Program of Courses for the M.A Degree in Economics under CBCS
(With effect from 2019-20)

M.AEconomics program highlights practical applications of economic theory. It is organized to provide students with analytical tools by which they can use to solve many economic problems existing in the real world. The program provides students with practical econometric skills that are popularly used in both private and public sectors. Students will be able to apply critical thinking, quantitative reasoning skills, problem-solving skills and communication skills

Course Code	Course Title	Contact Hours	Credits	Max Marks
I SEMESTER				
PEC 4431	Price Theory I	6	4	080
PEC 4433	Macro Economic Analysis I	6	4	080
PEC 4435	Public Economics	6	4	080
PEC 4337	Mathematical Methods and Applications	4	3	060
PEC 4339	Statistical Methods and Applications	4	3	060
PEC 4341 PEC 4343	Globalization and Economic Reforms Buffer course : Human Development	4	3	060
	Total	30	21	
II SEMESTER				
PEC 4432	Price Theory II	6	4	080
PEC 4434	Macro Economic Analysis II	6	4	080
PEC 4436	Econometric Theory and Applications	6	4	080
PEC 4338	Research Methodology	4	3	060
PEC 4340	Agriculture and Rural Development	4	3	060
PEC 4342 PEC 4344	China and Global Economy Buffer course : Small Business Management	4	3	060
	Total	30	21	
III SEMESTER				
PEC 5431	Environmental Economics	6	4	080
PEC 5433	Financial Markets and Services	6	4	080
PEC 5435	Advanced Econometrics	4	4	080
PEC 5437	Actuarial Economics	4	4	080
PEC 5439	Computer Applications in Economics (Lab)	4	4	080
PEC 5400	Special Area Study	6	4	--
	Total	30	24	
IV SEMESTER				
PEC 5632	International Economics	7	6	120
PEC 5634	Indian Economy	7	6	120

PEC5436	Development Economics	6	4	080
PEC 5438	Gender Economics	4	4	080
PEC5400	Project	6	4	160
	Total	30	24	
	Grand Total	120	90	

Special Area Study and Project are sequential courses

Programme Specific Outcomes (PSOs) for MA Economics

On completion of the programme, postgraduates will be able to

1. Gain an understanding of core economic principles and how they apply to a wide range of real-world issues.
2. Study the various terms, concepts principles and theories inEconomics.
3. Learn how to articulate pragmatic, principles-based policies to enhance economic well-being and promote social justice.
4. Understand research methodology in Economics to undertakeresearch.
5. Apply thequantitativetechniquesanditsapplicationsinEconomics.
6. Explore topics relevant to academic, Industry and policy-making fields.
7. Analyze macroeconomic policies including fiscal and monetary policies of India
8. Determine economic variables which will help to make decisions regarding entrepreneurship, market and Industry
9. Identify the theoretical and applied tools necessary to critique and create economic research.
10. Comprehend the global economic understanding like Globalization, Privatization andLiberalization.

Mapping of Courses with Programme Specific Outcomes (PSOs)

Courses	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10
PEC 4431		X	X		X	X		X	X	X
PEC 4433	X	X	X		X	X	X	X	X	X
PEC 4435	X	X	X		X	X		X	X	X
PEC 4337	X	X	X		X	X		X	X	X
PEC 4339	X	X	X		X	X		X	X	X

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
PEC 4341	X	X	X			X	X	X	X	X
PEC 4343	X	X	X			X	X	X	X	X
PEC 4432		X	X		X	X		X	X	X
PEC 4434	X	X	X		X	X		X	X	X
PEC 4436	X	X	X		X	X		X	X	X
PEC 4338	X	X	X	X	X	X	X	X	X	X
PEC 4340	X	X	X			X	X		X	X
PEC 4342	X	X	X		X	X			X	X
PEC 4344	X	X	X		X	X			X	X
PEC 5431	X	X	X	X	X	X	X		X	X
PEC 5433	X	X	X		X	X	X		X	
PEC 5435	X	X	X	X	X	X			X	X
PEC 5437	X	X	X	X	X	X			X	X
PEC 5439	X	X	X	X	X	X			X	X
PEC 5400	X		X	X	X	X	X	X	X	X
PEC 5632	X	X	X	X		X	X		X	X
PEC 5634	X	X	X			X	X	X	X	X
PEC5436	X	X	X	X		X	X		X	X
PEC 5438	X	X	X	X		X	X		X	X
PEC5400	X		X	X	X	X	X	X	X	X

Mapping of PSOs with POs

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10

PSO 1	X	X		X		X	X	X	X	X
PSO 2	X	X	X	X			X	X	X	X
PSO 3	X	X	X	X	X	X	X			X
PSO 4	X	X	X	X	X	X	X		X	
PSO 5	X	X	X	X	X	X	X		X	
PSO 6	X	X		X		X	X	X	X	X
PSO 7	X	X	X	X		X	X	X	X	
PSO 8	X	X	X	X		X	X	X	X	
PSO 9	X	X	X	X	X	X	X			X
PSO 10	X	X	X	X		X	X	X		X

