M A ECONOMICS

LOCF SYLLABUS 2025

Department of Economics

School of Management Studies

St. Joseph's College (Autonomous)

Tiruchirappalli - 620002, Tamil Nadu, India

SCHOOLS OF EXCELLENCE WITH CHOICE BASED CREDIT SYSTEM (CBCS) POSTGRADUATE COURSES

St. Joseph's College (Autonomous), an esteemed institution in the realm of higher education in India, has embarked on a journey to uphold and perpetuate academic excellence. One of the pivotal initiatives in this pursuit is the establishment of five Schools of Excellence commencing from the academic year 2014-15. These schools are strategically designed to confront and surpass the challenges of the 21st century.

Each School amalgamates correlated disciplines under a unified umbrella, fostering synergy and coherence. This integrated approach fosters the optimal utilization of both human expertise and infrastructure. Moreover, it facilitates academic fluidity and augments employability by nurturing a dynamic environment conducive to learning and innovation. Importantly, while promoting collaboration and interdisciplinary study, the Schools of Excellence also uphold the individual identity, autonomy, and distinctiveness of every department within.

The overarching objectives of these five schools are as follows:

1. Optimal Resource Utilization: Ensuring the efficient use of both human and material resources to foster academic flexibility and attain excellence across disciplines.

2. Horizontal Mobility for Students: Providing students with the freedom to choose courses aligning with their interests and facilitating credit transfers, thereby enhancing their academic mobility and enriching their learning experience.

3. Credit-Transfer Across Disciplines (CTAD): The existing curricular structure, compliant with regulations from entities such as TANSCHE and other higher educational institutions, facilitates seamless credit transfers across diverse disciplines. This underscores the adaptability and uniqueness of the choice-based credit system.

4. Promotion of Human Excellence: Nurturing excellence in specialized areas through focused attention and resources, thus empowering individuals to excel in their respective fields.

5. Emphasis on Internships and Projects: Encouraging students to engage in internships and projects, serving as stepping stones toward research endeavors, thereby fostering a culture of inquiry and innovation.

6. Addressing Stakeholder Needs: The multi-disciplinary nature of the School System is tailored to meet the requirements of various stakeholders, particularly employers, by equipping students with versatile skills and competencies essential for success in the contemporary professional landscape.

In essence, the Schools of Excellence at St. Joseph's College (Autonomous) epitomize a holistic approach towards education, aiming not only to impart knowledge but also to cultivate critical thinking, creativity, and adaptability – qualities indispensable for thriving in the dynamic global arena of the 21st century.

Credit system

The credit system at St. Joseph's College (Autonomous) assigns weightage to courses based on the hours allocated to each course. Typically, one credit is equivalent to one hour of instruction per week. However, credits are awarded regardless of actual teaching hours to ensure consistency and adherence to guidelines.

The credits and hours allotted to each course within a programme are detailed in the Programme Pattern table. While the table provides a framework, there may be some flexibility due to practical sessions, field visits, tutorials, and the nature of project work.

For postgraduate (PG) courses, students are required to accumulate a minimum of 92 credits, as stipulated in the programme pattern table. The total minimum number of courses offered by the department is outlined in the Programme Structure.

OUTCOME-BASED EDUCATION (OBE)

OBE is an educational approach that revolves around clearly defined goals or outcomes for every aspect of the educational system. The primary aim is for each student to successfully achieve these predetermined outcomes by the culmination of their educational journey. Unlike traditional methods, OBE does not

prescribe a singular teaching style or assessment format. Instead, classes, activities, and evaluations are structured to support students in attaining the specified outcomes effectively.

In OBE, the emphasis lies on measurable outcomes, allowing educational institutions to establish their own set of objectives tailored to their unique context and priorities. The overarching objective of OBE is to establish a direct link between education and employability, ensuring that students acquire the necessary skills and competencies sought after by employers.

OBE fosters a student-centric approach to teaching and learning, where the delivery of courses and assessments are meticulously planned to align with the predetermined objectives and outcomes. It places significant emphasis on evaluating student performance at various levels to gauge their progress and proficiency in meeting the desired outcomes.

Here are some key aspects of Outcome-Based Education:

Course: A course refers to a theory, practical, or a combination of both that is done within a semester.

Course Outcomes (COs): These are statements that delineate the significant and essential learning outcomes that learners should have achieved and can reliably demonstrate by the conclusion of a course. Typically, three or more course outcomes are specified for each course, depending on its importance.

Programme: This term pertains to the specialization or discipline of a degree programme.

Programme Outcomes (POs): POs are statements that articulate what students are expected to be capable of by the time they graduate. These outcomes are closely aligned with Graduate Attributes.

Programme Specific Outcomes (PSOs): PSOs outline the specific skills and abilities that students should possess upon graduation within a particular discipline or specialization.

Programme Educational Objectives (PEOs): PEOs encapsulate the expected accomplishments of graduates in their careers, particularly highlighting what they are expected to achieve and perform during the initial years postgraduation.

LEARNING OUTCOME-BASED CURRICULUM FRAMEWORK (LOCF)

The Learning Outcomes-Centric Framework (LOCF) places the learning outcomes at the forefront of curriculum design and execution. It underscores the importance of ensuring that these outcomes are clear, measurable, and relevant. LOCF orchestrates teaching methodologies, evaluations, and activities in direct correlation with these outcomes. Furthermore, LOCF adopts a backward design approach, focusing on defining precise and attainable learning objectives. The goal is to create a cohesive framework where every educational element is in harmony with these outcomes.

Assessment practices within LOCF are intricately linked to the established learning objectives. Evaluations are crafted to gauge students' achievement of these outcomes accurately. Emphasis is often placed on employing authentic assessment methods, allowing students to showcase their learning in real-life scenarios. Additionally, LOCF frameworks emphasize flexibility and adaptability, enabling educators to tailor curriculum and instructional approaches to suit the diverse needs of students while ensuring alignment with the defined learning outcomes.

Some important terminologies

Core Courses (CC): *These are compulsory courses that students must undertake as essential components of their curriculum, providing fundamental knowledge within their primary discipline. Including core courses is essential to maintain a standardized academic programme, ensuring recognition and consistency across institutions.*

Discipline Specific Elective Courses (ES): *Elective courses are offered within the main discipline or subject of study. They allow students to select specialized or advanced options from a range of courses, offering in-depth exposure to their chosen area of study. Typically, ES are more applied in nature and provide a deeper understanding of specific topics.*

Research Methodology/IPR(RM)*: It is a two-credit course offered in the third semester as a common program across disciplines within the school. It is designed to acquaint postgraduate learners with the research foundations and legal frameworks vital for innovation and entrepreneurship in technology and business.*

Open Elective Courses (OE): *These elective courses are chosen from disciplines unrelated to the student's main area of study, aiming to broaden their exposure and knowledge base. As per the Choice Based Credit System (CBCS) policy, students may opt for open elective courses offered by other disciplines within the college, enhancing the diversity of their learning experience.*

Ability Enhancement Course (AEC): *AE is designed to enhance skills and proficiencies related to the student's main discipline. It aims to provide practical training and hands-on experience, contributing to the overall development of students pursuing academic programmes.*

Skill Enhancement Course (SEC): *SE focus on developing specific skills or proficiencies relevant to students' academic pursuits. While it is open to students from any discipline, SE is particularly beneficial for those within the related academic programme.*

Self-Learning (SL): *A two-credit course designed to foster students' ability for independent and self-directed learning. There are* Three Self-Learning Courses:

- 'Global Citizenship Education' *a common online course offered to all PG students in Semester I on JosTEL.*
- *Compulsory MOOC on NPTEL-SWAYAM in Semester I or II*
- *A Department-Specific Self-Learning Course in Semester III on JosTEL*

Comprehensive Examination (CE): *These examinations cover detailed syllabi comprising select units from courses offered throughout the programme. They are designed to assess crucial knowledge and content that may not have been covered extensively in regular coursework.*

Extra Credit Courses: *To support students in acquiring knowledge and skills through online platforms such as Massive Open Online Courses (MOOCs), additional credits are granted upon verification of course completion. These extra credits can be availed across three semesters (2 - 4). In line with UGC guidelines, students are encouraged to enhance their learning by enrolling in MOOCs offered by portals like SWAYAM, NPTEL, and others. Additionally, certificate courses provided by the college are also considered for these extra credits.*

Outreach Programme (OR): *It is a compulsory course to create a sense of social concern among all the students and to inspire them to dedicated service to the needy.*

Course Coding

The following code system (10 alphanumeric characters) is adopted for Postgraduate courses:

25	**UXX**	**0**	**XX**	**00/X**
Year of Revision	PG Department Code	Semester Number	Course Specific Initials	Running Number/with Choice

Course Specific Initials

CC - Core Course

CP - Core Practical

ES - Discipline Specific Elective

AE - Ability Enhancement Course

SL - Self-Learning

OE – Open Elective

PW - Project and Viva Voce

CE - Comprehensive Examination

OR - Outreach Programme

IS – Internship
RM – Research Methodology

EVALUATION PATTERN (PG)
Continuous Internal Assessment

Sl No	Component	Marks Allotted
1	Mid Semester Test	30
2	End Semester Test	30
3	*Two Components (15 + 20)	35
4	Library Referencing	5
	Total	**100**

Passing minimum: 50 marks

* *The first component is a compulsory online test (JosTEL platform) for 15 marks comprising 7 questions (1 mark) at K1 level and 4 questions (2 marks) at K2 level;* The second component is decided by the course in-charge in accordance with the prescribed K levels.

Question Paper Blueprint for Mid and End Semester Tests

Duration: 2 Hours								**Maximum Marks: 60**
Section		**K levels**						**Marks**
		K1	**K2**	**K3**	**K4**	**K5**	**K6**	
A *(compulsory)*		7						7 × 1 = 7
B *(compulsory)*			5					5 × 3 = 15
C *(either…or type)*				3				3 × 6 = 18
D *(2 out of 3)*	Mid Sem				1(2)	1*		2 × 10 = 20
	End Sem					1(2)	1*	
							Total	**60**

***** *Compulsory*

Question Paper Blueprint for Semester Examination

Duration: 3 Hours							**Maximum Marks: 100**
Section	**K levels**						**Marks**
	K1	**K2**	**K3**	**K4**	**K5**	**K6**	
A *(compulsory)*	10						10 × 1 = 10
B *(compulsory)*		10					10 × 3 = 30
C *(either…or type)*			5				5 × 6 = 30
D *(3 out of 5)*				1(2)	1(2)	1*	3 × 10 = 30
						Total	**100**

***** *Compulsory*

Evaluation Pattern for One/Two-credit Courses

Title of the Course	CIA	Semester Examination	Final
• Ability Enhancement Course	20 + 10 + 20 = 50	50 *(Department)*	100
• Self - Learning Course (Dept. Specific) • Comprehensive Examination	25 + 25 = 50	50 *(CoE)*	100
• Internship • Self - Learning Course (Common) • Self - Learning Online Course (NPTEL / SWAYAM)	100	-	100
• Skill Enhancement Course: Soft Skills	100	-	100
• Project Work and Viva Voce	100	100	100

Grading System

The marks obtained in the CIA and semester for each course will be graded as per the scheme provided in Table - 1.

From the second semester onwards, the total performance within a semester and the continuous performance starting from the first semester are indicated by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA), respectively. These two are calculated by the following formulae:

$$SGPA \ and \ CGPA = \frac{\sum_{i=1}^{n} C_i Gp_i}{\sum_{i=1}^{n} C_i}$$

$$WAM = \frac{\sum_{i=1}^{n} C_i M_i}{\sum_{i=1}^{n} C_i}$$

Where,

Ci - credit earned for the Course i

Gpi - Grade Point obtained for the Course i

Mi - Marks obtained for the Course i

*n - Number of Courses **passed** in that semester*

WAM - Weighted Average Marks

Table - 1: Grading of the Courses for PG

Mark Range	Grade Point	Corresponding Grade
90 and above	10	O
80 and above and below 90	9	A+
70 and above and below 80	8	A
60 and above and below 70	7	B+
50 and above and below 60	6	B
Below 50	0	RA

Table - 2: Grading of the Final Performance for PG

CGPA	Grade	Performance
9.00 and above	O	Outstanding*
8.00 to 8.99	A+	Excellent*
7.00 to 7.99	A	Very Good
6.00 to 6.99	B+	Good
5.00 to 5.99	B	Above Average
Below 5.00	RA	Re-appear

**The Candidates who have passed in the first appearance and within the prescribed duration of the PG programme are eligible. If the Candidates Grade is O/A+ with more than one attempt, the performance is considered "Very Good".*

Vision

Forming globally competent, committed, compassionate and holistic persons, to be men and women for others, promoting a just society.

Mission

- Fostering learning environment to students of diverse background, developing their inherent skills and competencies through reflection, creation of knowledge and service.
- Nurturing comprehensive learning and best practices through innovative and value- driven pedagogy.
- Contributing significantly to Higher Education through Teaching, Learning, Research and Extension.

Programme Educational Objectives (PEOs)

1. Graduates will be able to accomplish professional standards in the global environment.
2. Graduates will be able to uphold integrity and human values.
3. Graduates will be able to appreciate and promote pluralism and multiculturalism in working environment.

Programme Outcomes (POs)

1. Graduates will be able to apply assimilated knowledge to evolve tangible solution to emerging problems.
2. Graduates will be able to analyze and interpret data to create and design new knowledge.
3. Graduates will be able to engage in innovative and socially relevant research and effectively communicate the findings.
4. Graduates will become ethically committed professional and entrepreneurs upholding human values.
5. Graduates imbibed with ethical values and social concern will be able to understand and appreciate cultural diversity, social harmony and ensure sustainable environment.

Programme Specific Outcomes (PSOs)

1. Define and apply the fundamental concepts, principles and methods of Economics in Multidisciplinary fields.
2. Develop and use the analytical skills and intellectual maturity to comprehend the complexities in the working of the economy.
3. Apply and estimate mathematical and statistical tools in the analysis of emerging economic and social problems.
4. Understand and infer the research culture and uphold ethical, social and economic responsibilities of environmental sustainability.
5. Create and integrate entrepreneurial development skills and Corporate Social Responsibilities to build a successful career and to promote social welfare.

M. A. Economics				
Programme Structure				
Semester	**Specification**	**No. of Courses**	**Hours**	**Credits**
1 – 4	Core Course	16	84	61
1 - 4	Core Practical	-	-	-
1, 3 & 4	Discipline Specific Elective	3	12	9
1 – 2	Open Elective	2	8	4
1	Ability Enhancement Course	1	2	1
1 – 3	Self-Learning	3	-	4
2	Skill Enhancement Course	1	4	2
3	Research Methodology	1	4	2
4	Project	1	6	3
4	Comprehensive Examination	1	-	2
2 – 4	Outreach Programme (SHEPHERD)	-	-	4
1 – 4	Extra Credit Course	4	-	12
	Total	**33**	**120**	**92 (12)**

M.A. ECONOMICS PROGRAMME PATTERN								
Course Details						Scheme of Exams		
Semester	**Course Code**	**Course Type**	**Title of the Course**	**Hours**	**Credits**	**CIA**	**SE**	**Final**
1	25PEC1CC01	**CC Major**	**Core Course – 1:** Advanced Microeconomics - 1	5	4	100	100	100
	25PEC1CC02		**Core Course – 2:** Analysis of Indian Economy	5	4	100	100	100
	25PEC1CC03		**Core Course – 3:** Public Economics	5	4	100	100	100
	25PEC1CC04		**Core Course – 4:** Statistics for Economists	5	3	100	100	100
	25PEC1ES01A	**DSE**	**Discipline Specific Elective - 1:** Welfare Economics	4	3	100	100	100
	25PEC1ES01B		**Discipline Specific Elective - 1:** Economic Survey and Union Budget					
	25PEC1AE01	**AEC**	**Ability Enhancement Course:** Business Management with Tally	2	1	100	-	100
	25PEC1OE01	**OE**	**Open Elective – 1 (WS):** Labour Economics	4	2	100	100	100
	25PGC1SL01	**SL**	Global Citizenship Education (Online)	-	1	100	-	100
			Extra Credit Course	-	(3)	-	-	-
			Total	**30**	**22 (3)**			
2	25PEC2CC05	**CC Major**	**Core Course – 5:** Advanced Microeconomics - 2	6	4	100	100	100
	25PEC2CC06		**Core Course - 6:** Mathematics for Economists	6	4	100	100	100
	25PEC2CC07		**Core Course - 7:** Macroeconomic Process	5	4	100	100	100
	25PEC2CC08		**Core Course - 8:** Agricultural Economics (Internship Embedded Course)	5	4	100	100	100
	25PEC2OE02	**OE**	**Open Elective - 2 (BS):** Managerial Economics	4	2	100	100	100
	25PSS2SE01	**SEC**	**Skill Enhancement Course:** Soft Skills	4	2	100	-	100
	25PEC2SL02	**SL**	Online Courses: NPTEL / SWAYAM	-	2	-	100	100
	-		Extra Credit Course	-	(3)			
			Total	**30**	**22 (3)**			
3	25PEC3CC09	**CC Major**	**Core Course – 9:** Economics of Growth and Development	6	4	100	100	100
	25PEC3CC10		**Core Course – 10:** Monetary Economics	5	4	100	100	100
	25PEC3CC11		**Core Course – 11:** Econometrics	6	4	100	100	100
	25PEC3CC12		**Core Course – 12:** Behavioural Economics	5	4	100	100	100
	25PEC3ES02A	**DSE**	**Discipline Specific Elective - 2:** New Frontiers in Economics	4	3	100	100	100
	25PEC3ES02B		**Discipline Specific Elective - 2:** Financial Economics					
	25SMS3RM01	**RM**	Intellectual Property Rights **(**IPR)	4	2	100	100	100
	25PEC3SL03	**SL**	**Self-Learning:** Economics of Tourism*	-	1	50	50	50
			Extra Credit Course	-	(3)			
			Total	**30**	**22 (3)**			
4	25PEC4CC13	**CC Major**	**Core Course – 13:** International Economics	5	4	100	100	100
	25PEC4CC14		**Core Course – 14:** Research Methodology	5	4	100	100	100
	25PEC4CC15		**Core Course – 15:** Industrial Economics	5	3	100	100	100
	25PEC4CC16		**Core Course – 16:** Optimization Techniques in Economics	5	3	100	100	100
	25PEC4ES03A	**DSE**	**Discipline Specific Elective - 3**: Modern Economic Thought	4	3	100	100	100
	25PEC4ES03B		**Discipline Specific Elective - 3**: Contemporary Issues in Economics					
	25PEC4PW01	**PW**	Project	6	3	100	100	100
	25PEC4CE01	**CE**	Comprehensive Examination*	-	2	50	50	50
	-		Extra Credit Course	-	(3)			
			Total	**30**	**22 (3)**			
2 – 4	25PCW4OR01	**OR**	Outreach Programme	0	4			
1 – 4			**Total**	**120**	**92 (12)**			

