria for distribution of emission reduction burden; distribution criteria for adaptation fund; inter and intra-generational equity issues; discounting in climate change context

Text Books:
1. Perman, R., Ma. Y., Common, M., Maddison, D., Mcgilvray, J., Natural Resource and Environmental Economics, Pearson Education Limited, 2011 (4th Edition).
2. Intergovernmental Panel on Climate Change – Fifth Assessment Report, 2011 Stern, N., The economics of climate change – The Stern Review, Cambridge University Press, 2006.

Reference:
1. F. Ackerman, E. Stanton: Climate Economics: State of the Art. Routledge (2013)

2. W. Nordhaus: A Question of Balance. Yale University Press (2008)
3. D. Acemoglu, P. Aghion, Leonardo Bursztyn, D Hemous. (2012). "The environment and directed technical change," American Economic Review, 102(1): 131-166.

Web Resources:

1. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjc
2. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjc-

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

CO Code	Course Outcomes	K-Levels
CO1	To define and explain the science of climate change.	K1, K2
CO2	To explain and identify the climate change policy.	K2, K3
CO3	To illustrate and analyses the integrated assessment of climate changes.	K2, K4
CO4	To classify, compare and evaluate climate change impact assessment.	K4, K5
CO5	To estimate and illustrate the climate change negotiations and equity.	K5, K6

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	3	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	3	3	3	3	3	2
CO5	3	3	3	3	3	3
Weightage	15	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low
2 – Medium
3 – High
0 – No Correlation

SEMESTER- II

ELECTIVE – IV (3)

(MOOCS COURSES)

SKILL ENHANCEMENT COURSE / NME

SOCIAL ETHICS AND RESPONSIBILITIES
(Women Empowerment, Disability, Social Inclusion)

Course Objective:
1. To understand the importance of Ethical Values.
2. To equip the students with social responsibilities

UNIT 1: INTRODUCTION

Social Ethics – Definition - -Ethical Model: Golden Rule Model and Kantian Model- Ethical Decision-making, Ethical Dilemmas in Organization, Corporate Governance- Types of Ethical Issues - Theft - Bribery and Corruption - Exploitation of Employees – Discipline - Whistle Blowing.

UNIT 2: WORKPLACE AND PROFESSIONAL ETHICS

Ethical Issues in Workplace- Types - Accountability - Employee Favoritism -Bad Leadership Behavior- Gender Ethics- Sexual Harassment and Discrimination.

UNIT 3: SOCIAL RESPONSIBILITY OF BUSINESS

Social Responsibility of Business – Shareholders-Employees -Customers-Community and Government - Corporate Social Responsibility Initiatives -Dimensions-Ethics of Environment Protection & Pollution Control.

UNIT 4: SOCIAL INCLUSION

Meaning of Social Inclusion and Exclusion – Dimensions of Social Inclusion- Gender Inclusion and Equality

UNIT 5: OPPORTUNITIES FOR DISABLED

Mainstreaming Disability- Provision of Employment Opportunities for disabled – Indian Government Schemes – Ministry of Social Justices and Empowerment

Textbooks:

1. Jenny Teichman (1996) Social Ethics A Student's Guide Wiley Blackwell

2. John S.Feinburg and Paul D.Feinburg(2010) Ethics for a Brave New World, Crossway.

References

1. Denis Collins and PatriciaKanashiro (2017)   Business Ethics: Best Practices for Designing and Managing Ethical Organizations SAGE Publications, Inc; Third edition
2. William H.Shaw (2016) Business Ethics: A textbook with Cases Cengage Learning
3. Govindarajan M.,Senthilkumar <u>M.S. Natarajan</u> (2013)Professional Ethics and Human Values,PHI.

Web Resources

1. https://pachamama.org/social-justice/social-responsibility-and-ethics
2. http://www.fimt-ggsipu.org/study/bbabi310.pdf
3. https://www.socialworkers.org/About/Ethics/Ethics-Education-and-Resources

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the importance of Ethics and outlining the various types of Ethical Issues in an organization	K1, K2, K4
CO2	Categories the ethical issues in the workplace	K2, K4, K5
CO3	Evaluate the need for Corporate Social Responsibility	K1,K4
CO4	Design Policies for Social inclusion	K4,K5
CO5	Know various schemes for disabled	K5,K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	2	3	3
CO3	3	3	3	3	3
CO4	3	3	3	2	3
CO5	3	3	3	3	3
Weightage	15	15	14	14	15
Weighted percentage of Course Contribution to Pos	3	3	2.8	2.8	3

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low

 2 – Medium

 3 – High

 0 – No Correlation

SEMESTER – III

ADVANCED MACROECONOMICS

Course Objective:

1. This course on macroeconomics intends to make the students understand the working of the economy as a whole, integrating the different markets**.**

2. This course also gives the Classical and Keynesian perspectives on the economic factors affecting an economy's general equilibrium.

UNIT I: CLASSICAL, KEYNESIAN AND POST KEYNESIAN MACROECONOMICS

Classical Theory of Output and Employment- Full employment equilibrium- AD-AS Model- Keynesian Theory of Output and Employment- Under employment equilibrium- Effective Demand-Hicks Hansen IS-LM- BP Model.

UNIT II: THE NEW CLASSICAL MACROECONOMICS

Assumptions of Rational Expectation Hypothesis- Policy Ineffectiveness Theorem- Aggregate supply hypothesis- Policy implications of new classical Approach- Source of Productivity shocks in Real Business Cycle Theory- Stabilisation Policy and Unemployment- Role of money in Real Business Cycle Theory'- Policy implications of real business cycle theory- DAD-DAS Model.

UNIT III: NEW KEYNESIAN MACROECONOMICS

Core propositions of new Keynesian macroeconomics- Wage and Price Rigidities- New Keynesian business cycle theory- Policy implications of new Keynesian macroeconomics

UNIT IV: OPEN ECONOMY MACROECONOMICS

Openness in goods in financial market- output interest rate and exchange rate- exchange rate regimes- exchange rate and balance of payments- Mundell- Fleming Model.

UNIT V: MACROECONOMIC POLICIES

Stabilisation policies- Theory of policy- Tinbergen Approach- Fiscal Policy- Monetary Policy- Optional Policy Mix- Crowding out effect- Bond Financed and Tax Financed Government Expenditure- Rules Vs Discretion- Government Budget and Budget Deficit.

Text Books

1. Dornbusch, Rudiger, Stanley Fischer, and Richard Startz (2000). Macroeconomics, Tata McGraw-Hill Publishing Company, New Delhi.

2. Roger E.A. Farmer (2002), Macro Economics, Thompson Asia Pvt. Ltd., Singapore.

Reference Books

1. Michl, T. R. (2015). Macroeconomic Theory: A Short Course: A Short Course. Routledge.Levacic, R. (1982). Macroeconomics: an introduction to Keynesian-neoclassical controversies (No. 339.2 L4.).Macroeconomics: Dornbusch, Fischer, and Startz (Ninth Edition), 2004. Tata McGraw-Hill

2. Blanchard, O., &Giavazzi, F. (2003). Macroeconomic effects of regulation and deregulation in goods and labor markets. The Quarterly Journal of Economics, 118(3), 879-907.Romer D., 1996, Advanced Macroeconomics, McGraw-Hill International.