PEC 4431   PRICE THEORY - I   6 Hrs/4 Cr

The student's get trained with the knowledge to handle tools of price theory in Economic Analysis

At the end of the course, students will be able to

    i.   Recognize the relevance of economic models in price theory.
    ii.   Apply theoretical constructs of consumer behavior in decision making
    iii.   Identify the choice of production technology and scalability in resource use efficiency
    iv.   Acquire the skill of differentiating firm's behavior under market structure
    v.   Appraise decision making and profit seeking strategies under oligopolistic models

Unit- I: Models and Demand Analysis

Models**:** Relevance of Economic Models – Types – Markets: Classification – Criteria - Consumer Behaviour: Cardinal Utility Theory – Indifference Curve Theory – Revealed Preference Hypothesis – Determinants and Exception to Law of demand – Elasticity of demand

Unit -II: Cost and Production Theories

Cost – Types – Traditional vs. Modern Theories – Scale Economies - Production Function – Technical Progress and Production Function – Equilibrium of the Firm – Laws of Production: Law of Variable Proportion – Returns to Scale

Unit -III: Firms andMarket Structure

Perfect Competition: Short and Long Run Equilibrium - Monopoly: Short and Long Run Equilibrium – Comparison with Pure Monopoly – Bi-lateral Monopoly – Price Discrimination – Effects of Discrimination – Monopoly power - Monopolistic Competition: Product Differentiation - Equilibrium of the Firm

Unit -IV: Oligopolistic Models

Non-Collusive Oligopoly: Curonot's Duopoly Model – Bertran's Duopoly – Chamberlin's Oligopoly – Kinked Demand Curve Model – Stackelberg's Duopoly Model - Collusive Oligopoly: Cartels – Joint Profit Maximisation – Market Sharing Cartels – Price Leadership – Low Cost Firm Leader – Dominant Firm Price Leader – Barometric Price Leadership

Unit -V: Critique on Marginalism

Assumptions of Neo Classical Theory – Hall and Hitch Report and the Full-Cost Pricing Principle – Gordon's Attack on Marginalism – In Defense of Marginalism

Text Books
1. Ahuja, H.L. (2012), Advanced Economic Theory, Chand and Company Limited, New Delhi.
2. Koustoyiannis. A, (2013), Modern Micro Economics, Mac Millan Press Limited, London.

References
1. Joshi, J.M. and Joshi, R. (1994), Micro Economic Theory: Analytical Approach, Vishwa Prakashan, New Delhi.
2. Watson, D.S., and Getz, M. (1996), Price Theory and its Uses, AITBS Publishers and Distributors, New Delhi.
3. Peter Pashigian, B. (1999), Price Theory and Applications, Irwin Mc Graw Hill, Boston, USA.
4. Gould, J.P. and C.E. Ferguson, (2003), Micro Economic Theory, AITBS, New Delhi
5. Robert S. Pindyck and Daniel L. Rubengeld, (2006), Micro Economics, Prentice Hall of India Limited, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying		**3**			
K4: Analyzing				**4**	
K5: Evaluating	**5**		**5**		
K6: Creating					6

Mean: 4.6

PEC 4433MACRO ECONOMIC ANALYSIS – I   6 Hrs/4 Cr

Theoretically and empirically, Macro Economic behavior in its facts the behavior of aggregative variables related to macro policy. National income accounting as the basis for aggregative supply and aggregative demand, consumption function, multiplier, supply and demand for money

At the end of the course, students will be able to

i.   Apply methods of accounting national income vis-à-vis competing accounting systems
ii. Appraise Keynesian approach to income, output and employment
iii. Identify nature and types of investment in view of super multiplier
iv. Find out ways and means of regulating economic behavior of money supply
v.   Examine motives behind demand for money in view of liquidity preference

Unit -I: National Income and Accounting

Income and related concepts - 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 payments accounting

Unit -II: Consumption Function

Consumption – classical Vs modern - Keynes' psychological law of consumption — implications and Empirical evidence on - Determination of Income, Output, and Employment -

Aggregate demand function and Aggregate supply function - Income-consumption relationship — absolute income, relative income, life cycle and permanent income hypotheses

Unit -III: Investment Function

Investment – types - Marginal efficiency of investment - Marginal efficiency of capital - Investment behavior – accelerator, multiplier and super multiplier - effect of policy measures on investment

Unit -IV: Supply of Money

Money – types – money as financial intermediation — a mechanistic model of bank deposit determination - A behavioral model of money supply determination, a demand determined money supply process, RBI approach to money supply, High powered money and money multiplier - budget deficits and money supply - money supply and open economy - control of money supply

Unit -V: Demand for Money

Classical approach to demand for money — Quantity theory approach, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference and demand for money — aggregate demand for money; Derivation of LM curve

Text Books
1. Edward Shapiro, (2013), Keynes and Post – Keynesian Economics, Kalyani Publishers, New Delhi
2. Rana and Verma, (2015), Macro Economic Analysis, Vishal Publication, Jalandhar.