***For Grade Calculation:** Marks obtained out of 50 will be converted into 100 in the mark statements.

Open Elective - 1 (WS): 1st Semester

School	Course Code	Title of the Course
SMS		
Commerce	25PCO1OE01	Supply Chain Management
Commerce Computer Application	25PCC1OE01	Financial Planning and Wealth Management
Counselling Psychology	25PCP1OE01	Organizational Behavior
Economics	25PEC1OE01	Labour Economics
Human Resource Management	25PHR1OE01	Human Behaviour in Organization

Open Elective – 2 (BS): 2nd Semester
Offered to students from other Schools

School	Course Code	Title of the Course
SBS		
Botany	25PBO2OE02	Sustainable Horticulture and Urban Landscaping
Biochemistry	25PBI2OE02	First Aid Management
Biotechnology	25PBT2OE02	Food Technology
SCS		
Artificial Intelligence and Machine Learning	25PAI2OE02	Cyber Security
Computer Science	25PCA2OE02A	Web Design
	25PCA2OE02B	Cyber Security
Information Technology	25PCS2OE02	Recent Trends in Computing
Data Science	25PDS2OE02	Discrete Mathematics
Mathematics	25PMA2OE02	Operations Research
Visual Communication	25PVC2OE02	Women and Media
SLAC		
English	25PEN2OE02	English for Digital Media
History	25PHS2OE02	Public Administration
Tamil	25PTA2OE02	விளம்பரக்கலை (Art of advertising)
SMS		
Commerce	25PCO2OE02	Basics of Tally Prime
Commerce Computer Application	25PCC2OE02	Behavioural Dynamics and Psychology
Counselling Psychology	25PCP2OE02	Artificial Intelligence in Psychology
Economics	25PEC2OE02	Managerial Economics
Human Resource Management	25PHR2OE02	Counselling and Guidance
SPS		
Chemistry	25PCH2OE02	Chemistry of Health and Nutrition
Electronics	25PEL2OE02	Computer Hardware and Networks
Physics	25PPH2OE02A	Physics for Competitive Exams
	25PPH2OE02B	Nanoscience

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1CC01	**Core Course - 1:** Advanced Microeconomics - 1	5	4

Course Objectives
To impart knowledge on consumer and producer behaviour to reach equilibrium.
To enhance the students' analytical skills in cost concepts
To increase the analytical skill of students on market concepts.
To create awareness of using mathematical techniques in economic theories.
To make students understand the efficacy of game theory and its uses in economics.

Unit – I: Introduction and Basic Concept (15 Hours)

Basic Economic Problem – Choice and scarcity – Deductive and Inductive Methods of Analysis – Positive and Normative Economics – Economic models –Types and Characteristics of Equilibrium and Disequilibrium.

Unit–II: Demand Analysis (15 Hours)

Theories of Demand – Utility, Indifference Curves - Price, Income and Substitution Effects – Slutsky and Hickisian Approaches – Elasticities - Price, Income and Cross Elasticities of Demand – Theoretical Aspects and Empirical Estimator – Revealed Preference Theory of Samuelson – Revision of Demand Theory of Hicks – Consumer's Surplus –Developments in Demand Analysis – Modern Utility Analysis – Petersburg, Friedman - Savage Hypotheses – Markowitz Hypothesis.

Unit – III: Theory of Production and Costs (15 Hours)

Production Function – Short and Long Periods –Law of Variable Proportions and Laws of Returns to Scale – Iso-quants – Least Cost Combination of Inputs – Economies of Scale – Multi-Product Firm – Elasticity of Substitution – Technical Progress and Production Function: Cobb - Douglas and CES – Modern Theories of Costs – Derivation of Cost Functions from Production Functions.

Unit – IV: Price and Output Determination (15 Hours)

Marginal Analysis: Price and Output Determination in Perfect Competition: Short-Run and Long-Run– Equilibrium of the Firm and Industry –Price and Output Determination–Supply Curves of the Firm and Industry – Monopoly: Short-run and Long - run Equilibrium – Price Discrimination– MonopolisticCompetition;GeneralandChamberlinApproaches to Equilibrium – Oligopoly: Collusive and Non-Collusive of Cournot Solution – Kinked Demand Curve – Price Leadership – Cartels.

Unit–V: Linear Programming and Game Theory (*Theoretical Aspects Only*) (15 Hours)

Introduction to Linear Programming – concepts of LPP – the Simplex Method-Primal and Dual Solutions – Game Theory: Rules, Two-Persons Zero Sum Game – Pay-off Matrices

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Koutsoyiannis A.(1987) *Modern Micro economics*, Macmillan Press, London.
2. Ahuja H.L.(2009) *Advanced Economic Theory Microeconomic Analysis*, Chand Publications ,New Delhi.

Books for References:

1. DaCosta., G.C., (1980) *Production, Prices and Distribution*, Tata McGraw Hill New Delhi.
2. Hirshleifer, J and Glazer A,(1997) *Price Theory and Applications*, Prentice Hall of India, New Delhi.
3. Kennedy, Maria John M., (1999) *Advanced Micro Economic Theory*, Himalaya Publishing House, New Delhi.
4. Stigler, G., (1996) *Theory of Price*, Prentice Hall of India, New Delhi.
5. Salvatore, Dominic (1991), *Micro Economic Theory*, McGraw Hill, New Delhi

Websites and eLearning Sources:

1. https://academistan.com/revealed-preference-theory-of-samuelson/

2. https://www.geeksforgeeks.org/law-of-variable-proportion-meaning-assumptions-
3. phases-and-reasons-for-variable-proportions/ https://en.wikipedia.org/wiki/Perfect_competition https://www.investopedia.com/terms/g/gametheory.asp
4. https://byjus.com/maths/linear-programming/

Course Outcomes		
CO No.	**CO–Statements**	**Cognitive Levels (K–Levels)**
	On successful completion of this course, students will be able to	
CO–1	Examine the basic concepts of advanced microeconomics	**K1**
CO–2	Compare the various theories of demand with modern utility analysis	**K2**
CO–3	Illustrate how micro economic concepts can be applied in real life situations	**K3**
CO–4	Explain the concepts of game theory and to illustrate its importance in explaining various kinds of economic and social phenomena.	**K4**
CO–5	Evaluate the producers' decision-making and working of the marke system in the economy.	**K5**
CO-6	Explore distribution theories to understand income distribution and economic equity	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
1	**25PEC1CC01**			**Core Course - 1:** Advanced Microeconomics - 1					**5**		**4**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	3	2	3	2	3	3	2	2	2	**2.5**
CO–2	3	3	2	2	2	3	3	2	3	3	**2.6**
CO–3	3	1	2	3	2	2	3	2	2	2	**2.2**
CO–4	3	2	2	2	1	3	3	2	2	2	**2.2**
CO–5	3	3	3	3	2	3	3	2	2	3	**2.7**
CO-6	3	3	2	3	2	3	3	2	2	2	**2.5**
										Mean overall Score	**2.45 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1CC02	**Core Course – 2:** Analysis of Indian Economy	5	4

Course Objectives
To develop a comprehensive understanding of the Indian Economy.
To analyse the performance and dynamics of agriculture and industrial sector.
To examine the fiscal developments and trends in the financial sector.
To evaluate the concepts of poverty and inequality in India.
To explore various social sector issues in India.

Unit – I: Structure of Indian Economy (15 Hours)

Growth and Structural changes in Indian Economy during Independence- Demographic features; size, se composition and growth rates of population - latest Census of Population - Infrastructure - Transport, Communication and Energy; National Income: Trend, growth rate and sectoral contribution

Unit–II: Agricultural Sector (15 Hours)

Institutional structure – Green Revolution and Technological change in agriculture –Types of Faming: contract farming - policies for sustainable agriculture – organic farming and precision farming and Integrated farming Agricultural Marketing and Warehousing; Food security - Pricing of agricultural inputs and output-Minimum Support Price (MSP)- Agricultural finance policy.

Unit–III: Industrial Sector (15 Hours)

Industrial Policy 1991- Recent amendments of Industrial policy - Industrial Growth before and after reforms -Dualism in Indian manufacturing sector- Role and Structure of Major Large Scale Industries – MSME – Rural industrialization – industrial estate Industrial sickness: cause and remedies: Evaluation of Privatization and Disinvestment; – SEZ - Make in India. Digitization.

Unit – IV: Service sector and External Sector (15 Hours)

Information Technology and ITeS, Banking and Insurance - Tourism - E-commerce - Digital Marketing – Health and Education – Logistics – Role of AI - Trends of India's foreign trade – Import substitution and export promotion – Balance of payments in India - Foreign capital and MNCs in India.

Unit – V: Planning and Economic Reforms (15 Hours)

Planning in India, Objectives; Strategies; Broad Achievements and Failures - NITI Aayog - Economic Reforms: Liberalization, Privatization and Globalization – Foreign exchange reforms – Parameters for Assessing Economic Reforms: GDP, Employment, Poverty, Labour, Regional disparities, Human Development.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Dutt and K.P.M. Sundaram *Indian Economy*, 73rd edition Sultan Chand & Sons, New Delhi, 2019.
2. Dhingra, I. C., (2019) *March of the Indian Economy*: 8th Edition. Heed Publication PVT. Ltd., Haryana.

Books for Reference:

1. Kindleberger, C.P. (1977), *Economic Development*, 3e, McGraw Hill, New York.
2. Meier, G.M. (2000), *Leading Issues in Economic Development*, 6e, Oxford University Press, New Delhi.
3. Jhingan, M.L., (2019) *The Economics of Development and Planning*, Vikas Publishing House Pvt Ltd., New Delhi.
4. Dhar, P.K. (2015) *Indian Economy-its growing dimensions*, Kalyani Publishers.

Websites and eLearning Sources:

1. https://www.investindia.gov.in/team-india-blogs/service-sector-india-paradigm-shift
2. https://www.ibef.org/industry/manufacturing-sector-india

3. https://www.worldbank.org/en/news/feature/2012/05/17/india-agriculture-issues-priorities
4. https://visionias.in/current-affairs/monthly-magazine/2024-08-22/economics-(indian-economy)/indias- structural-transformation

Course Outcomes		
CO No.	**CO–Statements**	**Cognitive Levels (K–Levels)**
	On successful completion of this course, students will be able to	
CO–1	Examine the impact of tertiary and external sectors on Indian economy.	**K1**
CO–2	Understand the significance of natural and human resources in the development of Indian economy.	**K2**
CO–3	Interpret the role and issues of agricultural sector in Indian economy.	**K3**
CO–4	Analyse various industrial policies and reforms in Indian economy.	**K4**
CO–5	Integrate and evaluate Liberalization, Privatization and Globalization in the context of Indian Economic development.	**K5**
CO-6	Critically assess the fiscal developments in India	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
1	**25PEC1CC02**			**Core Course – 2:** Analysis of Indian Economy					**5**		**4**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	1	2	2	2	2	3	2	3	2	2	**2.1**
CO–2	2	1	3	2	1	2	3	3	2	3	**2.2**
CO–3	2	2	1	2	2	3	3	3	3	2	**2.3**
CO–4	3	3	2	2	1	2	2	3	2	3	**2.3**
CO–5	2	2	3	2	2	2	2	3	2	2	**2.2**
CO-6	3	3	2	2	1	2	2	3	2	3	**2.3**
										Mean overall Score	**2.23 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1CC03	**Core Course – 3:** Public Economics	5	4

Course Objectives
Evaluate the rationale for government intervention in markets, including the provision of public goods, the regulation of externalities, and the redistribution of income.
Develop the ability to critically assess the economic impact of government policies such as taxation, spending, and budgetary decisions on both macroeconomic stability and income distribution.
Utilize microeconomic and macroeconomic frameworks to analyze contemporary public sector issues, including healthcare, education, and environmental policy.
Measure the effectiveness, efficiency, and equity of public policies, with a focus on cost-benefit analysis, public sector performance, and social welfare outcomes.
Equip students with the necessary quantitative tools and techniques, such as econometrics and cost-benefit analysis, to evaluate and formulate public economic policies.

Unit – I: Government and the Economy (15 Hours)

Major economic functions of the economy: Allocation function, Distribution function, Stabilization function – Private Goods, Public foods and Merit goods – Market Failure – Externalities- Informational Asymmetry – Theory of Second Best: Private and public mechanism for allocating resources, Problems in allocation of resources, Problems of Preference revelation and aggregation of preferences, Voting Systems, Arrows Impossibility Theorem.

Unit – II: Public Revenue & Public Expenditure (15 Hours)

Concepts: Public Revenue – Sources - Benefit theory and Ability to pay approaches - Theory of optimal taxation; Excess burden of taxes; Trade - off between equity and efficiency. Theory of incidence; Alternative concepts of incidence - Allocative and equity aspects - Public Expenditure: Wagner's law of increasing state activities; Peacock-Wiseman hypothesis; Pure theory of public expenditure; Structure and growth of public expenditure; Social Cost -benefit Analysis.

Unit – III: Public Debt, Budget and Fiscal Policy (15 Hours)

Classical view of public debt- Compensatory aspect of debt policy - Burden of public debt - Sources of public debt; Public borrowings and price level; Crowding out of private investment and activity - Principles of debt management and repayment - Fiscal policy: objectives of fiscal policy - Interdependence of fiscal and monetary policies - concepts of Budget-Budgetary deficits and its implications; Fiscal policy for stabilization -automatics. discretionary stabilization.

Unit–IV: Fiscal Federalism (15 Hours)

Meaning and Importance of Federal Finance-Principles of multi-unit finance; Fiscal federalism in India; Vertical and horizontal imbalance- Functions of Finance Commission Assignment of functions and sources of revenue, Constitutional provisions - Recent Finance Commission, Resources transfer from Union to States and Local bodies - Criteria for transfer of Resources; Centre-state financial relations in India – Local Finances: Functions and Revenues.

Unit–V: Indian Public Finance (15 Hours)

Indian tax system; Revenue of the Union, States and Local bodies; Major taxes in India: base of taxes, direct and indirect taxes, Reforms in direct and indirect taxes, taxes on services - GST; Non-tax revenue of Centre, State and Local bodies; Trends in Public expenditure and public debt; Fiscal crisis and fiscal sector reforms in India.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Singh S.K. (2014) *Public Finance Theory and Practice*, S. Chand & Co. Ltd, New Delhi.
2. Tyagi. B.P.(2012) *Public Finance*, Jai Prakash Nath, Meerat.

Books for Reference:

1. *Reports of various finance commission*.
2. Dr. M. Maria John Kennedy (2012),*Public Finance*, PHI Learning Pvt. Ltd.
3. Jha. R (1998), *Modern Public Economics*, Routledge, London
4. Musgrave. R A and P. B. Musgrave (1976). *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.
5. Spulber, N (1998*) Redefining the State*, Cambridge University Press, Cambridge.
6. Buchanan, J. M. (1968) *The Demand and Supply of Public Goods*, Rand McNally, Chicago.
7. Peacock. A. and D. J. Robertson (Editors) (1963*), Public Expenditure: Appraisal and Control*
8. Gulati, I. S. (1979). *Centre State Financial Relations: An Assessment of the Role of Finance Commission,* M.S. University of Baroda, Baroda.

Websites and eLearning Sources:

1. https://www.jiwaji.edu/pdf/ecourse/commerce/UNIT-1%20PUBLIC%20FINANCE.pdf
2. https://dde.pondiuni.edu.in/files/StudyMaterials/UG/BA-Economics/2year/BAEC1922EconomicsPublicFinance.pdf
3. https://rgu.ac.in/wp-content/uploads/2023/05/MAECO-403.pdf

Course Outcomes		
CO No.	**CO–Statements** On successful completion of this course, students will be able to	**Cognitive Levels (K–Levels)**
CO–1	Recall the role and functions of the government in a modern Economy	**K1**
CO–2	Discuss the concept of market failure and its remedial measures.	**K2**
CO–3	Apply the concepts and theories of Public Economics in real life situation.	**K3**
CO–4	Analyse the financial relations between Centre, state and local Governments.	**K4**
CO–5	Design and evaluate mock budget.	**K5**
CO-6	Evaluate monetary and fiscal measures to stabilize the economy.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
1	**25PEC1CC03**			**Core Course – 3:** Public Economics				**5**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	2	3	3	2	2	2	**2.3**
CO–2	2	3	2	2	3	2	2	2	2	2	**2.2**
CO–3	2	2	2	2	2	3	2	2	2	2	**2.1**
CO–4	3	2	2	2	2	3	3	2	2	1	**2.2**
CO–5	2	2	2	2	2	3	3	2	2	2	**2.2**
CO-6	2	3	2	2	3	3	2	2	2	2	**2.3**
Mean overall Score											**2.22 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1CC04	**Core Course – 4:** Statistics for Economics	5	3

Course Objectives
To know the theoretical background of correlation and regression and its application in Economics.
To know the importance of time series analysis in research.
To understand the various properties of statistical distributions.
To help students develop hypothesis for their research work.
To facilitate a research bent of mind in statistical tools

Unit – I: Correlation and Regression (15 Hours)

Meaning - Significance of the study of Correlation - Types of Correlation - Methods of Studying Correlation: Scatter Diagram Method, Graphic Method, Karl Pearson's Coefficient of Correlation, Spearman's Rank Correlation. - Difference between Correlation and Regression - Regression Lines - Regression Equations of X on Y and Yon X Only - Regression Coefficients - Concepts of $R^2$and adjusted R^2

Unit-II: Index Numbers and Analysis of Time Series (15 Hours)

Index Numbers-Meaning - Uses – Classification – Types - Cost of Living Index (CPI) - Problems in construction – Methods - Paasche, Laspeyre and Fisher's Ideal Index numbers – Adequacy Tests-Time Series -Meaning and definition - Uses - Components – Measurement of Trend - Methods of Time series –Graphical method- Semi average method – Moving average method - Method of least squares.