3. Obstfeld, M., Rogoff, K. S., & Wren-lewis, S. (1996). Foundations of international macroeconomics (Vol. 30). Cambridge, MA: MIT press.Krugman, P.R., and M. Obstfeld, 2003, International Economics: Theory and Policy, 6th edition, India: Pearson Education.

Web Resources

1. https://www.econlib.org/library/Enc/bios/Keynes.html
2. https://www.postkeynesian.net/post-keynesian-economics/
3. https://www.bu.edu/econ/files/2014/08/DLS1.pdf

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Defines and understand the concepts of general Equilibrium in the Economy and its models and approaches	K1, K2
CO2	Define, Illustrate and examine the role of rational expectations influencing macroeconomics variables, models of income and the various approaches to the working of business cycles.	K1, K2, K4
CO3	To demonstrate, identify and to understand the functions of the major propositions of new Keynesian macroeconomics	K2, K3, K4
CO4	To understand how, Evaluate and to analyse the open economy model in post Keynesian era	K1, K4, K5
CO5	To explain and apply the role of stabilization policies such as fiscal and monetary policy on the economy and to analyze, elaborate and to know the importance government policies and tax frame work	K2, K3, K4, K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	3
CO2	2	3	2	3	3
CO3	2	3	3	3	3
CO4	3	3	3	2	3
CO5	3	3	3	3	3
Weightage	12	15	13	13	15
Weighted percentage of Course Contribution to Pos	2.4	3	2.6	2.6	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

HEALTH ECONOMICS

Course Objective:

1. To equip students on the role of health in Economic Development.

2. To have an insight of the health status in India.

UNIT 1: INTRODUCTION TO HEALTH ECONOMICS

Health and Economic Development – Determinants of Health- Economic Dimensions of Healthcare –Healthcare Models- Beveridge Model, Bismarck Model and Out-of-pocket Model – Demand for Healthcare – Health Care Accessibility– Grossman Model– Supply of Healthcare – Health Care Delivery System- World Health Organization- Importance – Alma Ata Declaration.

UNIT 2: HEALTH INDICATORS AND EVALUATION

Health Indicators –Infant Mortality Rate– Maternal Mortality Rate–Child Mortality Rate) – Morbidity Rate –Global Burden of Disease-Communicable and Non Communicable Diseases-Lifestyle Disease-Disability Adjusted Life Years (DALY) – Quality Adjusted Life Years (QALY) – Economic evaluation of health care: Cost Benefit Analysis – Cost Effective Analysis.

UNIT 3: HEALTH CARE MANAGEMENT

Health care Financing - Health Management – Prevention – Curative– Palliative – Public Healthcare System- Private Healthcare System- Privatization and Health Care- Health Education- Health Infrastructure- Pre and Post COVID Health Sector Reforms.

UNIT 4: HEALTH INSURANCE

Health Insurance: Definition and Types – Health Insurance and Market Failure- Information Asymmetries- Government Health Insurance – Need – Types – Schemes -Private Health Insurance.

UNIT 5: HEALTH SCENARIO IN INDIA

Health in India- Ministry of AYUSH – National Health Mission (NHM) – Rural Healthcare system –National Rural Health Mission (NRHM) – Accredited Social Health Activist (ASHA) Workers –Urban Healthcare system – NUHM (National Urban Health Mission) – National Family Health Survey – Alternative sources of Medicine in India – Medical Tourism – Ministry of AYUSH – Role of World Health Organization (WHO) in India.

Text Books

1. N.K. Anand&ShikhaGoel (2006) Health Economics AITBS Publishers India.

2. Charles E Phelps (2017) Health Economics Sixth Edition Routledge.

References:

1. Brijesh C. Purohit(2020) <u>Economics Of Public And Private Healthcare And Health Insurance In India</u> Sage Publications Private Limited.
2. Jery D, JosephinDr.Jeyasingh, Dr.D. Solomon Raj (2016) Health Economics, Greative Crows.
3. KesavanSreekantan Nair (2022) Health Economics and Financing New Century Publications

WEB RESOURCES

1. https://www.who.int/
2. https://mohfw.gov.in/
3.https://www.ayush.gov.in/

Course Outcomes (COs):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the importance of Health in Economic Development.	K1, K2,K3
CO2	Gain Knowledge on the various Health Indicators	K3,K4, K5
CO3	Evaluate the importance of Public and Private Health care systems	K3,K4, K5
CO4	Compare the various Health Insurance Schemes	K2,K3,K4
CO5	Analyse the Rural and Urban Health Scenario	K4,K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	2	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	14	15	15
Weighted percentage of Course Contribution to Pos	3	3	2.8	3	3

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

CORE – IX

RESEARCH METHODOLOGY

Course Objectives

1. This course describes the ethical issues in social science research and the present position of economic research. It covers data collection methods and different types of research design. It also discusses about qualities of a good research report
2. To Develop and equip quality research culture among students

UNIT I: RESEARCH IN ECONOMICS

Research Methods in Economics Nature of Social Science Research – Research Methods in Social Science – Formulating the problem- Types and Sources of Hypothesis – Characteristics of a Good hypothesis- Components and types of research design – Collection of data – sources and methods- Presentation of results – Format of a Report.

UNIT II: DATA COLLECTION
Sampling and Data collection Sampling; Need, types, Probability sampling, random, systematic, stratified, multistage or cluster sampling, Non Probability sampling; Purposive Judgment, quota and snowball sampling- Data collection; Primary and Secondary data; NSS and censes data Methods of data collection- Tools of data collection; schedule and questionnaire.

UNIT III: RESEARCH DESIGN

Data Processing and Presentation Processing and analysis of data: Editing, coding and tabulation; use of computers in social science research- Diagrammatic and graphic representation of data- Interpretation of results and Report writing – Preparation of Project Proposals.

UNIT IV: DATA ANALYSIS - I

Statistical Inferences Census Versus sampling -Random and Non-Random sampling Techniques Estimation – Point and interval estimation – Statistics and Parameter – Standard Error – Confidence interval- Null and Alternative hypothesis – Type I Error and Type II Error, Level of Significance – Critical region – Steps in Testing of Hypothesis.

UNIT V: DATA ANALYSIS - II

Large and small Sample Tests Properties and uses of Normal Distribution – Standard normal 'Z' Statistic Z-Test of Significance of proportions, means and Correlation- 't' Test for sample mean and Equality of mean – Paired 't' Test- Chi-Square Test for Association of Attributes.

Text Books:

1. C.R. Kothari (2002), Research Methodology Vikas publishing House, New Delhi.

2. Goode W. J and Hatt(1952), Methods in Social Research, Mcgraw Hill Book Co, Tokyo.

Reference:

1. Young, Pauline V., Scientific Social Surveys and Research, 4th Edition, Prentice Hall of India, 1977

2. Bryman, Alan, Social research methods, 4th Edition, Oxford University Press, 2008

3. Patton, M.Q., Qualitative Research and Evaluation Methods, 3rd Edition Sage 41 Publications, 2002

Web Resources

1. www.socialresearchmethods.net
2. www.ualberta.ca
3. http://finmin.nic.in

Course Outcomes (Cos):

Upon Completion of this course, the students will be able

No.	Course Outcomes	K-Levels
CO1	To understand what are all the basic concepts in Research and explain means of data collection	K1, K2
CO2	Explain and distinguish various sources of primary and secondary data and to apply it in data collection	K2, K3, K4
CO3	Demonstrate, construct, and explain the functions of presenting data in different methods	K2, K4, K5, K6
CO4	To develop the statistical inference and to explain the errors that can happen during data analysis	K3, K4, K5, K6
CO5	To illustrate, identify, evaluate and create new models and evaluate the data	K2, K3, K4, K5, K6

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	3	2	3
CO2	2	3	2	3	3
CO3	2	3	3	3	3
CO4	3	3	3	2	2
CO5	3	3	3	3	3
Weightage	12	15	14	13	14
Weighted percentage of Course Contribution to Pos	2.4	3	2.8	2.6	2.8

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)Assign the value

1 – Low,2 – Medium, 3 – High,0 – No Correlation

CORE PAPER – X

ECONOMETRIC METHODS

Course Objectives:
2. To provide an understanding on the knowledge of Econometrics and its use for Economists and social scientists, how economic theories are used to test empirical data.
3. To provide in depth knowledge on the Econometric models and to examine the meaning and applicability of dummy variables and to recall the basic methods of time series data.