Unit III: Probability and Theoretical Distribution (15 Hours)

Classical and empirical definitions of probability - addition and multiplication theorems, conditional probability and concept of interdependence-Central Limit Theorem–Bayes theorem and its applications--Permutation and Combinations - Calculation of Probability - Properties of Binomial, Poisson and Normal distributions - Fitting of distributions.

Unit IV: Tests of Hypotheses – I (15 Hours)

Procedure of Testing of hypothesis - Standard Error, Sampling Methods and sampling distribution – Statistical inferences-Estimation - Tests of significance for large samples - Tests of significance for small samples: Students t test - Type I and Type II errors.

Unit V: Tests of Hypotheses – II (15 Hours)

$\chi 2$(chi-square) test and Goodness of fit - F- test and Analysis of Variance - Non-parametric tests: The sign test- A rank sum test: The Mann – Whitney U test – The Kruskal Wallis or H test.

Teaching Methodology	Chalk and talk, PPT,
Assessment Methods	Seminar, Snap Test, MCQ

Books for Study:

1. Gupta S.P. *Statistical Methods*, Sultan Chand & Sons, New Delhi, 2021.

Books for Reference:

1. Gupta S. P. *Elementary Statistical Methods*, Sultan & Chand publishers, New Delhi, 2014.
2. Pillai, R. S. N. & Bagavathi. V, *Statistics, Theory and Practice*, S. Chand, New Delhi,2010.
3. Croxton, F. E., Cowden, D. J., and Klein. S, *Applied General Statistics*, Prentice-Hall, New York, 1939.
4. Gupta, S C. & V. K. Kapoor, *Fundamentals of Applied Statistics*, Sultan Chand & Sons, New Delhi, 2019.
5. Spiegel., M R., *Theory and Problems of Statistics*, McGraw Hill Book Co, London, 1922.

Websites and eLearning Sources:

1. www.khanacademy.org
2. https://youtu.be/LZnRlOA1_2I
3. http://hyperphysics.phy-astr.gsu.edu/hbase/hmat.html#hmath
4. https://www.youtube.com/watch?v=_2jymuM7OUU&list=PLhkiT_RYTEU27vS_SlE

5. https://archive.nptel.ac.in/courses/115/106/115106086/

Course Outcomes		
CO No.	**CO-Statements**	**Cognitive Levels (K-Level)**
	On successful completion of this course, students will be able to	
CO1	Examine the procedure of testing hypothesis.	**K1**
CO2	Estimate various methods of correlation and linear regression between two variables.	**K2**
CO3	Calculate various measurements of trends.	**K3**
CO4	Compare and contrast various properties of statistical distributions.	**K4**
CO5	Know the various decision making tools available	**K5**
CO6	Formulate and propose the best solution for handling complex ODE problems	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**						**Hours**	**Credits**
1	**25PEC1CC04**			**Core Course – 4:** Statistics for Economics						**5**	**3**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	2	1	3	3	3	2	2	**2.4**
CO2	3	3	3	2	2	3	3	3	2	2	**2.5**
CO3	3	3	3	2	2	3	3	3	2	2	**2.5**
CO4	3	3	2	2	2	3	3	3	2	2	**2.5**
CO5	3	3	3	3	2	3	3	3	2	2	**2.7**
CO6	3	3	2	3	2	3	3	3	2	2	**2.6**
										Mean Overall Score	**2.53 (High)**

Semester	Course Code	Title of the Course	Hours/Week	Credits
1	25PEC1ES01A	**Discipline Specific Elective - 1:** Welfare Economics	4	3

Course Objectives
To understand the core concepts and principles of welfare economics
To compare and contrast cardinal and ordinal approaches in welfare economics
To examine the conditions for Pareto optimality and its application in perfect competition
To analyze the concepts and applications of New Welfare Economics
To Study the theories of social choice

Unit I: Introduction to Welfare Economics (12 Hours)

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

Unit II: Approaches to Welfare (12 Hours)

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 (12 Hours)

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 (12 Hours)

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 (12 Hours)

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

Teaching Methodology	PPTs, Brainstorming method, Written assignment, Seminar, Online quizzing through Jostel.
Assessment Methods	Seminar, Snap Test, MCQ

Books for Study:

1. Verma, K.N. (2012) *Micro economic theory*, Vishal Publishing House
2. Johannson, P. O. (2009). *An introduction to modern welfare economics*. Cambridge University Press.

Books for Reference:

1. Arrow, K. J. (1963). *Social choice and individual values,* (2nded.). Cowles Foundation Monograph 12, Yale University.
2. Bossert, W. & Suzumura, K. (2010). *Consistency, choice and rationality*. Harvard University Press.
3. Broadway, R. W. & Bruce, N. (1984). *Welfare economics*. Basil Blackwell.

Websites and eLearning Sources:

1. https://conceptually.org/concepts/pareto-principle
2. https://web.stanford.edu/~jdlevin/Econ202/GeneralEquilibrium.pdf
3. https://policonomics.com/lp-welfare-economics1-general-equilib

Course Outcomes		
CO. No.	**CO-Statements** On successful completion of this course, the students will be able to	**Cognitive Levels (K-Level)**
CO1	Summarize the Contribution to welfare economics	**K1**
CO2	Analyse the different approaches to welfare economics	**K2**
CO3	Interpret the development of Pare to Optimality conditions	**K3**
CO4	Explain the compensation Criteria of Economics	**K4**
CO5	Evaluate and critique the theories of Social Choice.	**K5**
CO6	Apply the P are to optimality criterion to various economic scenarios,	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours/Week**			**Credits**
1	**25PEC1ES01A**			**Discipline Specific Elective - 1:** Welfare Economics				**4**			**3**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	3	2	3	3	2	2	2	**2.5**
CO2	3	3	2	2	2	3	3	2	3	3	**2.6**
CO3	3	1	2	3	2	2	3	2	2	2	**2.2**
CO4	3	2	2	2	1	3	3	2	2	2	**2.2**
CO5	3	3	3	3	2	3	3	2	2	3	**2.7**
CO6	3	2	3	3	2	2	3	2	2	3	**2.5**
Mean Overall Score											**2.45 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1ES01B	**Discipline Specific Elective - 1:** Economic Survey and Union Budget	4	3

Course Objectives
Analyze the key features of the annual Economic Survey of India.
Examine the structure and content of the Union Budget, emphasizing fiscal policy, revenue generation, expenditure allocation, and budgetary reforms.
Evaluate the impact of budgetary provisions on key sectors such as agriculture, infrastructure, education, and healthcare, in alignment with India's developmental goals.
Understand the relationship between the Economic Survey, Union Budget, and broader economic policy, and assess their implications for India's growth.
Develop skills to critically assess government fiscal strategies, the effectiveness of budgetary allocations, and their influence on economic stability and social welfare programs.

Unit – I: State of the Economy (12 Hours)

Sectoral contributions - Agriculture, Industry and Services sectors – Year wise Production - Contribution to GDP – Funds allocation by the Central Government to all the sectors.

Unit – II: Prices and Inflation (12 Hours)

Current trends in Inflation - Wholesale Price Index - Consumer Price Index - Drivers of Inflation - State wise Inflation rates – Global commodity prices - Measures to control Inflation.

Unit – III: Exports and Imports (12 Hours)

Exports and imports: Agricultural goods – Industrial goods - Crude oil – Gold export - import policies - India's Performance on Patents and Trademarks - (Current data and information)

Unit – IV: The Union Budget (12 Hours)

Capital receipts - Revenue receipts - Tax and non-tax revenue - Direct and indirect taxes - trends - Goods and Services Tax (GST) - Capital expenditure, revenue expenditure, plan expenditure, non-plan expenditure - fiscal deficit, primary deficit and revenue deficit. (Latest trends)

Unit – V: Centre-State Financial Relations (12 Hours)

Fiscal devolution and Centre - State financial sharing in India - Latest Economic Survey.

Teaching Methodology	PPTs, Brainstorming method, Written assignment, Seminar, Online quizzing through Jostel.
Assessment Methods	Seminar, Snap Test, MCQ

Books for Study:

1. Dutt & Sundaram, (2020), Indian Economy, S. Chand, New Delhi.
2. Economic Survey (Latest)

Books for Reference:

1. Economic Survey (latest).
2. *'Understanding the Budget Concepts and Terminologies'*, Centre for Budget and Governance
3. http://www.cbgaindia.org/files/documents/Understanding

Websites and eLearning Sources:

1. https://www.indiabudget.gov.in/economicsurvey/
2. https://www.indiabudget.gov.in/budget2017-2018/survey.asp
3. https://www.visionias.in/resources/material/?id=1506&type=economic_survey

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K –Levels)
CO–1	Recall the data and profile of the government documents in particular to the Economic Survey and the Union Budget.	**K1**
CO–2	Identify the basic concepts related to some contemporary economic issues.	**K2**
CO–3	Explain the basic concepts of exports and imports.	**K3**
CO–4	Sketch out the Government policies and programmes.	**K4**
CO–5	Analyse the trends of the Indian economy.	**K5**
CO-6	Evaluate the revenue and expenditure pattern of the Government	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
1	**25PEC1ES01B**			**Discipline Specific Elective - 1:** Economic Survey and Union Budget					**4**		**3**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	3	1	1	3	2	3	3	2	1	**2.1**
CO–2	2	3	1	2	3	2	3	3	2	2	**2.3**
CO–3	2	2	2	2	3	2	2	3	1	3	**2.2**
CO–4	2	2	3	2	2	2	2	3	1	2	**2.1**
CO–5	3	2	2	2	2	3	2	3	2	2	**2.3**
CO-6	2	2	2	2	3	2	2	3	1	3	**2.2**
Mean overall Score											**2.2 (High)**

Semester	Course Code	Title of the Course	Hours / Week	Credits
1	25PEC1AE01	**Ability Enhancement Course:** Business Management with Tally	2	1

Course Objectives
To Understand the Fundamentals of Tally Prime
To Apply Accounting Principles in Tally Prime
To Manage Inventory Operations
To Administer Payroll Systems
To Generate and Analyze Financial Reports

Unit I: Introduction to Tally Prime (6 Hours)

Overview of Tally Prime - Features and Benefits - Installation and Configuration. Getting Started with Tally Prime - Creating a New Company - Altering and Deleting Company - Gateway of Tally and User Interface

Unit II: Basic Accounting in Tally Prime (6 Hours)

Basics of Accounting - Introduction to Accounting Principles - Types of Accounts - Accounting Vouchers in Tally Prime - Creating Masters - Creating and Managing Groups - Creating and Managing Ledgers - Configuring Voucher Types.

Unit III: Voucher Entry and Basic Inventory Management (6 Hours)

Sales and Purchase Vouchers - Receipt and Payment Vouchers - Contra and Journal Vouchers - Creating Stock Groups, Categories, and Items - Units of Measure and God owns - Inventory Vouchers.

Unit IV: Payroll Management in Tally Prime (6 Hours)

Introduction to Payroll - Overview of Payroll in Tally Prime - Configuring Payroll Settings-.Employee Management - Creating Employee Masters - Defining Salary Structures-Payroll Processing - Processing Payroll and Generating Pay slips - Provident Fund, ESI, and Gratuity Management-Payroll Reports - Generating Payroll Statements and Reports

UNIT V: Financial Reporting and Analysis (6 Hours)

Financial Statements - Generating and Analyzing Profit & Loss Account - Balance Sheet and Cash Flow Statements - Ratio Analysis - Understanding and Analyzing Key Financial Ratios.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Asok. K. Nadhani**,** Mastering Tally Prime: Training, Certification & Job, BPB publications, 2022,
2. Shraddha Singh & Navneet Mehra, Tally Prime – A Complete Guide for Beginners, 2014.
3. Sajee Kurian, Kulin Shah, et al, Learning Tally ERP 9 with GST, 2017

Books for Reference:

1. Vinod Kumar S, *Tally Prime: The Complete Reference*
2. CA Raj K Agrawal, Practical Approach to Tally Prime with GST.
3. S. P. Jain & K. L. Narang., Financial Accounting with Tally Prime,

Websites and eLearning Sources:

1. https://tallysolutions.com/
2. https://nicedigitalschool.com/uploads/download_material/15/DownoadMateriall_6950124_15.pdf
3. https://sscstudy.com/fundamental-of-accounting-and-tally-prime-notes/

Course Outcomes		
CO No.	**CO-Statements**	**Cognitive Levels (K-Level)**
	On successful completion of this course, the students will be able to	
CO1	Learn to create Banking Transactions and E-payment	**K4**
CO2	Acquire knowledge about Accounting and Inventory Reports in Tally ERP	**K5**
CO3	Generate and interpreta variety of accounting and financial reports	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours/Week**			**Credits**
1	**25PEC1AE01**			**Ability Enhancement Course:** Business Management with Tally				**2**			**1**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	1	2	3	2	2	3	2	2	2	**2.2**
CO2	3	2	2	2	1	3	3	2	2	2	**2.2**
CO3	3	3	3	3	2	3	3	2	2	3	**2.7**
Mean Overall Score											**2.36 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
1	25PEC1OE01	**Open Elective - 1 (WS):** Labour Economics	4	2

Course Objectives
To know the overview of the basic theoretical and empirical literature on Labour, employment, wages, working conditions and unemployment.
To understand the functioning of labour markets.
To understand the wage differentials, discrimination, contracts and incentives.
To study the role of social security system to enhance employees welfare.
To understand performance of labour force in various sectors in India.

Unit – I: Labour Economics and Labour Problems (12 Hours)

Meaning and concepts of labour - Definition, nature , scope and importance of Labour economics - Nature of labour problems – labour market segmentation - Labour in the unorganized sector - Child Labour - International Labour Organization (ILO)

Unit – II: Agricultural Labour in India (12 Hours)

Meaning and characteristics of agricultural labour in India casual labour and attached labour and bonded labour – The problems of agricultural labour in India – Government measures to improve the conditions of agricultural labour-Employment in agricultural sector – MGNREGP.

Unit – III: Industrial Labour in India (12 Hours)

Meaning and characteristics of Industrial Labour in India- Employment in organized sector - Meaning and objectives of Trade Union - Trade union movement in India - Problems and draw backs of the movement in India – Measures to strengthen the Trade Union Movement – Industrial disputes: meaning and causes and effects of industrial disputes – prevention of Industrial disputes.

Unit–IV: Wages (12 Hours)

Wage determination - Wage differentials in India - productivity and wage relationship - non wage component of labour remuneration - types of wages in India – the need for State Regulation of wages - National Wage Policy in India.

Unit – V: Social Security Measures of Labour in India (12 Hours)

The meaning and the need for social security measures in India - present status of social security in India-social assistance and social insurance –Social Security Legislations in India: Workmen's Compensation Act, 1923, Employees' State Insurance Scheme Act, 1948, Maternity Benefits Act, 1961 and the Provident Fund Act, 1952 - Labour Welfare Funds – Unemployment insurance – Second National Commission on Labour (1999).

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Sharma, A. K. (2018). *Labour Economics*, Anmol Publications, New Delhi,
2. B. P. Thyagi (2019). *Economics of Labour and Social Welfare*-Revised Edition, Sage Publication New Delhi.

Books for Reference:

1. Dutt, G. (2017). *Bargaining power, wages and Employment: An Analysis of Agricultural Labour Markets in India,* Sage Publication, New Delhi.
2. Lester, R. A. (2018). *Labour Restructuring in India: Acritique of the new Economics of Labour* Macmillan, New Delhi.
3. VenkataRathnam, C. S. (2017). *Globalization and Labour Management Relations, Dynamics of change* - Sage Publication, New Delhi.
4. Memoria, C. B. (2016). *Labour Problems and Social Welfare in India* – Kitab Mahal, Allahabad.

Websites and eLearning Sources:

1. https://labour.gov.in/
2. https://eshram.gov.in/
3. https://www.ilo.org/

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be ableto	
CO–1	Define and explain the content of labour economics and significance of the study.	**K1**
CO–2	Discuss about wage theories and its applications in Indian labour market.	**K2**
CO–3	Illustrate issues of agricultural labour and empowerment programmes.	**K3**
CO–4	Analyze labour issues in industries and the role of trade unions.	**K4**
CO–5	Assess and compile social security measures provided by the governments for the labour force.	**K5**
CO-6	Evaluate the growth and issues in India's labour sector	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**	**Credits**	
1	**25PEC1OE01**			**Open Elective – 1 (WS):** Labour Economics					**4**	**2**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	1	3	3	2	2	3	**2.2**
CO–2	2	3	2	1	2	3	3	2	2	3	**2.3**
CO–3	1	2	3	2	3	2	3	2	3	2	**2.3**
CO–4	1	2	2	3	1	2	3	2	2	3	**2.1**
CO–5	1	2	2	2	3	1	3	2	2	3	**2.1**
CO-6	2	3	2	2	1	3	3	2	2	3	**2.2**
										Mean overall Score	**2.2 (High)**

Semester	Course Code	Title of the Course	Hours/ Weeks	Credits
1	25PGC1SL01	Global Citizenship Education	Online	1

Course Objectives
To develop an understanding of global governance structures, rights and responsibilities.
To recognize and respect differences, multiple identities and diversity.
To examine beliefs and perceptions about social justice, equality and civic engagement.
To develop attitudes of care and empathy for others and the environment.
To develop global competence and ethical considerations by enhancing communication and collaboration skills across cultures

UNIT I: Introduction to Global Citizenship

01. Historical and Philosophical Foundations of Global Citizenship
02 Rights and Responsibilities of Global Citizenship
03. Key Organizations and Movements Promoting Global Citizenship

UNIT II: Globalization and Its Impact on Society

04. Globalization and Its Key Drivers
05. Positive and Negative Impacts of Globalization
06. Role of Education in Fostering a Global Perspective

UNIT III: Human Rights, Social Justice, Equality and Diversity

07. Key Human Rights Treaties, Frameworks and Declarations
08. Advocacy, Activism, and Movements for Social Justice and Equality
09. Global Challenges to Human Rights, Equality and Diversity

UNIT IV: Sustainable Development and Environmental Responsibility

10. The Sustainable Development Goals and Their Relevance to Global Citizenship
11. Climate Change, Environmental Degradation and Sustainable Development
12. Strategies for Promoting Environmental Responsibility

UNIT V: Building Global Competence and Engagement

13. Effective Communication and Collaboration Across Cultures
14. Volunteering and Community Engagement in Global Initiatives
15. Ethical Considerations in Global Citizenship

Teaching Methodology	Recorded Lectures/Videos, Reading Materials, PPTs, Case Studies, Collaborative Projects, Quizzes and Polls
Assessment Methods	Seminars, Assignments, MCQs, Reflection Essays, Group Project Presentations, Problem-Solving Scenarios

Books for Study:

1. Clapham, A. (2007). *Human rights: A very short introduction.* Oxford University Press.
2. Desai, A. (2018). *Global citizenship and cultural diplomacy: India's role in a changing world*. Routledge India.
3. Gould, J. A. (2012). *The ethics of global citizenship*. Routledge.
4. Held, D., et al. (2022). *Globalization and its impact on the developing world*. Cambridge University Press.
5. Sen, A. (2009). *The idea of justice*. Penguin Books India.

Books for Reference:

1. Ghosh, A. (2007). *The global impact of Indian civilization*. HarperCollins India.
2. Krecker, E. (2008). *The global citizen: A guide to creating an international life and career*. Career Press.
3. Kumar, R. (2017). *Sustainable development and environmental justice in India*. Oxford University Press.
4. Nair, K. G. (2014). *Human rights: A socio-political perspective*. Orient Blackswan.

5. Patel, V. (2015). *Social justice and equality in India: Theories and practices*. Oxford University Press.
6. Pillai, V. (2016). *Globalization and its impact on Indian society*. SAGE Publications India.

Websites and eLearning Sources:

1. https://www.unesco.org/en/global-citizenship-peace-education/need-know
2. TEDxCincinnati: Global Citizenship in the Classroom: Jenny Buccos at TEDxCincinnati https://www.youtube.com/watch?v=6jjLHmyBs7o
3. Social justice -- is it still relevant in the 21st century? | Charles L. Robbins | TEDxSBU https://www.youtube.com/watch?v=Wtroop739uU
4. Are We the Last Generation — or the First Sustainable One? | Hannah Ritchie | TED https://www.youtube.com/watch?v=Kl3VVrggKz4
5. Diversity, Equity & Inclusion. Learning how to get it right | Asif Sadiq | TEDxCroydon https://www.youtube.com/watch?v=HR4wz1b54hw

Course Outcomes		
CO No.	**CO-Statements** On successful completion of this course, students will be able to	**Cognitive Levels (K-Level)**
CO1	Recall the historical, philosophical and practical foundations of global citizenship.	**K1**
CO2	Explain the key drivers of globalization and the role of education in fostering a global perspective.	**K2**
CO3	Apply human rights frameworks, social justice principles, and advocacy strategies to real-world challenges.	**K3**
CO4	Analyze the relevance of the Sustainable Development Goals in addressing climate change and environmental degradation.	**K4**
CO5	Develop strategies for fostering global competence by enhancing communication and collaboration skills across cultures.	**K5**
CO6	Critically evaluate the effectiveness of current global strategies and policies in addressing social justice and environmental sustainability.	**K6**

Semester	Course Code	Title of the Course	Hours	Credits
2	25PEC2CC05	**Core Course – 5:** Advanced Microeconomics – 2	6	4

Course Objectives
To equip the students with the importance of theory of distribution.
To enhance the students' knowledge on welfare economics.
To impart the students' knowledge on partial equilibrium.
To equip the students' awareness with regard to general equilibrium and its superiority over partial equilibrium.
To make the students know details on economics of uncertainty and information.

Unit I: Managerial Theories of the Firm (18 Hours)

Baumol's Sales Revenue Maximization Model; Williamson's Model of Managerial Discretion, Marris' Model of Managerial Enterprise; Full cost pricing; Bain's Limit Pricing Theory; Recent Developments in Limit Pricing Theory: Sylos- Labini's Model, Franco Modigliani's Model, Bhagwati's Model; Behavioristic Model of Cyert and March

Unit – II: Theories of Distribution (18 Hours)

Marginal productivity theory; Euler's product Exhaustion theorem; Elasticity of Technical substitution, Theories of Distribution in Perfect and Imperfect Factor Markets: Determination of Rent, Wages, Interest and Profits; Application of Macro theories of distribution: Ricardo, Marxian, Samuelson, Kalecki, and Kaldor.

Unit – III: Economics of Uncertainty (18 Hours)

Individual Behaviour towards risk, expected utility and certainty - Risk and Risk Aversion - competitive firms under uncertainty - Factor demand under price uncertainty - Economics of Information - Search for New Market models.

Unit–IV: General Equilibrium (18 Hours)

Walrasian General Equilibrium - Partial Equilibrium – 2x2x2 Relationship between relative commodity and factor prices (Stopler - Samuelson Theorem) Relationship between output mix and real factor prices, effect of changes in factor supply in closed economy (Rybczynski theorem) Factor supply in open economy (outsourcing) in production and consumption.

Unit–V: Welfare Economics (18 Hours)

Pigouvian Welfare Economics; Cardinalist, Kaldor - Hicks Compensation Criteria, Pareto Optimality, social welfare function; inability to obtain optimum welfare - Imperfections, market failure, Arrow's theory of social choice.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Koutsoyiannis A.(1987*) Modern Micro economics*, Macmillan Press, London.
2. Ahuja H. L.(2009)- *Advanced Economic Theory Microeconomic Analysis*, S. Chand, New Delhi.

Books for Reference:

1. DaCosta., G. C.,(1980) *Production, Prices and Distribution*, Tata McGraw Hill New Delhi.
2. Hirsh leifer, J and Glazer A,(1997)*Price Theory and Applications*. Prentice Hall of India, New Delhi.
3. Kennedy, Maria John M.,(1999) *Advanced Micro Economic Theory*, Himalaya, Publishing House New Delhi.
4. Stigler, G.,(1996) *Theory of Price*, Prentice Hall of India, New Delhi.
5. Salvatore, Dominic (1991), *Micro Economic Theory*, McGraw Hill, New Delhi.
6. Shepherd, R. W. (1970) *Theory of Cost and Production Functions* ,Princeton Univ. Press, N.J.

Websites and eLearning Sources:

1. https://www.economicsdiscussion.net/articles/utility-theory-and-attitude-toward-risk-explained-with-diagram/1384
2. https://www.economicsdiscussion.net/revenue/maximisation/baumols-sales-or-
3. revenue-maximisation-with-diagram/18735
4. https://www.gcmkadapa.ac.in/uploads/academics/dept/economics/lecturenotes/15.pdf
5. https://oldsite.pup.ac.in/e-content/social_sciences/economics/General%20Equilibrium-Walrasian%20Model.pdf
6. https://oldsite.pup.ac.in/econtent/social_sciences/economics/Pigovian%20Welfare%20Economics%20e-content.pdf

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K –Levels)
CO–1	Examine the recent changes in the alternative theories of firms.	**K1**
CO–2	Compare the Micro and Macro theories of distribution.	**K2**
CO–3	Show the fundamentals of welfare economics and to identify the inability to obtain the optimum welfare in a country.	**K3**
CO–4	Compare the working of partial equilibrium and general equilibrium approach in an economy.	**K4**
CO–5	Assess the theory of risk and uncertainty on risk a version in the market.	**K5**
CO-6	Develop welfare measures to suit developing economies	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
2	**25PEC2CC05**			**Core Course – 5:** Advanced Microeconomics – 2				**6**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	1	1	3	3	2	3	3	**2.3**
CO–2	3	1	2	2	1	3	3	1	2	2	**2**
CO–3	2	3	2	2	2	3	3	2	2	3	**2.4**
CO–4	3	2	2	2	2	3	3	2	2	2	**2.3**
CO–5	3	3	3	3	3	3	3	2	3	3	**2.9**
CO-6	2	3	2	2	2	3	3	2	2	3	**2.4**
										Mean overall Score	**2.38 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
2	25PEC2CC06	**Core Course – 6:** Mathematics for Economists	6	4

Course Objectives
To know economic concepts in mathematical form.
To provide a knowledge on the uses of mathematical tools.
To know the uses of mathematics in research.
To analyse economic relationships between the variable like price, quantity, income and production.
To understand the significance of mathematics in Economics.

Unit–I: Analytical Geometry (18 Hours)

Straight lines – Slope Intercept form- Slope point form - Two-point form - intercepts form – General form - Application of Linear Equations in Economics - quadratic equations and solution – applications – Demand and Supply curves – Determination of equilibrium price and quantity -Arthashastra

Unit–II: Differentiation (18 Hours)

Concept of function and types of functions, limit, continuity and derivative- Rules of differentiation- interpretation of revenue, cost, demand and supply functions, Elasticity and their types, Problems in maxima and minima and optimization of firm.

Unit–III: Partial Differentiation (18 Hours)

Rules of partial differentiation and interpretation of partial derivatives – Maxima and Minima, constrained optimization in simple economic problems - Madhava's Calculus

Unit–IV: Integration (18 Hours)

Simple integration – application - Total Cost and Total Revenue, definite integral - Application - consumer's surplus and producer's surplus.

Unit–Matrix (18 Hours)

Types of matrices, simple operations in matrices – Addition - Subtraction and Multiplication - Transpose of Matrix and rank of a matrix - Determinant and their basic properties – solution of simultaneous equations using Cramer's rule and Inverse method –Applications of Matrices and determinants in business and economics - Ancient Indian Matrix Algebra (Meru Prastara by Pingala)

Teaching Methodology	Chalk and talk
Assessment Methods	Test, Seminar

Books for Study:

1. Aggarwal S C, Rana R K Leena Gupta, Mathematics for Economists, VK Global Publications Pvt Ltd, New Delhi, 2020.
2. Agarwal, C. S. and Joshi, R.C., Mathematics for Economists, The New Academic, Jalandhar, 2017
3. Mehta and Madani, Mathematical Economics, S. Chand, New Delhi, 2013
4. Bose, D, An Introduction to Mathematical Economics, Himalaya Publishing House, Mumbai,2010.

Books for Reference:

1. Allen, R. G.D. Mathematical Analysis for Economics, Macmillan, London, 2008.
2. Chiang, A.C.& Kevin Wain wright. Fundamental Methods of Mathematical Economics, McGraw Hill, New Delhi, 2005
3. Weber Jean E, Mathematical Analysis–Business and Economic Applications, Harper& Row, New York, 1976.

Websites and eLearning Sources:

1. http://14.139.185.6/website/SDE/Mathematical%20tools%20for%20economics%20II_23april2015.pdf
2. https://nibmehub.com/opac-service/pdf/read/An%20Introduction%20to%20Mathematics%20for%20Economics.pdf

3. https://editorialexpress.com/jrust/econ425/readings/Alpha_chiang_4th_edition.pdf https://editorialexpress.com/jrust/econ425/readings/Mathematics-for-Economists-Carl-P.-Simon-Lawrence-E.-Blume.pdf
4. https://mu.ac.in/wp-content/uploads/2022/06/Mathematical-Techniques-for-Economists-English-Version.pdf

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	State and interpret the basic concepts and its application in Economics	**K1**
CO–2	Explain various mathematical tools.	**K2**
CO–3	Apply the concepts of differentiation and integration in cost and revenue functions.	**K3**
CO–4	Analyze the properties of matrices.	**K4**
CO–5	Develop the aptitude for research in social science	**K5**
CO-6	Evaluate the appropriateness of various mathematical techniques in solving real- world economic problems.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
2	**25PEC2CC06**			**Core Course – 6:** Mathematics for Economists				**6**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	3	3	3	1	1	2	3	2	3	**2.3**
CO–2	3	2	2	3	1	1	3	3	2	2	**2.2**
CO–3	3	3	3	3	2	1	2	3	2	1	**2.3**
CO–4	3	3	2	3	1	3	3	2	2	1	**2.3**
CO–5	3	3	2	2	1	2	3	2	3	3	**2.4**
CO-6	3	3	2	2	1	3	3	2	3	2	**2.4**
										Mean overall Score	**2.32 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
2	25PEC2CC07	**Core Course – 7:** Macroeconomic Process	5	4

Course Objectives
To understand the basic concepts of Macroeconomics and national income.
To analyse the Keynesian theory of Consumption Function
To illustrate the importance of IS-LM Fuctions
To evaluate the theories of Investment Function and Multiplier
To impart students to understand the concept and Phases of Business Cycle

Unit–I: Theories of Employment (15 Hours)

Concept of Employment - Say's Law of Market - Classical theory of employment - Keynesian theory of employment - Determination of Effective demand - Compare and contrast Classical and Keynesian contribution.

Unit – II: National Income and Social Accounting (15 Hours)

Circular Flow of income in Two, Three and Four sector economy – Different forms of National Income Accounting - Social accounting, Input – output accounting, Flow of funds accounting and Balance of Payment Accounting – uses of National Income Analysis.

Unit–III: Consumption Function (15 Hours)

Keynes Psychological Law of Consumption – implications of the Law, short run and long - run consumption function - Empirical evidence on Consumption function, Income - consumption relationship – Absolute Income, Relative Income, Permanent Income and Life cycle Hypotheses

Unit–IV: Investment Function (15Hours)

Marginal Efficiency of Investment and level of investment, Marginal Efficiency of Capital and Investments – long - run and short – run - Multiplier – Accelerator – Super Multiplier.

Unit–V: IS-LM and Keynesian Model of IS-LM (15 Hours)

Investment - Saving (IS) - Liquidity and Money Supply (LM) - Factors determines the savings and investment - J.M. Keynes model of IS –LM – Effects of Monetary Policy and Fiscal Policy in the Keynesian System - pros and cons of IS-LM model.

Teaching Methodology	Chalk and talk and Brain storming
Assessment Methods	Assignment, Seminar, online Test

Books for Study:

1. *Keynes and Post Keynesian Economics* (2013) - R. D. Gupta and R. K. Lekhi - Kalyani Publisher-Chennai-17- Tamil Nadu.
2. Ackley, (Revised edition 2008) *Macro Economics Theory and Policy*–Macmillan New York.

Books for Reference:

1. Eden, M .and A. T. Peacock (1967). *National Income and Social Accounts* Hutchinson University, New York.
2. Keynes, J. M.(1936).*The General Theory of Employment Interest and Money:* Mac Million, London.
3. Gurley and E. S. Shaw. (1960) *Moneyina Theory of Finance* Brookings Institutions.

Websites and eLearning Sources:

1. https://www.jvwu.ac.in/documents/Classical%20theory%20of%20employment%201.pdf
2. https://unacademy.com/content/bank-exam/study-material/general-awareness/what-is-national-income/
3. https://www.economicshelp.org/blog/27080/concepts/life-cycle-hypothesis/
4. https://www.britannica.com/money/marginal-efficiency-of-investment
5. https://www.albany.edu/~bd445/Economics_301_Intermediate_Macroeconomics_Slides_Spring_2014/Keynesian_IS-LM_Model.pdf

CO No.	CO–Statements	Cognitive Levels (K –Levels)
	On successful completion of this course, students will be able to	
CO–1	State the concepts and measurement of calculating National Income.	**K1**
CO–2	Understand the various theories used in Macroeconomics for national development.	**K2**
CO–3	Illustrate the circular flow of Income in various sectors.	**K3**
CO–4	Analyse the various fluctuations in business cycle.	**K4**
CO–5	Evaluate the ratio of investment through multiplier and accelerator in economics.	**K5**
CO-6	Design the various of trade cycle in macroeconomic terms	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
2	**25PEC2CC07**			**Core Course – 7:** Macroeconomic Process				**5**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	2	2	1	2	3	1	3	2	1	**1.9**
CO–2	2	1	3	2	1	2	3	3	2	3	**2.2**
CO–3	2	2	3	2	2	3	3	3	3	2	**2.5**
CO–4	3	3	2	2	3	2	2	2	2	3	**2.4**
CO–5	2	2	2	2	2	2	2	3	2	2	**2.1**
CO-6	3	3	2	2	3	2	2	2	2	3	**2.4**
										Mean overall Score	**2.25 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
2	25PEC2CC08	**Core Course – 8:** Agricultural Economics (Internship Embedded Course)	5	4

Course Objectives
To develop a comprehensive understanding of the economic principles and theories that underpin agricultural production, distribution, and consumption.
To analyze the impact of government policies, market structures, and international trade on agricultural markets and the broader economy.
To equip students with the skills to evaluate agricultural business practices, including resource allocation, cost analysis, and profitability assessment.
To examine the role of technology, innovation, and sustainable practices in enhancing agricultural productivity and addressing global food security challenges.
To foster the ability to apply economic tools and models to real-world agricultural issues, with a focus on decision-making, policy formulation, and strategic planning in the agricultural sector.

Unit – I: Agriculture and Economic Development (15 Hours)

Agriculture: Scope and Significance of Agricultural Economics – role of agriculture in economic development of a nation - Mechanization of agriculture – Interdependence between agriculture and industry – Farming types: traditional techniques, organic, commercial, co-operative, collective farming.

Unit – II: Cropping Pattern and Agricultural Labour (15 Hours)

Meaning - Importance and Types of cropping pattern - Types of Farming - Inputs of Agricultural produce - Importance of Irrigation - Types and sources of irrigation. Agricultural Labour: Types, Problems, Minimum Wages.

Unit–III: Agricultural Finance (15 Hours)

Agricultural Finance: Meaning- Significance and Types-Sources: Institutional- Co-operatives- MFIs – RRBs – SHGs -Role of Commercial Banks and NABARD in agricultural finance – Non-Institutional: Money lender- Kisan Credit Cards- Problems of Agricultural Finance- Principles of agricultural financial management.

Unit – IV: Agricultural Marketing and Price Analysis (15 Hours)

Agricultural Marketing - Role and Functions - Warehousing and storage - Problems in marketing agricultural produce; government interventions including regulated markets, procurement, buffer stock operations, co-operative marketing – UzhavarSanthai (Farmers' Market)- market integration; price stabilization measures – CSIP (Consumer Support Price Index) and MSP (Minimum Support Price).

Unit – V: Agriculture Policy (15 Hours)

Agricultural Price policy - Objectives, instruments and impact- Economic Reforms and New Agricultural policy - WTO and Indian Agriculture-Sustainable agriculture - Mechanization of agriculture - Green revolution and its impact- Second Green Revolution.