UNIT I:BASIC REGRESSION

Analysis nature and scope of econometrics – simple regression model: specification, OLS method, assumptions of CLRM and Gauss Markov theorem, hypothesis testing and goodness of fit – extensions of simple regression model: regression through origin, scaling and units of measurement, functional forms of regression model – maximum likelihood estimation.

UNIT II: DUMMY VARIABLE

Dummy Variables- Nature of Dummy Variables- ANOVA Models, ANCOVA Models- Dummy Variable alternative to Chow test- Uses of Dummy Variables Seasonal Analysis- Piecewise Linear Regression. Qualitative response Regression Model- Linear Probability Model, Logit Model, Probit Model, Tobit Model.

UNIT III: DYNAMIC ECONOMETRIC MODEL

Dynamic Econometric Model: Autoregressive model and Distributed lag model – Estimation of Distributed Lag Models, The Koyck approach to Distributed—Lag models-Adaptive Expectations Model, Partial Adjustment Model. Estimation of Autoregressive Model- Almon approach to Distributed-Lag Models.

UNIT IV: SIMULTANEOUS EQUATION MODEL

Simultaneous Equation Model-Simultaneous equation bias- Identification Problem-Rules for Identification- Test of Simultaneity-Test of Exogeneity.Simultaneous Equation Methods- Recursive models and ordinary least squares- Methods of Indirect Least squares-Method of Two-Stage least squares– Generalized least squares.

UNIT V:TIME SERIES ECONOMETRICS

Introduction to Time Series Econometrics: Stochastic Process - Stationary and Non Stationary stochastic process-Unit root stochastic process- Trend stationary and difference stationary stochastic process-Integrated stochastic process – Properties- Unit root tests – Cointegration Model.

Text Books:
1. DamodarN.Gujarati&Sangeetha (2019)Basic Econometrics Tata McGraw-Hill Publishing company Limited New Delhi
2. K.Dhanasekaran(2012) Econometrics, Vrinda Publications.

References:

1. Gujarathi, D.N. (2005), Text Book of Econometrics[McGraw-Hill, New Delhi].

2. Kalirajan, K.P. (1995,.Applied Econometrics [Oxford and IBH, New Delhi].

3. Suresh, J. Ghosh (1994), Econometric Theory and Applications [Prentice Hall of India, New Delhi],

Web Resources:

1. https://learneconometricsfast.com.

2. https://inomics.com.

3. https://economicsnetwork.ac.uk.

COURSE OUTCOMES:
Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Examine the meaning and applicability of dummy variables	K1, K2, K4
CO2	Estimate the Auto Regressive model and the role of lags in dynamic econometric models	K4, K5
CO3	Identify the problems of ignoring OLS assumptions	K3, K4
CO4	Gain in-depth knowledge in Simultaneous equation models	K2, K4
CO5	Analyze the stochastic process and cointegration model	K3,K5

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO/PSO	PSO 1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	2
CO2	3	2	3	3	3
CO3	3	3	3	3	3
CO4	3	2	3	3	3
CO5	3	3	3	2	3
AVERAGE	15	13	15	14	14
Weighted percentage of Course Contribution to Pos	3.0	2.6	3.0	2.8	2.8

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low, 2 – Medium, 3 – High,0 – No Correlation

ELECTIVE – V (1)

POPULATION STUDIES / DEMOGRAPHY

Course Objectives:
1. To apply demographic concepts and population theories to explain past and present population characteristics.
2. To evaluate the use of demographic concepts and population theories to understand contemporary socio-economic issues and current affairs and to assess the relationship between demographic change and policy.

UNIT I: INTRODUCTION POPULATION STUDIES:

Nature and scope, Concepts and Definitions, Population Studies and Demography, Development of population Studies in World and India, Inter relationship between population studies and other disciplines. Sources of Population Data: Population Census-History of Census Taking in India, Vital Statistics Registration Systems-Historical Background-Vital Registration in different countries, Civil Registration in India-Historical Background, Sample Surveys-Important Demographic Sample Surveys conducted in India. Dual Reporting System, Population Registers and International Publications.

UNIT II: POPULATION GROWTH AND DISTRIBUTION POPULATION GROWTH

World, Developing and Developed countries. India's Population Growth-Trends and differentials in state and union territories, Factors Responsible for Rapid Population increase in India, Current Population situation and Future Prospects, Population Distribution among developed and developing regions of the world, Factors affecting Population distribution of India, Basic measures of population distribution.

UNIT III: POPULATION STRUCTURE AND CHARACTERISTICS SEX AND AGE STRUCTURE

Sex and Age Structure of various countries, Population PYRAMID, Factors affecting Age and Sex Structure of population, Aging Population. Marital status classification of population, Literacy and Educational attainment: Definition, Source of Data Measures used to study Literature, Religious classification of population.

UNIT IV: POPULATION DYNAMICS FERTILITY

Terms and Concepts, Factors affecting Fertility: Physiological factors, Social and Cultural factors, proximate determinants of Fertility, Sources Fertility data, Basic measures of Fertility. Mortality: Importance of the study, Terms and Concepts Data Sources and limitations, Factors important in the analysis of mortality, Measures of mortality, infant childhood and Maternal Mortality, Components of infant mortality, Levels and Trends and Mortality rates, Global HIV/AIDS Epidemic. Migration: of the study, Concepts and Definitions, Internal and International migration, Sources of Migration data, Measures of migration: Direct and Indirect methods, Everett Lee's Conceptual Framework for Migration analysis.

UNIT V: POPULATION POLICY CONCEPTS

Types of population Policies, Mortality, Fertility and Migration influencing Policies, World Population Plan of Action, Millennium Development Goals (MDGs),India's Population Policy, Family Planning Programme under various Five Year Plan Periods, Approaches to Family Planning Programme, Reproductive and Child Health Approach, National Population Policy 2000.

Text Books:

1. Shrivastava O.S. (2007), Demography and Population Studies,Quality Publishing Company (ajay)
2. Jain R.K. (2014), Textbook of Population Studies,Astha Publishers and Distributors

References:

1. BhendeAsha, A and Tara Kanitkar, (2012) Principles of Population studies, Mumbai Himalaya Publishing House.
2. Bogue, Donald J (1969), Principles of Demography, New York: John Wiley and Sons.
3. BaskarD.Misra. (1980), An introduction to the Study of Population, Madras: South Asian Publishers Pvt.Ltd.