Teaching Methodology	Blended learning, Group Discussions, Collaborative learning, Inquiry Based Learning.
Assessment Methods	Online Test (MCQ), Written Assignments, Seminar, Group Discussions,

Books for Study:

1. Tyagi B. P. (2017), *Agricultural Economics and Rural development*, 11th edition, Jaiprakash & Co.
2. Dutt and K. P. M. Sundaram (2019) – *Indian Economy*, 73rd edition Sultan Chand & Sons, New Delhi
3. Subha Reddy, Raghu Ram, Sastry & Devi, (2019), *Agricultural Economics*, Oxford, 2nd edition, New Delhi.

Books for Reference:

1. Dhingra, I. C., (2019) *March of the Indian Economy*: 8th Edition. Heed Publication PVT. Ltd., Hariyana
2. Bilgrami, S. A. R. (1996), *Agricultural Economics*, Himalaya Publishing House, Delhi.

3. Dandekar V .M (1994), *The Indian Economy 1947-1992, VolI Agriculture*, Sage
4. Dantwala, M. L.et.al (1991),*Indian Agricultural Developments Ince Independence*, Oxford & IBH, New Delhi.
5. Desai R.G (1998), *Agricultural Economics [models, Problems and policy issue*], Government of India(1976), Report of the National Commission on Agriculture, New Delhi.
6. Government of India, *Economic Survey* (Annual), New Delhi.
7. Dr. N. Jeyakumar, Dr. J. Fredrick (2010) *Agricultural Economics* – Vista International Publishing House- Delhi- 110 053.

Websites and eLearning Sources:

1. https://rgu.ac.in/wp-content/uploads/2023/05/MAECO-508.pdf
2. https://mis.alagappauniversity.ac.in/siteAdmin/dde-admin/uploads/5/__UG_B.A._Economics%20(English).pdf
3. https://www.rvskvv.net/images/Principles-of-Agricultural-Economics_17.04.2020.pdf
4. https://www.distanceeducationju.in/studymaterial/ECO%20309.pdf

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	Examine the financial problems of agricultural sector.	**K1**
CO–2	Understand the significance ofcropping pattern in agricultural economics	**K2**
CO–3	Interpret the role of WTO in Indian agricultural sector.	**K3**
CO–4	Analyse the various channels of marketing of agricultural produce	**K4**
CO–5	Assess and develop the knowledge of natural resources and its policy measures.	**K5**
CO-6	Develop the knowledge of agricultural policy and its reforms	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
2	**25PEC2CC08**			**Core Course – 8:** Agricultural Economics (Internship Embedded Course)					**5**		**4**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	1	2	1	2	2	3	2	2	2	1	**1.8**
CO–2	2	2	3	2	2	2	3	3	2	3	**2.4**
CO–3	2	2	1	2	2	3	3	3	3	2	**2.3**
CO–4	3	3	2	2	2	2	2	3	2	3	2.4
CO–5	2	2	2	2	2	2	2	3	2	2	2.1
CO-6	2	2	1	2	2	3	3	3	3	2	**2.3**
										Mean Overall Score	**2.2 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
2	25PEC2OE02	**Open Elective – 2 (BS):** Managerial Economics	4	2

Course Objectives
To understand the Managerial skill and its applications to the students.
To understand the production theory to the students.
To understand how products are priced.
To know the various macroeconomic polices
To impart the knowledge of demand theory

Unit – I: Nature and Scope of Managerial Economics (12 Hours)

Definitions of economics and managerial economics - nature, scope and functions of managerial economics – uses and limitations of managerial economics.

Unit–II: Demand Analysis (12 Hours)

Meaning - Demand and its determinants - Factors involved in Demand forecasting - methods of demand forecasting.

Unit–III: Production Analysis (12 Hours)

Meaning – Production and Production function - Law of variable proportions – Cost: Total, Average and Marginal cost – Revenue: Total, Average and Marginal revenue - Breakeven Point and the margin of safety.

Unit–IV: Pricing Techniques (12 Hours)

Full cost pricing - marginal pricing - skimming pricing - penetrating pricing - target pricing - peak load pricing - going rate pricing – cyclical pricing - customary pricing – product - line pricing - pricing of joint product, new product.

Unit – V: Profit & Profit Management (12 Hours)

Meaning and nature of Profit - Accounting profit and Economic profit - Theories of profit: Risk theory of profit, Uncertainty bearing theory of profit, Dynamic theory of profit, Innovation theory of profit and Marginal productivity theory of profit.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. S. Sankaran – *Managerial Economics*, Margham Publications, Madras, 2013.

Books for Reference:

1. Ahuja H. L. (2008) – *Principles of Micro Economics* (21st Revised Edition), *A New look at Economic Theory*, S. Chand, New Delhi.
2. P. L. Mehta: *Managerial Economics - Analysis, problems and causes,* Sultan Chand & Sons, 1992.
3. R. L. Varshney and K. L. Maheswari: *Managerial Economics* .Sultan Chand & Sons, 1987.
4. Joel Dean: *Managerial Economics*. Prentice Hall of India, 1987.
5. Mote, Paul and Gupta: *Managerial Economics Concepts and cases,* 1979.

Websites and eLearning Sources

1. https://www.geeksforgeeks.org/managerial-economics-scope-nature-and-importance/
2. https://www.toppr.com/guides/business-economics/theory-of-demand/demand-forecasting/
3. https://www.toppr.com/guides/fundamentals-of-economics-and-management/theory-of-production/law-of-variable-proportions/
4. https://www.shopify.com/in/blog/full-cost-pricing-strategy#
5. https://www.investopedia.com/ask/answers/033015/what-difference-between-economic-profit-and-accounting-profit.asp

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Remember the basic concepts of managerial economics.	**K1**
CO–2	Understand the importance of managerial skills in the real business world.	**K2**
CO–3	Apply the knowledge of managerial skills in business to resolve the real business problems faced by the entrepreneurs.	**K3**
CO–4	Analyse the psychology of the consumers at the time of consumption.	**K4**
CO–5	Evaluate and compile new ideas in the field of marketing using pricing techniques.	**K5**
CO-6	Develop profit management techniques	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
2	**25PEC2OE02**			**Open Elective – 2 (BS):** Managerial Economics				**4**		**2**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	1	2	2	2	3	3	3	2	2	2	**2.2**
CO–2	2	3	2	1	2	2	3	3	2	2	**2.2**
CO–3	3	2	2	2	2	2	3	3	2	2	**2.3**
CO–4	1	2	2	3	1	2	3	2	2	3	**2.1**
CO–5	1	2	2	2	3	2	3	2	2	3	**2.2**
CO-6	3	2	2	2	2	2	3	3	2	2	**2.3**
Mean overall Score											**2.2 (High)**

Semester	Course Code	Title of the Course	Hours/Week	Credits
2	25PSS2SE01	**Skill Enhancement Course:** Soft Skills	4	2

Course Objectives
To provide a focused training on soft skills for students in colleges for better job prospects
To communicate effectively and professionally
To help the students take active part in group dynamics
To familiarize students with numeracy skills for quick problem solving
To make the students appraise themselves and assess others

Unit I: Effective Communication & Professional Communication (12 Hours)

Definition of communication, Barriers of Communication, Non-verbal Communication; Effective Communication - Conversation Techniques, Good manners and Etiquettes; Speech Preparations & Presentations; Professional Communication.

Unit II: Resume Writing & Interview Skills (12 Hours)

Resume Writing: What is a résumé? Types of résumés - Chronological, Functional and Mixed Resume, Purpose and Structure of a Resume, Model Resume.

Interview Skills: Types of Interviews, Preparation for an interview, Attire, Body Language, Common interview questions, Mock interviews & Practicum

Unit III: Group Discussion & Personal effectiveness (12 Hours)

Basics of Group Discussion, Parameters of GD, Topics for Practice, Mock GD & Practicum & Team Building. Personal Effectiveness: Self Discovery; Goal Setting with questionnaires & Exercises

Unit IV: Numerical Ability (12 Hours)

Introducing concepts Average, Percentage; Profit and Loss, Simple Interest, Compound Interest; Time and Work, Pipes and Cisterns.

Unit V: Test of Reasoning (12 Hours)

Introducing Verbal Reasoning: Series Completion, Analogy; Data Sufficiency, Assertion and Reasoning; and Logical Deduction. Non-Verbal Reasoning: Series; and Classification

Teaching Methodology	Chalk and talk, Lectures, Demonstrations, PPT.
Assessment Method:	Presentations; Resume writing; interviewing; MCQs, GD, online test

Books for Study:

1. Melchias G., Balaiah, J. & Joy, J. L. (Eds). (2018). *Winner in the Making: A Primer on soft Skills.* Trichy, India: St. Joseph's College.

Books for Reference:

1. Aggarwal, R. S. (2010). *A Modern Approach to Verbal and Non-Verbal Reasoning.* S. Chand.
2. Covey, S. (2004). *7 Habits of Highly effective people.* Free Press.
3. Gerard, E. (1994). *The Skilled Helper* (5th Ed.). Brooks/Cole.
4. Khera, S. (2003). *You Can Win.* Macmillan Books.
5. Murphy, R. (1998). *Essential English Grammar,* (2nd Ed.). Cambridge University Press.
6. Sankaran, K., & Kumar, M. (2010). *Group Discussion and Public Speaking* (5th Ed.).
7. M.I. Publications.
8. Trishna, K. S. (2012). *How to do well in GDs & Interview*s? (3rd Ed.). Pearson Education.
9. Yate, M. (2005). *Hiring the Best: A Manager's Guide to Effective Interviewing and Recruiting*

Course Outcomes		
CO No.	**CO-Statements**	**Cognitive Levels (K - Level)**
	On successful completion of this course, students will be able to	
CO1	Recall various soft skill sets	**K1**
CO2	Understand personal effectiveness in any managerial positions	**K2**
CO3	Apply verbal and non-verbal reasoning skills to solve problems	**K3**
CO4	Differentiate problems at work and home; and design solutions to maintain work-life balance	**K4**
CO5	Assess growth and sustainability and infuse creativity in employment that increases professional productivity	**K5**
CO6	Construct plans and strategies to work for better human society	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours/Week**		**Credits**
2	**25PSS2SE01**			**Skill Enhancement Course:** Soft Skills					**4**		**2**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Scores of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	3	3	2	3	2	3	2	3	**2.7**
CO2	3	3	3	2	3	3	3	3	3	3	**2.9**
CO3	3	2	2	3	3	3	3	3	3	3	**2.8**
CO4	3	3	2	2	3	3	3	3	3	3	**2.8**
CO5	3	3	3	2	2	3	3	3	3	3	**2.8**
CO6	3	3	3	2	2	3	3	3	3	3	**2.8**
Mean Overall Score											**2.8 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3CC09	**Core course – 9:** Economics of Growth and Development	6	4

Course Objectives
To understand the various concepts of Growth and Development with special reference to India
To understand the evolution of growth and development in the modern era.
To analyze theoretical and empirical issues in economic growth and development.
To understand the role and contribution of modern technology in economic development
To provide critical thinking on contemporary issues on economic growth and development.

Unit–I: Concepts of Economic growth and development (18 Hours)

Concepts and definitions of Economic growth and development; Growth versus Development -indicators of economic growth and economic development–Factors affecting economic growth; Characteristic features of under developed countries – ancient Indian economic development (IKS)

Unit–II: Growth Models (18 Hours)

Classical: Harrod - Domar Model, Fei-ranis model - Neo-Classical: Solow Model of long run growth Cambridge: Joan Robinson Model of Capital Accumulation-Kaldor model of growth.

Unit – III: Theories of Economic Development (18 Hours)

Karl Marx's theory of social change, surplus value, profit and capitalist crisis; Leiben stein's Critical Minimum Effort Thesis; Hirschman's Theory of Unbalanced Growth; Gerschenkron's Great Spurt Theory; Myrdal's Theory of Circular Causation.

Unit – IV: Capital Formation and Human Capital (18 Hours)

Importance of Capital Formation; Role of Agriculture and Industry in economic development; Monetary Policy in economic development; Fiscal Policy in economic development; Population growth and its effects on economic development; Human Capital Formation and its role in economic development.

Unit–V:FDI and MNCs (18 Hours)

Importance of foreign trade in economic development – FDI, FII: role and importance, Debt crisis and its causes; role of foreign capital and aid in economic development; MNCs – role and contribution to economic development.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. M. L. Jhingan, (2014) *Economics of Planning and Development*, 2019 Edition, Vrinda Publications (P) Ltd.
2. R. K. Lekhi & Joginder Singh, (2014*) The Economics of Development and Planning*, Kalyani Publishers.

Books for Reference:

1. Adelman, I. (1961) *Theories of Economic Growth and Development*, Stanford University Press
2. Kindle berger, C. P. (1977) *Economic Development* ,McGraw Hill, New York
3. Sen, A K (1990) *Growth Economics*, Harmondsworth
4. Myrdal, G. (1957) *Economic Theory and Under developed Regions*, Duck worth, London
5. Taylor, L. (1979) *Macro Models for Developing Countries*, McGraw Hill, New York
6. Schumpeter, J A. (1949) *The Theory of Economic Development*, Harvard University Press, Cambridge

Websites and eLearning Sources:

1. https://testbook.com/ias-preparation/economic-growth-development
2. https://www.google.com/search?q=economic+growth+model
3. https://www.google.com/search?q=theories+of+economic+development

4. https://www.ijsr.net/archive/v8i1/ART20193973.pdf

CO No.	CO–Statements	Cognitive Levels (K –Levels)
	On successful completion of this course, students will be able to	
CO–1	Examine the features of under developed countries with the domestic and international aspects of economic growth and development.	**K1**
CO–2	Interpret the theoretical and empirical knowledge using the indicators of economic growth and development.	**K2**
CO–3	Relate the current policies, problems and issues in human resource development.	**K3**
CO–4	Appraise and assess the role and contribution of foreign trade, foreign aid, grants and MNCs in the development of the host nation.	**K4**
CO–5	Adapt subject knowledge into employment oriented ideas for enhancing entrepreneurial ability with ethical values.	**K5**
CO-6	Formulate the various policy measures for Economic growth and development.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
3	**25PEC3CC09**			**Core course – 9:** Economics of Growth and Development				**6**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	3	3	1	2	3	3	3	3	1	**2.4**
CO–2	3	3	3	1	3	3	3	3	3	2	**2.7**
CO–3	3	3	3	2	2	3	3	2	3	3	**2.7**
CO–4	2	3	3	2	3	3	3	2	3	2	**2.6**
CO–5	3	3	3	3	3	2	3	2	3	3	**2.8**
CO-6	2	3	3	2	3	3	3	2	3	2	**2.6**
Mean overall Score											**2.63 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3CC10	**Core Course - 10:** Monetary Economics	5	4

Course Objectives
To help students understand the monetary mechanism of money supply and interest rates
To analyse the role of monetary policy in the banking system
To equip students with the capacity to critically examine monetary policy
To help students examine the impact of monetary policy decisions from domestic and international perspectives
To help students devise solutions for monetary policy issues and challenges

Unit – I: Theory of Money and Prices (15 Hours)

Quantity theories – Fisher's approach – Cambridge approach - Keynesian theory of money and prices – Gurley and Shaw's thesis on liquidity of money – Radcliffe - Sayers thesis – Tobin and Shaw's theory - Patinkin's monetary theory - Phillips curve.

Unit – II: Milton Friedman's Quantity Theory (15 Hours)

Friedman's Quantity theory – Demand Function – Keynesian Theory and Friedman's quantity Theory: A comparison – Critical evaluation.

Unit – III: Theories of Inflation (15 Hours)

Concept and measurement of inflation – types of inflation – Inflation theories: Classical and Neo-Classical theories, Inflationary Gap Model, Phillips Curve – Lipsey's version, Samuelson Solow modification, Monetarist's approach, Neo-Classical approach – Impact of Inflation – measures to control inflation

Unit–IV: Banking System (15 Hours)

Central Banking – Meaning – Functions – Currency Issue – Principles - Credit control - Commercial Banking - Indigenous Banking – Modern Banking – New generations private sector Banks – Nationalization – Performance of Nationalized Banks - Money and Capital markets – Non–Performing Assets (NPA) – Recent trends in banking system.

Unit–V: Monetary Policy (15 Hours)

Monetary Policy: framing monetary policies in ancient India -objectives & effectiveness - Role of monetary policy in a developing economy – problems of monetary policy in India – Inflation in India – Demonetization in India- Developing inclusive financial systems from the point of view of the Indian Knowledge System.

Teaching Methodology	Chalk and talk, PPT, Seminars
Assessment Methods	Online Test (MCQ), Written Assignments, Seminar

Books for Study:

1. Gupta, S B. (2005) Monetary Economics, S. Chand & Company, New Delhi.
2. Jhingan M. L. Monetary Economics, Vrinda Publications P Ltd., New Delhi

Books for Reference:

1. Halm, G N. (1990). Monetary Theory. Asia Publishing House, New Delhi.
2. Harris, C. L. (1961). Money and Banking. Allyn and Bacon, London.
3. Seth, M. L. (2008). Monetary Economics. Lakshmi Narayana Agarwal

Websites and eLearning Sources

1. https://onlinecourses.swayam2.ac.in/imb25_mg79/preview
2. https://www.khanacademy.org/economics-finance-domain/macroeconomics/monetary-system-topic
3. https://ecoholics.in/understanding-the-basics-of-monetary-economics/

CO No.	Course Outcomes	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Critically examine monetary policies	**K1**
CO–2	Describe the nature, role, operations and functions of central banks and other monetary institutions.	**K2**
CO–3	Illustrate the relationship between financial and monetary theories.	**K3**
CO–4	Analyse the monetary mechanism or decisions concerning money supply, interest rates and its real effects on the economy	**K4**
CO-5	discover how monetary policy decisions can bring in inclusive growth	**K5**
CO–6	Evaluate the role of monetary economics in socio-economic problems and offer sustainable solutions.	**K6**

Relationship Matrix											
Semester	**Course Code**		**Title of the Course**				**Hours**				**Credits**
3	**25PEC3CC10**		**Core Course - 10:** Monetary Economics				**5**				**4**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	2	1	2	3	2	3	3	**2.4**
CO2	2	2	2	2	1	3	3	2	2	2	**2.2**
CO3	1	3	2	2	1	3	3	2	3	2	**2.2**
CO4	3	3	2	1	1	3	3	3	2	2	**2.3**
CO5	3	3	1	2	1	3	3	3	2	2	**2.4**
CO6	3	3	1	3	1	3	3	3	2	2	**2.4**
										Mean Overall Score	**2.31 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3CC11	**Core Course – 11:** Econometrics	6	4

Course Objectives
To get comprehensive understanding on importance of econometrics in day today life.
To provide knowledge on using economic data and applying mathematical and statistical tools and Econometric Applications of Economic theory.
To know the knowledge of Different types of data, and analyse relationship of economic variables using simple and multiple regression models.
To develop the analytical skills to write a critique report on regression results.
To get comprehensive understanding on importance of econometrics in day today life.

Unit – I: Fundamentals of Econometrics (18 Hours)

Econometrics – Meaning - Definition – Scope – Objectives – Methodology of Econometrics –Specification - Mathematical Economics and Econometrics - Econometric models –Types of Econometrics - Role of Computer in Econometrics.

Unit – II: Simple Linear Regression Model (18 Hours)

CLRM assumptions - Properties of OLS – Gauss - Markov theorem - Confidence Intervals for the Estimated Parameters - Properties of estimator – Statistical inference - Coefficient of Determination - Prediction with the Simple Regression model.

Unit – III: Multiple Linear Regression Model (18 Hours)

Estimation of parameters, goodness of fit - adjusted R^2, partial regression coefficients, testing of hypotheses – individual and joint significance: t and F-tests - ANOVA.

Unit – IV: Problems of Single Equation Model (18 Hours)

Problems in OLS Methods: Analysis of residuals – Heteroscedasticity, Autocorrelation and Problem of Multi collineraity - their consequences, detection and remedies - Specification error.

Unit – V: Qualitative Regression Model (18 Hours)

Introducing dummy (independent) variables - nature of dummy variables, variables with two categories and more than two categories, dummy variable trap – intercept Shifters - interaction of two categorical variables.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Domodar N. Gujarati, Dawn Porter and Sangeetha Gunasekar, *Basic Econometrics*, Fifth edition, McGraw Hill / Irwin, 2017.
2. Gujarati, D. (2014). *Econometrics by example*. Palgrave Macmillan.

Books for Reference:

1. Greene, William H. *Econometric Analysis*.6th Edition, Prentice Hall. 2008.
2. Johnston J. and Dinardo, J. *Econometric Methods*. 4th Ed. McGraw-Hill 1997.
3. Ramanathan, Ramu, *Introductory Econometrics with Applications*, 5th edition, 2002, Thomson Asia Pte Ltd., Singapore.
4. Stock, James Hand Mark W. Watson (2006): *Introduction to Econometrics*, Second Edition, (Addison - Wesley Series in Economics)./
5. Wooldridge, J., *Introductory Econometrics*: *A Modern Approach*, 2015, Nelson Education.
6. Earl K. Bowen & Martin K. Starr, *Basic Statistics for Business and Economics*, McGraw Hill International Student Edition.
7. Maddala, G. S. ,*Introduction to Econometrics*. Willey Publishers (Indian edition).
8. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3rd edition, Indian edition, 2007.

Websites and eLearning Sources:

1. https://home.iitk.ac.in/~shalab/econometrics/Chapter1-Econometrics-IntroductionToEconometrics.pdf
2. https://www.imf.org/external/pubs/ft/fandd/2011/12/basics.htm
3. https://www.youtube.com/watch?v=1-YDYB917_k
4. https://www.youtube.com/watch?v=_gIUVaHqpeQ
5. https://www.youtube.com/watch?v=DTAJbx_T0Js

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Define the concepts of econometrics.	**K1**
CO–2	Explain the concepts of dummy variables.	**K2**
CO–3	Apply the knowledge to formulate the hypothesis.	**K3**
CO–4	Analyse the research problem.	**K4**
CO–5	Estimate economic variables using econometric models.	**K5**
CO-6	Formulate suitable research hypotheses	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
3	**25PEC3CC11**			**Core Course – 11:** Econometrics				**6**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	1	3	3	2	2	3	**2.3**
CO–2	1	3	2	1	2	3	3	2	2	3	**2.3**
CO–3	1	2	3	2	3	2	3	2	3	2	**2.3**
CO–4	1	2	2	3	1	2	3	2	2	2	**2.0**
CO–5	2	2	2	2	3	1	3	2	2	3	**2.1**
CO-6	2	2	2	2	3	1	3	2	2	3	**2.1**
										Mean overall Score	**2.2 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3CC12	**Core Course - 12:** Behavioural Economics	5	4

Course Objectives
To provide a comprehensive understanding of how psychological factors and cognitive biases influence economic decision-making and market outcomes.
To explore the intersection of economics and psychology in shaping individual and collective behaviour, particularly in areas such as consumer choice, saving, and investing.
To develop critical skills in applying behavioural models to real-world economic issues.
To analyse the limitations of traditional economic theories, emphasizing the importance of incorporating human behaviour into economic analysis
To examine the role of behavioural interventions (nudges) in improving decision-making and promoting welfare across various sectors, such as health, finance, and environmental sustainability.

Unit – I: Introduction to Behavioural Economics (15 Hours)

Nature of behavioural economics - Methodological approach - Origins of behavioral economics– Neo-classical and Indian behavioral approaches to studying economics: rationality, optimization, role of intuition, emotions, beliefs in decision making.

Unit – II: Concepts of Behavioural Economics (15 Hours)

Values: Preferences and Choices - Beliefs: Heuristics and Biases – Decision making under risk and uncertainty- Decision weighting - Mental accounting – discounting utility model.

Unit – III: Inter-Temporal Behaviour (15 Hours)

Inter-temporal choice - temporal choice – inter-temporal choice models - valuation of delayed consumption preferences for sequences of outcomes - Hyperbolic discounting - Preference reversal.

Unit – IV: Markets and Behavioural Approaches (15 Hours)

Awareness and the willingness as deciding drivers of behavioural change - decision making and behavioural factors - understanding consumer decision - making and using behavioural insights - improving consumer outcomes - use of behavioural insights in policy making.

Unit–V: Strategic Interaction (15 Hours)

Nature of behavioral game theory, mixed strategies, Bargaining - social preferences: Altruism, envy, fairness and justice - Intentions, reciprocity and trust- Limited strategic thinking choice architecture - Nudge, nudge vs. boost, behavioural public policy.

Teaching Methodology	Blended learning, Group Discussions, Mind mapping techniques, Collaborative learning, Inquiry Based Learning.
Assessment Pattern	Online Test (MCQ), Written Assignments, Seminar, Group Discussions, Case Studies.

Books for Study:

1. Erik Angner (2016), '*A Course in Behavioural Economics'*, Palgrave Macmillan
2. Masao Ogaki, Saori C. Tanaka (2017)'*Behavioural Economics Toward New Economics by Integration with Traditional Economics'*, Springer Text in Business and Economics (e book),Springer Nature Singapore Pvt Ltd.

Books for Reference:

1. Alexander Rajko, Rutledge (2012), *Behaviour economics and business ethics- interrelation and application*, London.
2. Steffan Huck (2004), *Advance in understanding strategic behaviour – game theory experiments and bounded rationality*, Palgrave, McMillan, 2004
3. Brunner meier, Markus, K., and Jonathan A. Parker (2005). *"Optimal Expectations"* American Economic Review, 95 (4): 1092-1118.
4. Sydnor, Justin. 2010. *(Over) insuring Modest Risks*. American Economic Journal: Applied Economics, 2 (4): 177-99

Websites and eLearning Sources:

1. https://bkbcollege.in/upload/dpt_book/1669870509.pdf
2. https://www.cmu.edu/dietrich/sds/docs/loewenstein/BehavioralEconomics.pdf
3. https://www.bu.edu/eci/files/2020/05/Behavioral-Economics_final.pdf
4. https://www.behavioraleconomics.com/wp-content/uploads/delightful-downloads/2015/06/BEGuide2015.pdf

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Describe the concepts of behavioral economics.	**K1**
CO–2	Discuss the individual decision-making of economic agents.	**K2**
CO–3	Use behavioural insights in policy-making.	**K3**
CO–4	Analyse the importance of inter-temporal choice.	**K4**
CO–5	Assess and develop the strategic thinking choice of architecture.	**K5**
CO-6	Evaluate consumption pattern for an individual	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
3	**25PEC3CC12**			**Core Course - 12:** Behavioural Economics				**5**		**4**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	2	1	3	2	3	2	2	2	3	**2.2**
CO–2	2	3	2	1	2	3	3	2	2	2	**2.2**
CO–3	1	2	2	3	2	2	2	3	2	2	**2.1**
CO–4	1	3	2	2	3	3	2	2	2	2	**2.2**
CO–5	1	2	3	2	2	2	3	2	3	3	**2.3**
CO-6	1	2	3	2	2	2	3	2	3	3	**2.3**
Mean overall Score											**2.2 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3ES02A	**Discipline Specific Elective – 2:** New Frontiers in Economics	4	3

Course Objectives
Examine cutting-edge economic theories and models, with a focus on how new technologies, behavioral insights, and global challenges are reshaping traditional economic paradigms.
Analyze the economic implications of technological advancements, including artificial intelligence, blockchain, and digital currencies, on markets, labor, and policy.
Identify and critically evaluate global economic trends such as climate change, inequality, and digital globalization, and their implications for future economic governance and policy.
Integrate insights from other fields such as psychology, sociology, and political science to better understand complex, multi-dimensional economic phenomena in the modern world.
Equip students with advanced quantitative and analytical methods, such as machine learning techniques and experimental economics, to tackle contemporary economic research questions and real-world issues.

Unit–I: Theoretical Issues – (Microeconomics Perspective) (12 Hours)

N.M.UtilityAnalysis:Lancaster'sApproach-Hirschleiffer'sanalysisofUncertainty Asymmetric Information - Principal Agent Problems - Case Studies

Unit – II: Theoretical Issues – (Macroeconomics Perspective) (12 Hours)

Buchanan's Public Choice Approach – Stiglitz Private Use of Public Interest – Neo - Classical: Rational Expectations - Sen.'s Approach to Welfare.

Unit – III: Indian Governance and Policy Issues (12 Hours)

India in the Emerging World System - Changing Perceptions about the role of the Government - Growth and pattern of International Economic Relations: Aid Investment and Trade

Unit – IV: Human Development Policy Issues (12 Hours)

Human Face of Development: Components of Human Development Index: Education and Health, Basic Need Approach - Women Empowerment - Recent Employment Programmes.

Unit–V: Environmental Issues (12 Hours)

Environmental Issues - Sustainable Development - Waste Management - Natural Disaster Management - Environmental Policies.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Koutsoyiann is A. (1987) *Modern Microeconomics*, Macmillan Press, London.
2. Musgrave. R A and P. B. Musgrave (1976) *Public Finance in Theory and Practice*, McGraw Hill, Kogakusha, Tokyo.
3. Kindle berger, C. P. (1977), *Economic Development*, 3e, McGraw Hill, New York.
4. Ackley, (Revised edition 2008) *Macroeconomics Theory and Policy*–Macmillan New York.
5. C. Kolstad (2012), *Intermediate Environmental Economics*, Oxford University Press

Book for Reference:

1. Akerl of, (3,A.1984.*'An Economic Theorist's Book of Tales'*, Cambridge: Cambridge University Press.
2. Coase, R. 2001. *'The Problem of Social Cost '*Journal of Law and Economics, 3: 144.
3. Hirshleifer, J and Riley, J. G. 1992. *'The Analytics of Uncertainty and Information*, Cambridge: Cambridge University Press.
4. Orth, Qouglas, C.1990. *'Institutions, Institutional Change and Economic Performance'* Cambridge: Cambridge University Press.
5. Spencer, M. 1973. *'Job Market signaling'* Quarterly Journal of Economics, 87: 355-374.

6. Sengupta, Nirmal. 2001.'*A new Institutional Theory of Production: An Application*, Sage Publication, New Delhi.
7. Stiglitz, J. E. 1998.*'The Private Use of Public Interest; Incentives and Institutions*, Journal of Economic Perspectives, Vol. 2-12, p-3-22.
8. Shankar, U. 2002. '*Asymmetric Information and Counter acting Institutions'*,lEA Conference Vol., p.116.
9. *UNDP Reports*, Current Volumes, Oxford University Press, London
10. *World Development Reports*, Current Volumes.

Websites and eLearning Sources:

1. https://www.kauffman.org/wp-content/uploads/2011/05/frontier_economics_4_06.pdf
2. https://assets.publishing.service.gov.uk/media/6557860f046ed4000d8b9b2c/Frontier_Economics.pdf

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Identify the recent developments in Utility Analysis and Information Economics.	**K1**
CO–2	Explain the recent developments in international relations.	**K2**
CO–3	Interpret the recent indicators of economic development.	**K3**
CO–4	Analyse the environmental impact on economic development.	**K4**
CO–5	Critically assess the recent theories in Economics.	**K5**
CO-6	Design contemporary economic research questions to address real-world issues.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
3	**25PEC3ES02A**			**Discipline Specific Elective – 2:** New Frontiers in Economics				**4**		**3**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	1	3	3	2	2	3	**2.3**
CO–2	2	2	2	1	2	2	3	2	2	3	**2.2**
CO–3	2	2	3	2	3	2	3	2	3	2	**2.4**
CO–4	1	2	2	3	2	2	3	2	2	2	**2.1**
CO–5	1	3	2	2	3	2	2	2	2	3	**2.1**
CO-6	2	2	2	1	2	2	3	2	2	3	**2.2**
										Mean overall Score	**2.3 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3ES02B	**Discipline Specific Elective – 2:** Financial Economics	4	3

Course Objectives
Understand and apply key financial theories and models to analyze market behavior, asset pricing, and risk management strategies.
Examine the role of financial markets and institutions in economic development.
Analyze the dynamics of financial instruments, including equities, bonds, derivatives, and alternative assets.
Assess the impact of macroeconomic factors on financial decision-making and asset valuations.
Develop proficiency in financial data analysis and modeling techniques to make informed investment decisions.

Unit – I: Introduction to Financial System and Financial Markets (12 Hours)

Financial System: Structure and Functions - Financial markets - Financial Instruments - Role of Financial system - Financial system and economic development.

Unit – II: Money Market and Capital Market (12 Hours)

Money market: Meaning, Functions and Instruments - Features of money market - Capital market: Meaning, Functions and Structure: Primary and Secondary markets.

Unit – III: Security Market Analysis (12 Hours)

Risk - Return on risk - types of risk - Security Evaluation: Fundamental Analysis, Technical Analysis - Derivatives: Options, Futures/Forwards, Swaps, Construction of Stock market indices.

Unit – IV: Indian Financial System (12 Hours)

Structure of Indian Financial System - Organization and management of Indian Stock Exchanges - SEBI, OTCEI, BSE, BOLT, SENSEX, NSE, NEAT, NIFTY, ISE - Credit
rating agencies in India - CRISIL, ICRI, CIBIL CARE - International credit rating agency – S and P, Fitch ratings - Recent financial sector reforms.

Unit – V: Corporate Finance (12 Hours)

Patterns of corporate financing: common stock, debt, preferences, convertibles, Capital structure and the cost of capital - corporate debt and dividend policy.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Hull, John C. and Sankarshan Basu, *Options, Futures and Other Derivatives*, Pearson Education, 2016
3. Khan M Y., *Indian Financial System*, McGraw Hill Education, 2015
4. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw – Hill, 7th edition, 2002.

Books for Reference:

1. Stephen A. Ross, Randolph W. Wester field and Bradford D. Jordan, *Fundamentals of Corporate Finance*. McGraw-Hill, 7th edition, 2005.
2. Bhole, L M (1999): *Financial Institutions and Markets*, TATA McGraw Hill Co Ltd, New Delhi
3. Preethi Singh (2009): *Dynamics of Indian Financial system, markets, institutions and services*, Annes Books Pvt Ltd, New Delhi.

Websites and eLearning Sources:

1. https://sde.uoc.ac.in/sites/default/files/sde_videos/SLM-Eco-Financial%20Economics%20final.pdf
2. https://www.scss.tcd.ie/khurshid.ahmad/Teaching/Lectures_on_Financial_Informatics/External%20Courses/2012_fin_eco.pdf

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K –Levels)
CO–1	Identify the alternative approaches to economic problems through exposure in allied fields.	**K1**
CO–2	Predict economic decisions with relevance to real life problems.	**K2**
CO–3	Interpret financial portfolios in both money and capital markets for sustainable economic growth.	**K3**
CO–4	Analyse the role played by time, uncertainty, information and inflation in evaluating financial instruments.	**K4**
CO–5	Infer the economic and financial data to be applied in research.	**K5**
CO-6	Design contemporary financial sector reforms.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
3	**25PEC3ES02B**			**Discipline Specific Elective – 2:** Financial Economics				**4**		**3**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	3	2	3	2	3	2	3	3	2	**2.6**
CO–2	2	3	1	2	2	3	3	3	3	1	**2.3**
CO–3	3	2	2	3	1	2	3	3	2	1	**2.2**
CO–4	2	1	2	3	1	2	3	2	2	1	**1.9**
CO–5	3	3	2	3	2	1	2	3	3	1	**2.3**
CO-6	3	2	2	3	1	2	3	3	2	1	**2.2**
Mean overall Score											**2.25 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25SMS3RM01	**Common Core:** Intellectual Property Rights (IPR)	4	2

Course Objectives
To impart knowledge on the Concept and kinds of IPR
To enhance the awareness of Patent Rights
To analyze the protection and transfer of Copy Rights
To create awareness on Trademarks
To make the students understand the practical aspect of registration.

Unit I: Intellectual Property Rights (IPR) (12 Hours)

Concept and kinds - Economic importance - IPR in India and Abroad – Genesis and Development – the way from WTO to WIPO -TRIPS, Nature of Intellectual Property, Industrial Property, technological Research, Inventions and Innovations – Important examples of IPR.

Unit II: Patents (12 Hours)

History, Types of patent, Objectives, Rights, Patent Acts 1970 and its amendments - Procedure of obtaining patents, working of patent, Infringement, Industrial Application: Non-Patentable Subject Matter, Registration Procedure, Rights and duties of Patentees

Unit III: Copyrights (12 Hours)

Introduction, works protected under copyright law, Rights, Transfer of Copyrights, Infringement, Remedies and Penalties.

Unit IV: Trademarks (12 Hours)

Objectives, Types, Rights, Protection of goodwill, Infringement, Passing off, Defenses, Domain name.