Web Resources:

1. https://censusindia.gov.in/census.website/
2. https://www.taylorfrancis.com/series/international-population-studies/ashser1353
3. https://data.worldbank.org/indicator/SP.POP.GROW

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	To define and explain the basic concepts of population studies.	K1,K2,
CO2	To outline construct and conclude the population growth and distribution.	K2,K3,K5,
CO3	To organize and interpret the various population structure.	K3,K4,
CO4	To examine and criticise the various population dynamics.	K4,K5,
CO5	To label, and outline the various population policy.	K1,K5,

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low, 2 – Medium, 3 – High,0 – No Correlation

ELECTIVE – V (2)

ECONOMICS OF COASTAL RESOURCES

Course Objectives:

The main objectives of this course are to:

1. Enable the students to understand the importance of coastal resource for economic development.
2. To make them apply their minds to coastal protection through public participation and consensus building.
3. To make them to analyze the students how far globalization has negatively impacted coastal zone areas and its resources.

Unit I: INTRODUCTION

Introduction – Coasts – Features – Dunes - Beach Ridges – Creeks – Lagoons- Estuaries – Salt Marsh – Mangroves - Resources – Fisheries – Minerals – Seaweeds – Coral Reefs - Issues – Depletion - Degradation - Conflicts- Importance of ICM - Integrated Coastal Management – Definition – Functions – Guiding Principles- Stages of ICM – Enabling Conditions.

Unit II: ENVIRONMENTAL IMPACT ASSESSMENT OF COSTAL ENVIROMENT

Environmental Impact Assessment, Benefit – Cost Studies, Risk Assessment - Valuation of Resources- Participation for Behavior Change - Human Dimension to ICM – Importance of Public Participation and Consensus Building.

Unit III: INTEGRATED COASTAL MANAGEMENT PROGRAMMES

Formulation and Approval of an ICM Programme: Programme Formulation Process Identification of Initial Problems, Issues, and Opportunities - Setting Priorities Development and Analysis of Coastal Profiles - Assessment of Issues, Programmatic Scope: One Issue or Multiple Issues? – Geographical Scope – National Approach – Pilot Project - Formulation of Goals, Objectives and Strategies - Establishment of Boundaries for the Management Area - Inland Boundary, Seaward Boundary, Assessment of Existing Institutional and Legal Capacity for ICM Design of the Intersectoral – Intergovernmental Coordinating Mechanism and of the ICM Office - Consideration of New Management Measures, the Resulting ICM Plan, - Formal Approval of the ICM Plan by Participating Governments.

Unit IV LEGAL MEASURES TOWARDS COASTAL REGULATION MANAGEMENT

Implementation Process - Securing the Necessary Legal, Legislative Regulatory Changes, Putting the Institutional Arrangements in Place, Obtaining the Necessary Resources, Involving the Affected Interests in the Process, Management Tools and Techniques in the Operation Phase – Zonation - Set - Back Lines and Exclusionary Zones, Protected Areas, Special Area Planning - Acquisition, Easements, and Development Rights, Mitigation and Restoration, Coastal Permits, Conflict Management in an ICM Program - Understanding and Addressing Coastal and Marine Conflicts, Transparency and Public Participation in an ICM Program - Consensus Building, Types of Public Participation : "Advice Giving" and "Power Sharing" , Building and Maintaining Public Support : The Importance of Public Education and Awareness Performance Monitoring and Programme Accountability, Evaluation of ICM Programmes

Unit V ISSUES IN COASTAL ZONE MANAGEMENT IN INDIA

Issues in Coastal Zone Management in India – Impact of Globalization in Coastal Zone - Impact of Megacities in Coastal Zone – Coastal Disasters - Coastal Erosion - Coastal Disaster Planning and Management - Tourism Issues - Coastal Zone Regulations in India – CRZ Classification - Coastal Resource Management in Tamil Nadu – Issues – Gulf of Mannar and Bio diversity and Its Conservation - Coral Reef Management Issues in Gulf of Mannar – and Role of Government, NGOs and Communities.

Basic Readings list:
1. Stephen Bloye Olsen, (Ed.)Crafting Coastal Governance in a Changing World – Coastal Management Report #2241 CRC, URI, USA, 2003
2. BilianaCicin-Sain and Robert W.Knecht , Integrated Coastal and Ocean Management: Concepts and Practices , Island Press Washington, D.C.,1998.
3. Donald Robadue, Jr. (Ed.) Eight years in Ecuador The Road to Integrated Coastal Management –Coastal Resources Centre University of Rhode Island, USA, 1995.
4. Richard B. Pollnac and Brian R. Crawford, Discovering Factors that Influence the Success of Community –Based Marine Protected Areas in the Visayas, Philippines,
5. Coastal Resources Center, University of Rhode Island, USA, 2000.
6. Gordon W. Thayer et al., Science – Based Restoration Monitoring of Coastal Habitats, USA Department of Commerce NOAA, USA, 2003.
7. Richard K. Wallace and Kristen M. Fletcher, Understanding Fisheries Management, Auburn University and the University of Mississippi, USA, 1996.

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

CO Code	Course Outcomes	K-Levels
CO1	Basic understanding of the importance of coastal environment and its richness.	K1, K2
CO2	Understand the coastal protection through public participation and consensus building.	K2, K6
CO3	Assessment of existing Institutional and Legal Capacity for Integrated Coastal Management Design of the inter-sectoral- inter-governmental formulation and approval of ICM programmes.	K2, K6
CO4	Analyzing the importance of public Education and Awareness Performance Monitoring and Programme accountability, Evaluation of ICM Programmes.	K1, K2
CO5	Evaluate the impact of Megacities in the Coastal Zone areas.	K4, K6

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	3	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	3	3	3	3	3	2
CO5	3	3	3	3	3	3
Weightage	15	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix) Assign the value

1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

SEMESTER- III

ELECTIVE –V (3)

(MOOCS COURSES)

SKILL ENHANCEMENT COURSE

PERSONALITY DEVELOPMENT

Course Objectives:
1. To mark the students able and effective leadership and personality development
2. To learn the self-evaluation skill

UNIT I: CONCEPT OF PERSONALITY

Personality - Definition and meaning, Importance, Leadership and Management, Leader vs Manager, Essential qualities of an effective leader

UNIT II: PERSONALITY CHARACTERISTICS

Personality: Concept and Definition, Determinants of personality, Personality traits, Personality characteristics in organizations

UNIT III: SELF-EVALUATION

Self-evaluation, Locus of control, Self-efficacy, Self-esteem, Self-monitoring: Positive and negative Impact. Organizational Context of Leadership and Personality - Contemporary Business Leaders.

UNIT IV: QUALITIES OF PERSONALITY DEVELOPMENT

Body language - Problem-solving - Conflict and Stress Management - Decision-making skills - Character building -Team-work – Time management - Work ethics and etiquette.

UNIT V: ASPECTS OF EMPLOYABILITY

Resume building- Interactive session – Facing the Personal (HR & Technical) Interview – Self Introduction - Psychometric Analysis - Mock Interview Sessions.

Textbooks:
1. Parikh, M., & Gupta, R. K. (2010). *Organisationalbehaviour*. Tata McGraw Hill Education Pte. Limited.
2. Mullins, L. J., & McLean, J. E. (2019). *Organisationalbehaviour in the workplace*. Harlow: Pearson.

References:
1. Hofmann, D. A., & Jones, L. M. (2005). Leadership, collective personality, and performance. *Journal of Applied psychology*, *90*(3), 509.
2. Aurther, J. (2006). *Personality development*. Lotus Press.
3. Roberts, B. W. (2006). Personality development and organizational behavior. *Research in organizational behavior*, *27*, 1-40.