Unit V: Registration and Protection (12 Hours)

Meaning and practical aspects of registration of Copy Rights, Trademarks, Patents, Geographical Indications, Trade Secrets and Industrial Design registration in India and Abroad. Infringement of IPRs, Enforcement Measures, Emerging issues – Case Studies.

Teaching Methodology	Chalk and talk, Case analysis, Expert interaction and practical exposure
Assessment Methods	Online Test, Seminar, Library work and Case study methods

Book for Study:

1. Nithyananda, K.V. Intellectual Property Rights: Protection and Management. India, In: Cengage Learning India Private Limited. New Delhi, 2019.
2. S. V. Satarkar, Intellectual Property Rights and Copy Rights, Ess Ess Publications, New Delhi, 2002.
3. V. Scople Vinod, Managing Intellectual Property, Prentice Hall of India pvt Ltd, New Delhi, 2012.

Book for References:

1. Neeraj, P. and Khusdeep, D. Intellectual Property Rights. India, In: PHI learning Private Limited, New Delhi, 2014.
2. Ahuja, V.K. Law relating to Intellectual Property Rights. India, In: Lexis Nexis, 2017.
3. Deborah E. Bouchoux, "Intellectual Property: The Law of Trademarks, Copyrights, Patents and Trade Secrets", Cengage Learning, Third Edition, 2012.
4. Prabuddha Ganguli," Intellectual Property Rights: Unleashing the Knowledge Economy", Tata McGraw Hill Education, New Delhi, 2011.
5. Edited by Derek Bosworth and Elizabeth Webster, The Management of Intellectual Property, Edward Elgar Publishing Ltd., New Delhi, 2013.

Websites and E-Learning Resources:

1. https://testbook.com/ias-preparation/intellectual-property-rights-ipr
2. https://padeepz.net/ge8075-question-bank-intellectual-property-rights-regulation-2017-anna-university/#google_vignette

3. https://www.icsi.edu/media/webmodules/Academics/Intellectual_Property_Rights_Law_Practice.pdf
4. https://articles.manupatra.com/article-details/Patent-Types-Laws-related-to-them-in-India
5. https://www.legalserviceindia.com/legal/article-10384-law-of-patent-securing-intellectual-property-in-india.html#google_vignette

Course Outcomes		
CO. No.	**CO- Statement**	**Cognitive Level (K- level)**
	On successful completion of this course, the students will be able to	
CO-1	Get insight on the basic concepts of Intellectual Property Rights	**K1**
CO-2	Understand the basic concepts of applying for patent right, copy right and trade mark.	**K2**
CO-3	Understand and apply the appraisal methods for intellectual property rights	**K3**
CO-4	Understand and evaluate the functioning of the authorities authorized to grant patent	**K4**
CO-5	Analyze the working pattern of the intellectual property rights	**K5**
CO-6	Apply the knowledge gained by analyzing the case laws relevant to IPR	**K6**

Relationship matrix											
Semester	**Course Code**	**Title of the Course**							**Hours**		**Credits**
3	**25SMS3RM01**	**Common Core:** Intellectual Property Rights (IPR)							**4**		**2**
Course Outcomes	**Programme Outcomes (PO)**					**Programme Specific Outcomes (PSO)**					**Mean Scores of Cos**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO-1	3	3	3	2	3	3	2	3	3	2	2.7
CO-2	3	3	3	2	2	3	3	3	2	2	2.6
CO-3	3	3	3	3	2	3	3	2	3	3	2.8
CO-4	3	3	2	3	2	3	3	2	3	2	2.6
CO-5	3	3	3	2	2	3	3	3	2	3	2.7
CO-6	3	3	3	3	3	3	3	2	3	2	2.8
Mean Overall Score											**2.7 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
3	25PEC3SL03	**Self-Learning:** Economics of Tourism	-	1

Course Outcomes

CO No.	CO–Statements	Cognitive Levels K –Levels)
1	Describe the significance of Tourism Management and its promotion	K1
2	Discuss the various elements of tourism marketing	K2
3	Interpret the important Tourism Organizations in the global market.	K3
4	Analyze the social, economic, cultural and political impacts of tourism development.	K4
5	Plan for tourism services and recent trends in domestic and international tourism.	K5

Unit-I: BASIC CONCEPTS OF TOURISM

Meaning- Definition- Concepts and Types of Tourism - Tourism and economic development - Importance of tourism - Sustainable Tourism.

Unit-II: TOURISM PRODUCT AND TOURISM MARKETING

Tourism products: Attractions, Availability, Accessibility and Amenities - Tourism Marketing - Various types of tourism marketing in India - Impact of Information Technology in tourism development.

Unit-III: TOURISM SERVICES

Hotels - Motels - Resorts - Boating Clubs - Conducted /Organized Tours - Package Tour - Insurance - Guides - Tour Operators - Tour Promoters - Medical Tourism- Medical Tourism in India.

Unit-IV: TOURISM STATUS

Tourism status in global and national -Socio, Economic, Cultural and Political Impacts of tourism development in India - Programmes in Tourism Development - Infrastructure Development Programme – Integrated Development of Tourism Circuits, Product infrastructure and Destination Development

Unit-V: TOURISM ORGANIZATIONS

Role and Functions: United Nations World Tourism Organizations (WTO), Pacific Asia Travel Association (PATA), World Tourism and Travel Council (WTTC), International Hotel Association (IHA), Ministry of Tourism, Government of India, Indian Tourism Development Corporation (ITDC) and Federation of Hotel and Restaurants Association of India (FHRAI)

Books for Study:

1. Swain. S.K., and Mishra J.M., (2012), Tourism Principles and Practices, Oxford University Press, New Delhi
2. Bhatia. A K (2002), International Tourism Management, Sterling Publishers, New Delhi

Books for Reference:

1. Biswanath Ghosh (1998), Tourism and Travel Management, Vikas, New Delhi,
2. Arun Kumar Shankar (1998), Action Plan and Priorities in tourism development, Kaniskha, New Delhi, 1998.
3. Vinukumar. S and Chandrasekhar. K.S (2004), Sustainable Development and Tourism, 2004.
4. Nirmal Kumar. S (1996), Problems of Tourism in India -Tourism and Economic Development, APH, New Delhi 1996.

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	Explain the basic concepts, meaning, definitions and types of tourism and its role in economic development.	**K1**
CO–2	Discuss tourism products and various tourism marketing strategies, including the role of information technology in tourism development.	**K2**
CO–3	Illustrate different tourism services such as hotels, resorts, tour operators, insurance and medical tourism in India.	**K3**
CO–4	Analyse the socio-economic, cultural and political impacts of tourism development at national and global levels.	**K4**
CO–5	Evaluate and plan modern tourism services, programmes, infrastructure development and the role of national and international tourism organizations.	**K5&K6**

Relationship Matrix											
Semester	**Course Code**	**Title of the Course**								**Hours**	**Credits**
3	**25PEC3SL03**	**Self-Learning:** Economics of Tourism								**-**	**1**
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	2	2	1	2	3	2	3	2	2	2.2
CO2	2	3	2	2	2	2	3	3	2	2	2.3
CO3	2	2	2	3	2	3	2	2	2	2	2.2
CO4	1	3	2	2	2	2	3	2	2	2	2.2
CO5	2	3	2	2	3	3	2	3	2	2	2.4
										Mean Overall Score	**2.26**
										Rank	**High**

Semester	Course Code	Title of the Course	Hours	Credits
4	25PEC4CC13	**Core Course – 13:** International Economics	5	4

Course Objectives
To impart knowledge of theories of International Trade
To enhance the awareness of various types of Terms of Trade.
To analyze the Aruguments of Free Trade Vs Protection
To create the awareness on Balance of Trade and Payments
To make the students understand the importance of International Institutional.

Unit – I: Trade and Trade Theories (15 Hours)

Subject matter and importance of international economics - Internal trade and International trade – International trade and economic development – Theories of Trade: Adam Smith, Ricardo, Heberler and Heckscher-Ohlin

Unit–II: Gains from Trade (15 Hours)

Gains from Trade – their measurement and distribution - Trade as an engine of economic growth - Terms of Trade: Types of Terms of Trade - Doctrine of Reciprocal Demand: importance and limitations in the theory of trade.

Unit – III: Free Trade Vs Protection (15 Hours)

Free Trade: Arguments for and against free trade - Protectionism: Arguments for and against Protectionism - Methods of Trade Restriction: Tariff and non-tariff trade barriers - Types of tariffs and quotas - Free Trade and policy of tariffs in relation to economic growth with special reference to India - Concept of Optimum Tariff – Dumping – Anti dumping – Anti- Dumping Policy – Countervailing Duties.

Unit – IV: Balance of Trade and Balance of Payments (15 Hours)

Concept and components of Balance of trade and Balance of payments - Structure of Balance of Payments - Equilibrium and disequilibrium in balance of payments - Measures to correct BOP disequilibrium - International financial flows: Measures to correct deficit in the balance of payments - Relative merits, demerits and limitations of devaluation.

Unit – V: Foreign Trade and International Institutions (15 Hours)

Recent Export and Import Policy of India- Concept and Implications of Foreign Trade Multiplier- IMF, World Bank and GATT/ WTO – MNC: Financial inflow, capital inflow- FDI, FII, Technology Transfer- SAARC, ASEAN, NAFTA, EU and BRICS.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Dr. Francis Cherunilam (2011), *International Economics*, Tata McGraw Hill Education Private Limited, New Delhi
2. K C R anaand K N Verma (2007) *International Economics*, Vishal Publishing Co, Delhi.

Books for Reference:

1. M L Jhingan (2003) *International Economics*, Viruntha Publisher, New Delhi
2. V Joshi and I M D Little (1998) *India's Economic Reforms 1999-2001*, OUP, New Delhi
3. SJ Patel (1995) *Indian Economy towards the 21st Century*, University Press Ltd, India.
4. J Bhagawati (1981), *International Trade Selected Readings*, Cambridge University Pres mass.

Websites and eLearning Sources:

1. https://labour.gov.in/
2. https://eshram.gov.in/
3. https://www.ilo.org/

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	Describe the importance of internal and international trade.	**K1**
CO–2	Interpret the impact of financial institutions in the global market.	**K2**
CO–3	Illustrate the importance of terms of trade.	**K3**
CO–4	Analyze the important theories of international trade.	**K4**
CO–5	Assess and integrate the impact of trade policies both at national and international level.	**K5**
CO-6	Evaluate the significance of international financial flow.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
4	**25PEC4CC13**			**Core Course – 13:** International Economics					**5**		**4**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	2	2	1	3	2	3	2	2	2	3	**2.2**
CO–2	2	3	2	1	2	3	3	2	1	2	**2.1**
CO–3	2	2	2	3	2	2	2	3	2	2	**2.2**
CO–4	1	3	2	2	3	3	2	2	3	2	**2.3**
CO–5	1	2	3	2	2	2	3	2	3	3	**2.3**
CO-6	2	2	1	3	2	3	2	2	2	3	**2.2**
Mean overall Score											**2.22 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
4	25PEC4CC14	**Core Course – 14:** Research Methodology	5	4

Course Objectives
Develop a comprehensive understanding of various research designs (qualitative, quantitative, and mixed methods) and frameworks to effectively structure and plan research studies.
Equip students with the skills to select, design, and implement appropriate data collection methods, including surveys, interviews, and experiments, ensuring reliability and validity in research.
Build proficiency in analyzing research data using statistical tools and software, and interpret results accurately to draw meaningful conclusions and insights.
Foster a strong understanding of ethical considerations in research, including consent, confidentiality, and responsible data handling, ensuring integrity in all aspects of the research process.
Develop the ability to communicate research findings clearly and professionally through written reports, presentations, and academic papers, adhering to scholarly conventions and standards.

Unit – I: Introduction to Social Science Research (15 Hours)

Meaning and definitions of research-Pure research and applied research – Historical research and scientific research - meaning of social science research: Subject matter - Importance and problems in social science research, Objectivity in social science research - Case study method.

Unit – II: Research Problem and Research Design (15 Hours)

Research problem: components, selection, sources and techniques involved in a research problem - Research design: definition, components, features, characteristics of a good research design, steps involved in research design- role of review of literature.

Unit–III: Hypothesis (15 Hours)

Research Hypothesis: Meaning, sources, formulation, concepts, importance and types of hypothesis – Importance of hypothesis in social science research - Characteristics of a good hypothesis - Statistical hypothesis: Null and Alternative - Procedure for testing hypothesis - Type-I and Type-II errors – Concept of standard error.

Unit – IV: Data Collection and Sampling Techniques (15 Hours)

Primary and Secondary Data, merits and demerits of primary data - Methods of collecting primary data: Schedule method-Observation method - Interview Method - Questionnaire method - Scales of measurement: nominal, ordinal, interval, ratio - Qualities of a good questionnaire. Secondary data: - merits and demerits - sources of secondary data: published, unpublished and E-sources - Field survey logistics – Challenges and solution – Census method and Sampling method - Methods of sampling: Random sampling - simple and stratified - Judgment method – Quota sampling, multistage sampling method. Sampling and non sampling errors - Methods of reducing both - Sampling size - Sampling design.

Unit –V: Analysis and Research Report Writing (15 Hours)

Meaning of analysis and interpretation - Editing - Coding – Classification of data – Data entry - Statistical and Mathematical tools of analysis – SPSS - Meaning and significance of a Research report - Research report writing: steps and layout.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. C.R. Kothari and Gaurav Garg (2019): *Research Methodology,* Vishwa Prakasan, New Delhi.

Book for Reference:

1. Dhondyal and Wells (2001). *A Guide to Research Methodology*, New Delhi.
2. Wilkinson and Bandarkar (1989). *Methodology and Techniques of Social Research*. Himalaya, New Delhi.
3. P. V. Young (1987). *Scientific Social Surveys and Research*: Asia Publishing House, New Delhi.
4. C. T. Kurien (1985). *A Guide to Research in Economics*, Rainbow, New Delhi.

5. Goode and Hatt (1983). *Methods in Social Research*, McGraw - Hill, New Delhi.
6. B. N. Gosh (1970). *Research Methods in Social Science* - Sterling, New Delhi.
7. M. H. Gopal (1970). *An Introduction to Research Procedures in Social Sciences*: Asia Publishing House- New Delhi.

Websites and eLearning Sources:

1. https://www.educba.com/types-of-research-methodology/
2. https://www.geeksforgeeks.org/methods-of-sampling/
3. https://insightsopinion.com/data-processing-analytics/data-collection-methods-types-tools-and-techniques/

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	Remember the basic concepts of research in economics.	**K1**
CO–2	Understand the research process with the principal activities, skills and ethics.	**K2**
CO–3	Apply the knowledge of research in the society to solve the real problems faced by the people.	**K3**
CO–4	Analyse the research problem and recommend solutions.	**K4**
CO–5	Evaluate the research problem and provide solutions.	**K5**
CO-6	Create new ideas in thesis writing using the mechanics of research report.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
4	**25PEC4CC14**			**Core Course – 14:** Research Methodology					**5**		**4**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	2	3	2	2	3	2	**2.3**
CO–2	2	3	2	3	2	3	3	2	2	1	**2.3**
CO–3	3	2	2	2	2	2	2	3	2	2	**2.2**
CO–4	3	2	2	2	1	2	3	3	2	2	**2.2**
CO–5	1	3	2	2	2	2	2	2	2	3	**2.1**
CO-6	3	2	2	2	2	2	2	3	2	2	**2.2**
										Mean overall Score	**2.2 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
4	25PEC4CC15	**Core Course – 15:** Industrial Economics	5	3

Course Objectives
Evaluate the characteristics and strategic behavior of firms operating in various market structures, including perfect competition, monopoly, oligopoly, and monopolistic competition.
Examine how firms make pricing, output, and investment decisions, considering factors like cost structures, market power, and competitive dynamics.
Assess the role of government regulation in promoting competition, preventing monopolies, and addressing market failures, with a focus on antitrust laws and their economic implications.
Investigate the relationship between industrial organization and innovation, exploring how firms' competitive strategies impact technological advancement and industry evolution.
Develop the skills to apply econometric methods and data analysis techniques to assess real-world industrial issues, including market concentration, pricing strategies, and firm performance

Unit – I: Framework of Industrial Economics (15 Hours)

Concept and Organization of a Firm - ownership, control and objectives of the firm; Mergers and Acquisitions: types, effects and problems- diversification-Strategic Alliance.

Unit – II: Theories of Industrial Location (15 Hours)

Industrial location - general determinants – Theories: Weber and Sargent Florence; Industrial Productivity – concept and measurement – Tools of industrial productivity – Productivity trends.

Unit–III: Industrial Finance (15 Hours)

Importance of industrial finance - role, nature and sources of industrial finance – Financial statement – Balance sheet, Profit and Loss account; assessment of financial soundness, ratio analysis

Unit – IV: Indian Industrial Growth (15Hours)

Classification of Industries; large, medium and small scale industries - Role of Public and private sector; MNCs and transfer of technology; Regional industrial growth in India; Industrial economic concentration and remedial measures, Competition Act.

Unit – V: Project Appraisal/Evaluation Method & Principles (15 Hours)

Projectidentification–Projectselection–Projectformulation–ProjectAppraisal-Net Present Value (NPV) and Internal Rate of Return (IRR) - criteria-balancing private and social returns; PERT and CPM with case studies.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Khanna O P. (1999) *Industrial Engineering and Management*: Dhana Pvt Rai Publications (P) Ltd, New Delhi.
2. S. C. Kutchal (1980) *Industrial Economy of India* (5th Edition), Chaitanya Publishing House, Allahabad

Book for Reference:

1. Ahluwalia, I J. (1985).*Industrial Growth in India* OUP, New Delhi.
2. Barthwal, R R.(1985). *Industrial Economics*, Wiley Eastern, New Delhi.
3. Cherunilam, F. (1994). *Industrial Economics: Indian Perspective*: Himalaya Publishing House, Mumbai.
4. Desai, B. (1999). *Industrial Economy India*, Himalaya Publishing House, Mumbai.
5. Divine, P J. and R M Jones (1976). *An Introduction to Industrial Economics*: George Allen and Unpin Ltd., London.
6. Hay D J Morris (1979). *Industrial Economics; Theory and Evidence*, OUP, New Delhi.
7. Singh, A. and A N Sadhu (1988). *Industrial Economics*, Himalaya Publishing House, Bombay.