Web References
1. https://hbr.org/2017/09/could-your-personality-derail-your-career
2. https://au.indeed.com/career-advice/resumes-cover-letters/personal-skills
3.https://socialsci.libretexts.org/Courses/College_of_the_Canyons/COMS_246%3A_Inter personal_Communication_(Leonard)/2%3A_Communication_and_the_Self/2.1%3A_Self-Concept%2C_Self-Esteem_and_Self-Efficacy

Course Outcomes (Cos):

Upon Completion of this course, the Students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the importance of personality development	K1, K2, K3
CO2	To evaluate the Characteristics of Personality	K3, K5
CO3	Examine and analyse the concept of Self-evaluation	K2, K4
CO4	Describes the concept of Qualities of Personality Development	K1, K2
CO5	Create the self-evaluation and Organizational Context of Leadership and Personality	K1, K4, K5

K1 – Knowledge, K2 - Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	3	3	2	3
CO2	3	3	3	3	2	3
CO3	3	2	3	2	2	3
CO4	3	2	2	2	3	3
CO5	3	2	2	2	3	3
Weightage	14	12	13	14	12	15
Weighted percentage of Course Contribution to Pos	2.8	2.4	2.6	2.8	2.4	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

SEMESTER – IV

CORE – XI

INTERNATIONAL ECONOMICS

Course Objectives:

1. To make the students to understand theories of International Trade.
2. To understand the concept of balance of payments and equilibrium in BOP and to know the functioning of international institutions and its role.

UNIT I: THEORIES OF TRADE - I

Pure Theory of International Trade Comparative Cost Theory - Refinements of Comparative Cost Theory Modern Theory of Factor Endowments – Leontief Paradox- Factor price equalization theorem – Factors Intensity Reversal: The Stolper-Samuelson Theorem and the Rybezynski Theorem.

UNIT II: THEORIES OF TRADE - II

Recent Theories of International Trade Karvi's Theory of Availability – Lindar's Theory of Volume of Trade and demand pattern- Posner's Technological Gap Theory – Vernon's Product Cycle Theory - Kenen's Human capital theory- Intra- Industry Trade – Theory of Imperfect Competition - Strategic Theory – External Economies and International Trade.

UNIT III:BALANCE OF PAYMENT

Balance of Payments Policies BOP Disequilibrium – Adjustment Mechanism: Elasticity Approach, Absorption approach and Monetary Approach- Expenditure changing monetary and fiscal policy – Monetary and Fiscal policies for internal and external balance: The Swan Model and Mundallian Model- Expenditure Switching Policies and Expenditure Reducing Policies – Foreign Trade Multiplier.

UNIT IV: FOREIGN AID

Foreign Aid and MNCs. Foreign Aid - Types of Foreign aid – Advantages and Disadvantages – Factors determining foreign aid - Foreign Investment – Foreign Direct investment – Types of FDI – FDI Policy of India- Multinational Corporations – Features of Multinational Corporations - Advantages and Limitations of MNCs – MNCs and International Trade.

UNIT V:FOREIGN EXCHANGE

Managing Foreign Exchange Risk Foreign exchange risk - Sources of foreign exchange risk – types of exchange rate risk - Transaction risk, Translation risk, Economic risk Measurement of Exchange Rate Risk - value-at-risk (VAR) model. Methods of managing foreign exchange risk - internal and external techniques- Forward contracts, Money market hedges, Currency futures, Currency Options, Currency swaps.

Text Books:

1. D.N. Dwivedi (2013) International Economics: Theory and Policy. Vikas Publishing House ,New Delhi

2. M.L.Jhingan (2016) International Economics, Vrindha Publications ,New Delhi

References:

1. Francis Cherunillam (2004), International Economics (Tata McGraw Hill, New Delhi).

2. Paul Krugman and Maurice (2013), International Economics: Theory and PolicyObstfeld (New Delhi: Pearson).

3. J.N. Bhagwati (2003), Free Trade Today (Oxford University Press, New Delhi).State Integrated Board of Studies – Economics PG 20.

Web References:

1. https://www.worldbank.org/en/country/eu
2. https://www.imf.org/en/Data
3. https://www.economagic.com/

Course Outcomes (COs):
Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand Theories of International trade	K_1, K_2, K_3
CO2	Learn the Recent Theories in International trade	K_1, K_2, K_3
CO3	Ability to know the concept of Balance of Payments Policies	K_1, K_2, K_3, K_4
CO4	Assess the working of MNC s,Foreign Aid	K_1, K_2, K_3
CO5	Understand the working of Foreign Exchange	$K_1, K_2, K_3,$

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3
CO2	3	3	3	2	3
CO3	3	3	3	2	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	12	15
Weighted percentage of Course Contribution to Pos	3	3	3	2.4	3

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low, 2 – Medium, 3 – High, 0 – No Correlation

DEVELOPMENT ECONOMICS

Course Objectives:

1. Tracing the evolution of theories of economic development

2. To impart ideas on economic development and economic growth and its determinants and to familiarize the students about the index of measuring economic development

UNIT I: INTRODUCTION CONCEPTUALIZING DEVELOPMENT

Introduction Conceptualizing development: (a) GNP) as development indicator (b) Sen's capabilities approach to development: The Human Development Index- The structural characteristics of developing economies- Factors of development : (a) Capital accumulation (b) Labour (c) Natural resources (d) Technological Progress (e) Social institutions cultural values and entrepreneurial ability.

UNIT II: THEORIES OF DEVELOPMENT AS GROWTH

Theories of Development as growth: (a) Harrod-Domar model (b) Rostow's stages of growth theory (c) Lewis theory (d) balanced and unbalanced growth (e) Neo classical growth theory –Solow Model- Contemporary theory of development: (a) New growth theory: Romer model (b) Underdevelopment as Co-ordination failure (c) Kremer's O-Ring theory of development- Dependency theory-path dependence in development: QWERTY- Geography and development: Krugman's theory.

UNIT III: POVERTY, INEQUALITY AND HUMAN CAPITAL MEASUREMENT

Poverty, Inequality and Human Capital Measurement of inequality and poverty-Inverted –U hypothesis - Cause of inequality- Investing in education and health-the human capital approach Education and Development (a) social and private benefits of education- (b) education, inequality and poverty (c) Women's education and development Health system in development (a) health and productivity (b) financing health system in developing economics (c) Gender perspective in health care.

UNIT IV: AGRICULTURE AND RURAL DEVELOPMENT

Agriculture and Rural Development The role of agriculture in development- Agricultural policy: (a) agricultural taxation (b) pricing policy- Risk aversion and uncertainty in subsistence farming-sharecropping and interlocking factor markets- Rural urban migration – Todaro model –Rural credit markets (a) providers and characteristics (b) theories of informed credit markets: lender's monopoly and default collateral.

UNIT V: POLICIES FOR MARKET DEVELOPMENT

Policies for development Market and the state in development:(a) The Washington consensus components and critical evaluation (b) The role of state in development (c) market failure state failure and development- Trade Policy in development : (a) import substitution (b) export promotion- Fiscal policy for development: (a) direct Vs indirect taxes (b) pattern and

level of taxation.- Financial system in development: (a) the role of financial system in development (b) role of central banks (c) financial liberalization.

Text Books:

1. Jhingan M.L. Jhingan B K.,2019 The Economics of Development and Planning.,42 ed.,Vrinda Publications

2. Agrawal, A.N., Indian Economy: Problems of Development and Planning

References

1. Michael P. Todaro and Stephen C. Smith (2004), Economic Development, Pearson Education, Singapore cha- 2, 6,7, 8.

2. Yujiro Hayami (2003), Development Economics: OxfordUniversity Press, New Delhi. Tamilnadu State Council for Higher Education 17.

3. Debraj Ray (2009), Development Economics, OxfordUniversity Press, New Delhi.

Web Resources

1. https://economicsconcepts.com/human_development_index_(hdi).ht m

2. https://hdr.undp.org/data-center/human-development-index#/indicies/HDI

3. https://web.stanford.edu/~chadj/facts.pdf

Course Outcomes (Cos):
Upon Completion of this course, the students will be able to

No.	Course Outcomes	K-Levels
CO1	Understand the concepts of Development	K_1, K_2, K_3
CO2	Acquire knowledge about the theories of economic development	K_1, K_2, K_3
CO3	Ability to understand the concepts related to Poverty , Inequality, Health and Education	K_1, K_2, K_3
CO4	Gain knowledge about the insights of Rural Development	K_1, K_2, K_3, K_4, K_5
CO5	Understand the role of State in Fiscal Management	K_1, K_2, K_3, K_4, K_5

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	2	3
CO2	3	3	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	2	3
Weightage	15	15	15	12	15
Weighted percentage of Course Contribution to Pos	3	3	3	2.4	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

ELECTIVE – VI (1)

ECONOMICS OF SOCIAL ISSUES

Course Objectives

1. To understand the insights to the economic theory in the design and implementation of public policy related to the social sectors.
2. This course finds roots in social economics, health, education and the problem of discriminations in the society.

UNIT I:INTRODUCTION – SOCIAL ECONOMICS

Introduction of Social Economics: Definition – Equality in Human Societies – Role of government – Social security – Subsidies – Social banking – Refugees, Slavery and Beggary. - Principles of Social Doctrines: Marx, Pope and Gandhi.

UNIT II:ECONOMICS OF HEALTH

Concept of Welfare Economics – Health dimensions – Determinants of Health - Demand and Supply of Health care – Financing of healthcare - Concept of human life value – Inequalities in health – Healthcare constraints.

UNIT III:ECONOMICS OF EDUCATION

Education as an instrument of economic growth – Concept of human capital – components of human capital – Private and Social demand for education – Educational planning and economic growth – Manpower requirements approach – Human resource mobilization and utilization.

UNIT IV:SOCIAL DISCRIMINATION

Sources of Social Discrimination – Class, Caste, Religion, Race and language – Monopoly power - Consumerism – Provision of information – Economic crimes and their prevention – Violation of Human Rights – Terrorism: Causes and consequences – Need to control terrorism.

UNIT V:HUMAN DEVELOPMENT INDEX

Indicators – Life expectancy, Per Capita income and Education - Index – HDI Reports, UNDP - Dimensions - Poverty – Inequality – Gender.

Text Books
1. SeetaPrabhu, K. Economic Reform and Social Sector Development, Sage Publications, New Delhi, 2012.
2. Dreze, Jean and AmartyaSen, Hunger and Public Action, Clarendon Press, London.1999

Reference Books
1. Baumol, W J, & Oates, W E, Theory of Economical Policy, Cambridge University Press, 2000.

2. Culyer, A.J., The Economics of Social Policy, Martin Robertson and Co. Ltd., London. 1993.
3. Douglass C. North and Roger Leroy Miller, The Economics of Public Issues, Harper & Row Press, New York. 2001.

Web Resources

1. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjI4KeSh
2. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjI4KeSh-
3. https://link.springer.com/content/pdf/bfm:978-1-349-15632-0/1.pdf

Course Outcomes (Cos):

Upon Completion of this course, the students will be able to

CO Code	Course Outcomes	K-Levels
CO1	To define social economics and illustrate the role of the government in creating equality in human societies.	K1, K2
CO2	To explain and elaborate the concept of welfare economics with specific reference to healthcare.	K2, K6
CO3	To illustrate and discuss the importance of education in creating human capital; private and social demand for education.	K2, K6
CO4	To recall, classify and compare the various sources of social discrimination, causes and consequences of the same.	K1, K2
CO5	To examine, estimate and illustrate the several components of human development index and the importance of these indices on development of the social sector.	K4, K6

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	3	3
CO2	3	3	3	3	3	3
CO3	3	3	3	3	3	3
CO4	3	3	3	3	3	2
CO5	3	3	3	3	3	3
Weightage	15	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix) Assign the value

1 – Low,2 – Medium, 3 – High,0 – No Correlation

ELECTIVE – VI (2)

ENTREPRENEURIAL DEVELOPMENT

Course Objectives:
   1. To understand the concept of Entrepreneurship
   2. To understand the responsibilities and process of an entrepreneur

Unit I: Introduction

Introduction of Concepts Concept of Entrepreneur – characters of an Entrepreneur – distinction between Entrepreneur & Manager – function & Types of Entrepreneur. Concept Entrepreneurial ship – Role in Economic Development, Women Entrepreneurial ship – function, problems recent trends.

Unit II:Entrepreneurial Growth

Entrepreneurial Growth Economic & Non-Economic Factors – Role of Government Entrepreneurial Motivation – Theories – factors- Entrepreneurial Development – Need, Objectives, Phases Evaluation.

Unit III:Project Formulation and Selection

Projects & Entrepreneur Meaning – Identification – Selection- Project Formation: Meaning and Significance - Contents of a Project Report – Formation– Planning Commission Guidelines.

Unit IV:Project Appraisal

Project Appraisal and Finance Concept - methods of Appraisal- Need for financial Planning – Source of finance - Capital structure – Capitalisation –venture capital – Export Finance.

Unit V:Institutional Finance

Institutional Finance to Entrepreneurs Commercial Bank, Industrial Development of India (IDBI),Industrial Finance Corporation of India (IFCI),Industrial Credit & Investment Corporation of India (ICICI) Unit Trust of India (UTI),State Financial Corporation's (SFCs),State Industrial Development Corporation (SIDCO) Exam Bank of India- Institutional Support to Entrepreneur National Small Industries Corporation Ltd.(NSIC)- Small Industries Development Organisation (SIDO)- Small Scale Industries Board (SSIB)- State Small Industries Development Corporations (SSICS)- Small Industries Service Institutes (SISI)- District Industries Centre (DICs).

Text Books:
   1. Dr.S.S.Khanka (2011), Entrepreneurial Development, S.Chand& Company Ltd, Ram Nagar New Delhi. State Integrated Board of Studies – Economics PG 58.
   2. 4. Poornima M. Charantimath, (2007), Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi.

Reference Books:
1. Vasant Desai, (2008), Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, New Delhi.
2. Robert D. Hisrich, Michael P. Peters and Dean A. Shepherd,(2007) Entrepreneurship, Tata McGraw Hill, New Delhi.
3. Khanka, S.S. (2007), Entrepreneurial Development, S.Chand& Company, New Delhi.