Websites and eLearning Sources:

1. https://mis.alagappauniversity.ac.in/siteAdmin/dde-admin/uploads/1/PG_M.A._Economics%20(English)_362%2014_Industrial%20Economics_MA_Economics.pdf
2. https://mu.ac.in/wp-content/uploads/2023/03/MA-SEM-IV-Industrial-Economics-English-Version.pdf
3. https://www.acecollege.in/CITS_Upload/Downloads/Books/1081_File.pdf
4. https://egov.uok.edu.in/eLearningDistance/tutorials/7977_1_2016_170830135644.pdf

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO–1	Examine the important theories concerning organisation of industries and the behaviour of firms within those industries.	**K1**
CO–2	Explain the pricing behaviour by the firms and its welfare implications on the society both domestic and international.	**K2**
CO–3	Relate the different market structures their price and output relations and its implications on the society.	**K3**
CO–4	Analyse and criticize how the firms' actions affect the consumer welfare, environment and intervention of the government.	**K4**
CO–5	Assess how the firms' actions affect the consumer welfare, environment and intervention of the government.	**K5**
CO-6	Formulate models which could be applied in research for finding solutions to real life problems and environmental issues.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**					**Hours**		**Credits**
4	**25PEC4CC15**			**Core Course – 15:** Industrial Economics					**5**		**3**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	1	3	3	2	3	3	**2.4**
CO–2	2	3	1	2	3	3	3	2	3	3	**2.5**
CO–3	3	3	1	2	2	3	3	3	3	2	**2.5**
CO–4	3	3	2	2	3	3	3	2	3	3	**2.7**
CO–5	3	2	3	2	2	2	3	3	3	3	**2.6**
CO-6	3	3	1	2	2	3	3	3	3	2	**2.5**
Mean overall Score											**2.53 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
4	25PEC4CC16	**Core Course - 16:** Optimization Techniques in Economics	5	3

Course Objectives
Gain a solid foundation in optimization theory, including the principles of constrained and unconstrained optimization, and their applications in economic decision-making.
Develop proficiency in using mathematical techniques such as linear programming, dynamic programming, and calculus to solve economic optimization problems related to production, consumption, and resource allocation.
Learn how to formulate and solve complex economic models, focusing on maximizing utility, profit, or social welfare while considering constraints like budget limits, production capacities, and market conditions.
Apply optimization methods to analyze and design optimal policy and business strategies in areas such as pricing, investment, and risk management.
Enhance the ability to interpret optimization results in economic terms, and effectively communicate findings and policy implications to both technical and non-technical audiences.

Unit–I: Nature and Scope of Operations Research (15 Hours)

Operations Research: origin – Chakravyugam in Mahabharath, scope, techniques, uses, limitations of operations research

Unit–II: Linear Programming (15 Hours)

Linear programming -Standard L P P – Graphical method - Simplex method, Big M method.

Unit – III: Transportation Problem (15 Hours)

Transportation problem- North–West Corner rule -Vogel's Approximation method - Row Minima - Column Minima methods - Least cost method - Initial basic feasible solution only.

Unit–IV: Assignment Problem (15 Hours)

Assignment problem –Meaning-Hungari an method of solving assignment problems.

Unit–V: Simulation Techniques (15 Hours)

Simulation techniques-Simulation in economic fore casting –Simulation problems.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Mariappan, (2017) *Operational Research Methods and Application*, Rainbow Printers, New Delhi.

Books for Reference:

1. Swarap, (2017). *Operational Research*, Milestone Publication, New Delhi.
2. Kapoor V. K. (2018).*Operational Research Techniques for Management*. Sultan Chand and Sons, New Delhi.
3. Joseph, (2017). *Business Statistics and Operation Research*. Learn Tec Press, New Delhi.
4. Paneer selvam. P (2018). *Operation Research*. Prentice Hall of India, New Delhi.

Websites and eLearning Sources:

1. https://www.bbau.ac.in/dept/UIET/EME-601%20Operation%20Research.pdf
2. https://mdu.ac.in/UpFiles/UpPdfFiles/2021/Jun/4_06-11-2021_16-06-34_OPERATIONS%20RESEARCH%20TECHNIQUES(20MAT22C5).pdf
3. https://mis.alagappauniversity.ac.in/siteAdmin/dde-admin/uploads/2/PG_M.Com_Finance%20&%20Control_335%2021_Operations%20Research.pdf

CO No.	CO–Statements	Cognitive Levels (K–Levels)
	On successful completion of this course, students will be able to	
CO–1	Understand the models of Optimisation Techniques in OR	**K1**
CO–2	Summarize various Operations Research concepts suitable for finding optimal solutions in Economics.	**K2**
CO–3	Use Operations Research models to solve Business problems quantitatively.	**K3**
CO–4	Analyze the techniques of maximizing profit.	**K4**
CO–5	Estimate Minimizing cost concepts to ensure cost effectiveness.	**K5**
CO-6	Prepare simulation techniques in business forecasting.	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours**		**Credits**	
4	**25PEC4CC16**			**Core Course - 16:** Optimization Techniques in Economics				**5**		**3**	
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	2	2	2	1	3	3	2	2	3	**2.2**
CO–2	2	3	2	1	2	3	3	2	2	3	**2.3**
CO–3	1	2	3	2	3	2	3	2	3	2	**2.3**
CO–4	1	2	2	3	1	2	3	2	2	3	**2.1**
CO–5	1	2	2	2	3	1	3	2	2	3	**2.1**
CO-6	1	2	3	2	3	2	3	2	3	2	**2.3**
										Mean overall Score	**2.2 (High)**

Semester	Course Code	Title of the Course	Hours/Week	Credits
4	25PEC4ES03A	**Discipline Specific Elective – 3:** Modern Economic Thought	4	3

Course Objectives
To trace the ideas of Modern Economists
To underst and the foundational principles of Classical Economic Thought
To analyze the key aspects of Neo-Classical Economic Thought.
To examine the fundamental tenets of Keynesian Economic Thought
To evaluate the contributions of Indian economists.

Unit I: Classical Economic Thought (12 Hours)

Economic ideas of Irving Fisher -The Quantity theory of Money- Theory of Interest. Joseph Alois Schumpeter - Method of Study -Deductive Method -Inductive Method-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 (12 Hours)

Ragnar Nurske - 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 (12 Hours)

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 (12 Hours)

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 (12 Hours)

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.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Kulshrestha, U. C. (1994). *History of economic thought*. Lakshmi Narain Agarwal
2. Sankaran, S. (2006). *A history of economic thought*. Margham Publications

Books for Reference:

1. Roll, E.(1956). *A history of economic thought*. Prentice Hall,I nc.
2. Srivastava, P.(2018). *Economic thinkers*. DND Publications.
3. Jhingan, M. L., Girija, M. & Sasikala, L. (2011). *History of economic thought*. Vrindha Publications.

Websites and eLearning Sources:

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		
CO. No	**CO-Statements** On successful completion of this course, the students will be able to	**Cognitive Levels (K-Level)**
CO1	Understand modern economic concept of role of Entrepreneur Innovation, Business Cycles and Capitalism and Socialism	**K1**
CO2	Ability to understand about Capital Formation, Disguised Unemployment Imperfect Competition and Mathematical Economic Analysis	**K2**
CO3	Understand the ideas of Permanent Income Hypothesis, Revealed Preference Theory, Social Welfare Function and Samuel son's Utility Possibility Approach	**K3**
CO4	gain knowledge about the ideas of Modern Indian Economists-Regional Economics, Ecological Theory of Population-Economics of Growth and Development Economics of Fast	**K4**
CO5	understandeconomicideaslikeroleofTechnologicalProgress-Poverty-Deficit Financing and Public Expenditure, Human Factor in Economic Growth and Inequality and Concept of Capability	**K5**
CO6	Synthesize various economic theories and concepts proposed by classical, neo-classical, Keynesian and post-Keynesian economists	**K6**

Relationship Matrix											
Semester	**Course Code**		**Title of the Course**					**Hours/Week**		**Credits**	
4	**25PEC4ES03A**		**Discipline Specific Elective – 3:** Modern Economic Thought					**4**		**3**	
Course Outcomes	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	
CO1	3	3	2	3	2	3	3	2	2	2	**2.5**
CO2	3	3	2	2	2	3	3	2	3	3	**2.6**
CO3	3	1	2	3	2	2	3	2	2	2	**2.2**
CO4	3	2	2	2	1	3	3	2	2	2	**2.2**
CO5	3	3	3	3	2	3	3	2	2	3	**2.7**
CO6	3	3	3	2	2	3	2	2	3	2	**2.5**
Mean Overall Score											**2.45 (High)**

Semester	Course Code	Title of the Course	Hours/Week	Credits
4	25PEC4ES03B	**Discipline Specific Elective – 3:** Contemporary Issues in Economics	4	3

Course Objectives
Analyze and critically evaluate the current economic challenges and policy responses across various global contexts
Examine the impact of contemporary global economic trends
Explore the intersection of economic theory and real-world applications, addressing how economic models can inform solutions to pressing global issues
Develop a comprehensive understanding of the role of government and private sectors in shaping contemporary economic outcomes.
Foster critical thinking and decision-making skills through case studies and discussions on emerging economic topics

Unit – I: Fiscal Policy and Public Expenditure (12 Hours)

Fiscal Policy, need for government spending, areas of government spending in India - Capital expenditure, revenue expenditure, plan expenditure, non–plan expenditure.

Unit – II: Fiscal deficits (12 Hours)

Deficits - Fiscal, Primary and revenue – impact of fiscal deficit on Economy - need to control fiscal deficits in India - Fiscal devolution and centre-state financial relations in India.

Unit – III: Public Revenue (12 Hours)

Zero - base budgeting - Gender budgeting - Capital receipts, revenue receipts, tax and non tax revenue - direct and indirect taxes - need to rationalize tax structure - Goods and Services Tax.

Unit – IV: Economic Survey (12 Hours)

Economic Survey - Agriculture and food management - Industry and infrastructure - Services sector - External sector.

Unit – V: Union Budget (12 Hours)

The Union Budget - Need for the budget - Understanding the process of budget making in India - Analysis of budget in terms of various parameters – Deficits - trends in fiscal deficit and revenue deficit – Receipts - proposed sources of revenue and expected growth in revenue – Expenditure - Expenditure pattern and expected growth in expenditure.

Teaching Methodology	Chalk and talk
Assessment Methods	Online Test, Seminar

Books for Study:

1. Tyagi B.P & Singh H.P, *Public Finance,* Jai Prakash Nath & Co publishers, Meerut, 2015.

Books for Reference:

1. Singh S. K, *Public Finance in Theory and Practice*, S. Chand publishers, New Delhi, 2010
2. Bhatia H.L, *Public Finance*, Vikas Publishing house, New Delhi, 2018.
3. https://www.indiabudget.gov.in/budget2020-21/economicsurvey/index.php
4. https://www.indiabudget.gov.in/

Websites and eLearning Sources:

1. https://mdpires.com/bookfiles/book/2473/Contemporary_Issues_in_Business_and_Economics.pdf?v=1742349753
2. https://www.indiabudget.gov.in/economicsurvey/

CO No.	CO–Statements	Cognitive Levels (K –Levels)
	On successful completion of this course, students will be able to	
CO–1	Define the basic concepts related to contemporary issues in Economics.	**K1**
CO–2	Understand media discussions to know about Fiscal policy of India.	**K2**
CO–3	Understand the government policies to increase the people's participation in economic decision making.	**K3**
CO–4	Relate the theoretical framework of microeconomics and macroeconomics courses in the Indian context.	**K4**
CO–5	Analyse contemporary issues that figure in high profile government documents in particular to the Economic survey and the Union Budget.	**K5**
CO-6	Design economic policies suitable to current scenario	**K6**

Relationship Matrix											
Semester	**Course Code**			**Title of the Course**				**Hours/Week**			**Credits**
4	**25PEC4ES03B**			**Discipline Specific Elective – 3:** Contemporary Issues in Economics				**4**			**3**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of Cos**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO–1	3	3	2	3	1	3	2	3	2	2	**2.4**
CO–2	3	3	2	3	2	3	2	2	2	3	**2.5**
CO–3	3	3	2	3	1	3	3	2	2	1	**2.3**
CO–4	3	3	1	2	1	2	3	3	2	2	**2.2**
CO–5	2	3	3	3	2	3	2	3	2	2	**2.4**
CO-6	3	3	2	3	1	3	3	2	2	1	**2.3**
										Mean overall Score	**2.4 (High)**

Semester	Course Code	Title of the Course	Hours	Credits
4	25PEC4CE01	Comprehensive Examination	-	2

Course Objectives
To understand core economic principles to analyze individual, business, and government decision-making.
To develop critical thinking skills to evaluate economic models and real-world applications.
To apply microeconomic and macroeconomic theories to interpret market behavior and economic policy.
To utilize quantitative tools and data analysis to support economic reasoning and forecasting.
To explore global and contemporary economic issues to assess their impact on society and policy-making.

Unit – I: Microeconomics and Macroeconomics

Microeconomics: Theory of Consumer Behaviour - Theory of Production and Costs- Market Structures - General Equilibrium Analysis - Efficiency Criteria: Pareto-Optimality, Kaldor – Hicks and Wealth Maximization - Welfare Economics.

Macroeconomics: National Income: Concepts and Measurement - Classical & Keynesian Approach - Consumption and Investment Function - Multiplier and Accelerator - Demand for Money - Supply of Money - IS-LM Model Approach - Inflation and Phillips Curve - Business Cycles.

Unit – II: Indian Economy

Economic Growth in India: Agriculture, Industrial and Services sectors: Pattern & Structure of Growth, Major Challenges, Policy Responses – Urban and Rural Development – Issues, Challenges & Policy Responses - Foreign Trade: Structure and Direction, BOP, Flow of Foreign Capital, Trade Policies - Infrastructure Development - Centre-State Financial Relations and Finance Commissions of India - Poverty, Inequality & Unemployment.

Unit–III: Quantitative Techniques

Statistics: Probability Theory: Concepts of probability, Distributions, Moments, Central Limit theorem - Descriptive Statistics – Measures of Central tendency & dispersions, Correlation, Index Numbers - Sampling methods & Sampling Distribution - Statistical Inferences, Hypothesis testing. Econometrics: Linear Regression Models and their properties – BLUE - Identification Problem - Simultaneous Equation Models – Time Series Analysis.

Mathematical Economics: Sets, functions and continuity, sequence, series - Differential Calculus and its Applications - Linear Algebra – Matrices - Static Optimization Problems - Linear Programming

Unit – IV: Development and International Economics

Development Economics: Economic Growth and Economic Development - Theories of Economic Development - Balanced & Unbalanced growth - Models of Economic Growth: Harrod-Domar, Solow, Robinson, Kaldor - Technical progress – endogenous growth - Indicators of Economic Development.

International Economics: International Trade - Theories of International Trade - Balance of Payments - Exchange Rate: Concepts and Theories - Gains from Trade, Terms of Trade, Trade Multiplier – Trade barriers - Dumping – International Institutions.

Unit – V: Monetary and Fiscal Economics

Monetary Economics: Components of Money Supply - Central Bank - Commercial Banking - Monetary Policy - Non-banking Financial Institutions - Capital Market and its Regulation.

Fiscal Economics: Market Failure - Asymmetric Information, Public Goods, Externality - Regulation of Market – Public Revenue - Public expenditure - Public Debt and its management – Union Budget - Fiscal Policy and its implications

Teaching Methodology	e-materials
Assessment Methods	Online Test (MCQ)

Books for Study:

1. UGC NET/SET Economics, Arihant Publication, 2021.
2. Sanjay Kumar, UGC-NET Economics Paper II, Ramesh Publishing House, 2022.
3. Roshan Rakesh Kumar, NTA UGC NET/JRF/SET Economics Paper 2, Arihant Publications, 2020.

Books for Reference:

1. Ahuja H. L., Advanced Economic Theory Microeconomic Analysis, Chand, New Delhi, 2009
2. Dutt and K.P.M. Sundaram - Indian Economy,73rd edition Sultan Chand & Sons, New Delhi, 2019.
3. Tyagi. B.P., Public Finance, Jai PrakashNath, Meerat, 2012.
   Gupta S.P. Statistical Methods, Sultan Chand & sons, New Delhi, 2021.
4. Jhingan M. L., Economics of Planning and Development, 2019 Edition, Vrinda Publications (P) Ltd., 2014.
5. Jhingan M.L., International Economics, Viruntha Publisher, New Delhi, 2003.
6. Jhingan M. L., Monetary Economics, 7th Edition, Vrinda Publishers, New Delhi, 2019.
7. Ahuja H. L., Macroeconomics Theory and Policy, S Chand & Co Ltd, New Delhi, 2020.

Websites and eLearning Sources:

1. https://www.examrace.com/NTA-UGC-NET/NTA-UGC-NET-Study-Material/Economics/
2. https://www.youtube.com/watch?v=5XXdlIV66aQ

CO No.	CO–Statements On successful completion of this course, students will be able to	Cognitive Levels (K–Levels)
CO-1	Recall the concepts and theories in Economics	**K1**
CO-2	Relate economic concepts to current economic scenario	**K2**
CO-3	Apply theoretical knowledge in solving socio-economic problems	**K3**
CO-4	Appraise the dynamism of a developing economy	**K4**
CO-5	Evaluate programmes and policies from economic, social and political dimensions	**K5**
CO-6	Formulate sustainable policies for the welfare of the society	**K6**

Relationship Matrix											
Semester	**Course code**			**Title of the Course**					**Hours**		**Credits**
4	**25PEC4CE01**			Comprehensive Examination					**-**		**2**
Course Outcomes (COs)	**Programme Outcomes (POs)**					**Programme Specific Outcomes (PSOs)**					**Mean Score of COs**
	PO–1	**PO–2**	**PO–3**	**PO–4**	**PO–5**	**PSO–1**	**PSO–2**	**PSO–3**	**PSO–4**	**PSO–5**	
CO-1	3	2	2	2	1	3	3	2	3	3	2.4
CO-2	2	3	2	2	3	3	3	2	2	3	2.5
CO-3	3	3	1	2	2	3	3	3	3	2	2.5
CO-4	3	3	2	2	3	3	3	2	3	3	2.7
CO-5	3	2	3	2	2	2	2	3	3	3	2.5
CO-6	3	2	2	2	2	3	3	2	3	3	2.5
										Mean Overall Score	**2.6**