Web Resources:
1. https://www.startupindia.gov.in/content/sih/en/reources/l-d-listing.html
2. https://elearningindustry.com/entrepreneurship-and-elearning-top-5-elearning-options-newbie-entrepreneurs

Course Outcomes (COs):
Upon Completion of this course, the students will be able to

S.No	Course Outcomes	K-Levels
CO1	Understand the concept of Entrepreneurship	K_1, K_2, K_4
CO2	Ability to learn the factors involved in business	K_1,K_2, K_4
CO3	Identify the process involved in the project	K_1,K_2, K_3 K_4
CO4	Assess the methods of Project Appraisal	K_1, K_2, K_3 K_4 K_5
CO5	Acquire the knowledge about source of Finance	K_1,K_2,K_3,K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	3
CO2	3	3	2	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	2	3	3
Weightage	15	15	12	15	15
Weighted percentage of Course Contribution to Pos	3	3	2.4	3	3

Level of Correlation between PSO's and CO's
        (Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
        Assign the value
        1 – Low
        2 – Medium
        3 – High
        0 – No Correlation

ELECTIVE – VI (3)

PUBLIC FINANCE AND POLICY IN INDIA (e-Pathshala)

Course Objectives:
The main objectives of this course are to:
1. Enable the students to understand objective of fiscal policy, stabilization, monetary policy and principles of multi-unit finance.
2. Students can learn fiscal federalism in India and role of finance commission and planning commission. In addition, students can gain knowledge about the devolution of resources between centre and state.
3. Students can expand their knowledge towards Centre – State Financial Relations, Indian Tax system, GST and State Revenue sources and Budget presentations.

UNIT I - INTRODUCTION TO FISCAL POLICY

Objectives of Fiscal Policy – Fiscal Policy for stabilization – Interdependence of fiscal and monetary policy – budgetary and its implications – Alternative measures of resource mobilization – Impact of Fiscal Policy on growth and distribution – Impact of Fiscal policy on prices – Balanced budget multiplier – Principles of multi-unit finance.

UNIT II FISCAL FEDERALISM IN INDIA

Fiscal federalism in India – Assignment of functions and sources of revenue constitution – financial imbalance – vertical and horizontal – Mechanism of transfers: Finance commission and planning commission – Devolution of resources and Grants – Fiscal grants in India.

UNIT III RESOURCE TRANSFER TO UNION TO STATE

Resource transfer from union to State – Twelfth Finance Commission - Resource transfer from union to State – Thirteenth Finance Commission – Centre – State Financial Relations – Problems of States Resources and indebtedness – Transfer of resources from Union and States to Local bodies.

UNIT IV INDIAN TAX SYSTEM

Indian Tax systems – Structure of Union Government Revenues – Major Taxes in India –I (base of a tax, direct taxes) – Major taxes in India –II – Direct Taxes: Trends and Reforms - Indirect Taxes: Trends and Reforms – Trends in Public Expenditure – Trends in Public debt - Fiscal crisis and reforms in India – Union excise duty and tax on services – Value Added Tax and Goods and Services Tax.

UNIT V SOURCES OF REVENUE TO UNION AND STATE GOVERNMENTS

State Governments - Sources of Revenue –I - State Governments - Sources of Revenue –II – Other State Taxes – Revenue Sources of Local Governments – Analysis of Budgets of Union and State Governments-I - Analysis of Budgets of Union and State Governments-II.

References

1. Basu, Kaushik (1997), Analytical Development Economics: The Less Developed Economy Revisited, The MIT Press.
2. Bird, Graham (2004), International Finance and the Developing Economies, Palgrave Macmillan.
3. Bell, Crive (2003), Development Policy as Public Finance , Oxford University Press

4. Gale, Douglas (1994), "The Efficient Design of Public Debt," in Franklin Allen and D. Gale, Financial Innovation and Risk Sharing, The MIT Press.

5. Gibson, Heather D. (1996), International Finance: Exchange Rates and Financial Flaws in the International System, Longman.

6. Krugman, Paul (1988), "Financing vs. Forgiving a Debt Overhang," Journal of Development Economics , No. 29, pp. 253-268, North Holland.

7. Sachs, Jeffrey (1989), "The Debt Overhang of Developing Countries," in Guillermo Calvo, Ronald Findlay, PenttiKouri and Jorge Braga de Macedo (eds.), Debt, Stabilization and Development: Essays in Memory of Carlos Diaz-Alejandro , Blackwell

Course Outcomes (COs):
Upon Completion of this course, the students will be able to

S.No	Course Outcomes	K-Levels
CO1	Students can able to understand the objective of monetary and fiscal policy in detail	K_1, K_2, K_4
CO2	Enhance the students for understanding fiscal federalism and its significance.	K_1, K_2, K_4
CO3	Students also learn role of finance commission and planning commission.	$K_1, K_2, K_3 K_4$
CO4	Students can evaluate the centre-state financial relation	$K_1, K_2, K_3 K_4 K_5$
CO5	Comprehend Indian Tax system	K_1, K_2, K_3, K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	2	3	3
CO2	3	3	2	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's
    (Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
    Assign the value
    1 – Low
    2 – Medium
    3 – High
    0 – No Correlation

SKILL ENHANCEMENT COURSE

ROLE OF MSMES
(PRACTICE OF PUBLIC AND PRIVATE COMPANIES AND BANKING SYSTEMS)

Course Objectives:
1. To enlight the students on various opportunities to start a small scale business and the understand the structure of MSMEs in India
2. To educate students about the schemes and policies in India for companies and banking

UNIT I: MSMES IN INDIA

Concept of Entrepreneur and Entrepreneurship - Quality and Characteristics of Entrepreneurs - Overview and History of Entrepreneurship - Definition - Overview - History of SMEs in India - Performance(Role/Economic Indicators) - Production - Employment and Export Opportunities in MSMEs - Steps involved in setting up MSMEs.

UNIT II: PROGRAMS SCHEMES AND SERVICES - I

Schemes Implemented by the ministry/through DC (MSME) Scheme - Scheme under XI Plan - Micro and Small Enterprise Cluster Development Program - Credit Linked Capital Subsidy Scheme for Technology Up gradation - Credit Guarantee Scheme - Assistance to Entrepreneurship Development Institutes. Programs and schemes of ministry of MSME Special Schemes for Backward area (State and UT to be considered backward and industrially backward Districts) Scheme on trade related entrepreneurship assistance and development (TREAD) for women Promotional Schemes for Women, Schemes Of NSIC, KVIC, COIR Board.

UNIT III: PROGRAMS, SCHEMES AND SERVICES - II

Programs and schemes of ministry of MSME - Special Schemes for Backward area (State and UT to be considered backward and industrially backward Districts) - Scheme on trade related entrepreneurship assistance and development (TREAD) for women - Promotional Schemes for Women - Schemes of NSIC,KVIC,COIR Board.

UNIT IV: MSME POLICIES

Central Government Policies - SME and Export Promotion Policy - The MSME Development Act, 2006.

UNIT V: EMERGING TRENDS AND INSTITUTIONS SUPPORTING MSME

Overview of World Trade Organization, Intellectual property rights, INSME - (International SME Network) - Bar Coding.

Text Books:

1. Vasant Desai, The Dynamics Of Entrepreneurial Development And Management, Himalaya Publishing House

2. Paul Burns and Jim Dewhurst, Small Business and Entrepreneurship, Palgrave Macmillan; 2nd edition

References:

1. Gupta C.B. and Srinivasan N.P., Entrepreneurship development in India, Sulthan Chand and Sons

2. Kamal Garg, Bharat's Handbook on MSMEs (Micro, Small and Medium Enterprises), Bharat Law House Pvt. Ltd.

3. Indian Institute of Banking and Finance, Micro, Small and Medium Enterprises (MSMEs), TAXMANN

Web Resources:

1. https://msme.gov.in/public-procrument-policy
2. https://www.wto.org/english/thewto_e/thewto_e.htm
3. http://coirboard.gov.in/?page_id=221

Course Outcomes (Cos):

Upon Completion of this course, the Students will be able

No.	Course Outcomes	K-Levels
CO1	To define MSME and to explain the history of it in India	K1,K2
CO2	To summarize and identify numerous schemes for MSMEs	K2,K3, K4
CO3	To analyze and illustrate the programs for women and economic backward	K2,K4
CO4	To know the functions of and discuss about MSME development Act	K4, K6
CO5	To evaluate and estimate the role of WTO in the functioning of MSMEs	K5,K6

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

BUSINESS MANAGEMENT WITH TALLY

(Learning of Tally for Employability)

Course Objectives:
1. To understand the nature of a business organization.
2. To learn data maintenance for a business organization.

UNIT I: SIMPLE ACCOUNTING MANAGEMENT

Pre-Defined accounting groups and flexible chart of accounting – Groups and Ledgers management – Multi Currency support – Post dated transactions

UNIT II: FLEXIBLE PURCHASE AND SALES MANAGEMENT

GST complaint invoice – Multiple billing formats – Multiple price list and discount management – multiple mailing address – sales and purchase order processing

UNIT III: INVENTORY MANAGEMENT

Physical stock Verification - Manufacture and expiry date management – Flexible unit of measurement – Job costing –Reorder level - Multiple stock valuations

UNIT IV: BANKING AND JOB WORK

Auto Configuration - Cheque book management – Auto Bank reconciliation – Post dated cheque management – E payment – Job Order and Work Processing

UNIT V: ACCOUNTING ANDFINANCIAL REPORTS

Ledger reports – Cash/Bank Report – Bill receivable and payment – balance sheet – profit and loss A/C – Stock Summery – Stock Transfers – Order Summery

Text Books:
1. Tally.ERP 9 with GST in Simple Steps Paperback ,(2020) DT Editorial Services, India
2. Dr.NamrataAgrawal, Comdex Tally.ERP 9 Course Kit (2019), Dreamtech press , India

References:
1. Asok .K.Nadhani (2018), Tall. ERP 9 Training Guide, BPB Publications, India
2. Vikas Gupta (2018), Comdex Tally.ERP 9 Course Kit with GST and MS Excel, Dreamtechpress ,India
3. Shraddha Singh, Tally Erp 9, VandS Publishers

Web Resources:
1. https://tallysolutions.com/learning-hub/
2. https://www.rivereastlibrary.org/Pages/Index/183493/tech-time-online-resources-with-tally
3. https://www.tallysoft.com/wp-content/uploads/2017/07/TallyExplorer-Manual_v5.1.0.0.pdf

Course Outcomes (COs):

Upon Completion of this course, the Students will be able

S.No	Course Outcomes	K-Levels
CO1	Understand accounting and inventory Management	K_1, K_2, K_4
CO2	Able to maintain Company data like Flexible purchase and Sales Management	K_1, K_2, K_3, K_4
CO3	Develop skill in Inventory management	$K_1, K_2, K_3 K_4$
CO4	Learn to create Banking Transactions and E- payment	$K_1, K_2, K_3 K_4$
CO5	Acquire knowledge about Accounting and Inventory Reports in Tally ERP	K_1, K_2, K_3, K_4

K_1 – Knowledge, K_2 - Understand, K_3 – Apply, K_4 – Analyse, K_5 – Evaluate, K_6 – Create.

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3	3	3	3	3

Level of Correlation between PSO's and CO's

(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)

Assign the value

1 – Low

2 – Medium

3 – High

0 – No Correlation

ECONOMICS FOR COMPETITIVE EXAMINATIONS

Course Objectives:
1. To enable the students to acquire knowledge related to various Economics concepts pertaining to Indian Economy.
2. To help the students to have reason and think Economics and apply it in real terms

UNIT I: ECONOMICS GROWTH AND DEVELOPMENT
The basic concept and definition of economy and economics – its uses and transfer of resources, distributive effects, macro and micro economic policy, micro-macro balance, the distributive impact of economic policies, development versus growth, determinant of growth and development, concepts such as HPI / MPI, HDI, PQLI, GEM, GDI / GII, TAI, Green index, sustainable development, India's ranking in the various indices.

UNIT II: INCLUSION AND POVERTY
Definition, relevance, types, financial inclusion, recent initiatives – Poverty – Definitions, causes, distribution – deprivation, income versus calories, measurement of poverty, the status of poverty, eradication programmes, poverty and resource policy, tribal rights and issues, livelihood mission.

UNIT III: BASIC ECONOMIC INDICATORS AND FEATURES OF INDIAN ECONOMY
National Income – Concepts, Methods of calculation – Features of Indian Economy – Economic and Non-economic factors - Price Index, Production, Population, Foreign Trade – Division of economic activities – Human Development Reports.

UNIT IV: AGRICULTURE AND INDUSTRY
Crops, Seasons, Agricultural Credit Agencies, Kisan Credit Agencies, Land Reforms, Insurance, Green, White, Blue, Yellow Revolutions, Irrigation – Industrial Policies (1948, 1956, 1991), Small Scale Industries, Industrial Sickness, Disinvestment, PSU Policy, Industrial Finance. – Labour Policies

UNIT V: PUBLIC FINANCE
Fiscal Policy – Definition, Components, Receipts, Revenue and Capital Account, Tax Revenue, Expenditure, Budget - Finance Commission, Taxation, Deficit Financing, Public Spending and Debt. – Monetary Policy – Instruments – Current affairs in Economics

Text Books:
1. Puri V.K., Misra S.K., Indian Economy, Himalaya Publication House
2. Bhatia H.L., Public Finance, Vikas Publishing House

References:
1. Jhingan M.L., The Economics of Development and Planning, Vrinda Publications P Ltd
2. Koutsoyiannis A., Modern Microeconomics, Palgrave Macmillan U.K.
3. GauravDatt and AshwaniMahajan, Datt and Sundharam Indian Economy, S Chand and Co Ltd

Web Resources:
1. https://www.indiabudget.gov.in/
2. https://www.nabard.org/news-article.aspx?id=25andcid=552andNID=220
3. https://www.birmingham.ac.uk/news/2017/green-white-and-blue-why-india-needs-a-third-agricultural-revolution#:~:text=Agriculture%20is%20the%20backbone%20of,the%20world's%20largest%20milk%20producer.

Course Outcomes (Cos):
Upon Completion of this course, the Students will be able

No.	Course Outcomes	K-Levels
CO1	To explain and outline the concepts of Economic growth and development.	K1,K2
CO2	To explain and identify the problems of inclusion and poverty.	K2,K3
CO3	To interpret, develop and determine the economic indicators and features of Indian Economy.	K2,K3,K5
CO4	To illustrate and discuss the Agriculture and Industrial Sector.	K2,K6
CO5	To determine and estimate the Public Finance.	K5,K6

CO-PO Mapping (Course Articulation Matrix)

CO /PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	3	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	15	15
Weighted percentage of Course Contribution to Pos	3.0	3.0	3.0	3.0	3.0

Level of Correlation between PSO's and CO's
(Suggested by UGC as per Six Sigma Tool – Cause and Effect Matrix)
Assign the value
1 – Low
2 – Medium
3 – High
0 – No Correlation