References
1. Danlio, EA. (1974), Macro Economic Theory, Prentice Hall of India, New Delhi
2. Brooman, F.S., (1976), Macro Economics, Blackie and Son Limited, London.
3. Campbell R Mconnel and Harish C Gupta, (1987), Introduction to Macro Economics, Tata Graw Hill Publishing Company Limited, New Delhi.
4. Gupta, R D and A.S. Rana, (1997), Keynes and Post-Keynesian Economics, Kalyani Publishers, New Delhi.
5. Branson, (2003), Macro economic theory and policy, AIMBS, New Delhi..
6. .Richard T. Froyen, (2003) Macro Economics – Theories and Policies, Pearson Education, New Delhi
7. Rana and Verma, (2007), Macro Economic Analysis, Vishal Publication, Jalandhar

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5

Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3				
K4: Analyzing			4		
K5: Evaluating		5		5	
K6: Creating					6

Mean: 4.6

PEC 4435PUBLIC ECONOMICS 6 Hrs/4 Cr

Students can acquaint and understand with the changing role and functions of government in economic transition. Students will learn the knowledge of relative roles of government and the market in matters related to public goods, finance, enterprise and social welfare

At the end of the course, students will be able to

  i.   Apply value judgments in comprehending public goods and their inbuilt social welfare
 ii.   Evaluate nature and mode of state intervention in economic governance
iii.   Assess role of state as a means of market failure
iv.   Apprise public spending as state intervention in economic activities in view of public sector dominance
  v.   Review analytically the rationale of public policy with regard to social justice and economic stabilization

Unit- I: Public Goods and Welfare
The Value Judgments, Inter-Personal relationship and Social Welfare –Spillover Benefit and Cost-Efficient Provision of Public Goods and Private Goods – Principle of Exclusion and Consumption, Classification of Goods: Private, Toll, Collective and common pool Goods – Merit Goods, Demerit Goods -Economic and Social Goods – Mixed Goods

Unit- II: Economic Governance

Demand for and Supply of Government Services – Role of Government in a Mixed Economy onto market economy - Corporate Governance and Forms of Economic Governance – E-Governance – Privatization- PPP Model – Laffer Curve analysis

Unit -III: Public Activities

Engle's Law – Application of Wagner's Law of Increasing State Activities – Peacock–Wiseman Hypothesis – Lindhal, Samuelson Views on Benefit Principle – Evaluation and Project Expenditure Evaluation

Unit- IV: Public Policy

Rationale of Public Policies - Poverty Alleviation and User Price - Provision of Infrastructure, Correcting Regional Imbalance – Balanced Budget Multiplier – Automatic and Discretionary Stabilizers – Built-in-Flexibility – Functional Finance – Fiscal Policy for Economic Development

Unit- V: Government Finance

Concept of Tax Incidence – Fiscal Incidence - Public Debt Redemption – Theories of Budgets – Performance Budgeting – Programme Budget – Zero Base Budgeting – Budget as the means of operationalising the Planning Process – Fiscal Federalism and Cooperative Federalism- GST - Local Finance .

Text Books
1. Tyagi, B. P. (2011), Public Finance, Jai Prakahnath Meerut.
2. Maria John Kennedy (2012), Public Finance, PHI Learning Private Limited, New Delhi.
3. Musgrave, R. A. and Peggy B. Musgrave, (2013), Public Finance in Theory and Practice, Mc Graw Hills, New York.

References
1. Chelliah, R. (1971), Fiscal Policy in Underdeveloped Countries, George Allen and Unwin, Bombay.
2. Dates, W. E. (1972), Fiscal Federalism, Harcourt Brace and Jovanowich, New York.
3. Peacock, A. and G. K. Shaw (1976), The Economic Theory of Fiscal Policy, George Allen and Unwin, London.
4. Musgrave, R. A., (1977), Essays in Fiscal Federalism, Greenwood Press, Westport.
5. Muller, D. C., (1979), Public Choice, Cambridge University Press, Cambridge.
6. Buchanan, J. M., (1980), Fiscal Theory and Political Economy, Selected Essays, University of North Carolina Press, Chapel Hill.
7. Mishra, D. K., (1985), Public Debt and Economic Development of India, Prince House, Lucknow.
8. Atkinson, A. B. and J. Estiglitz, (1989), Lecturers on Public Economics, McGraw Hill, New York.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3				
K4: Analyzing			4		
K5: Evaluating		5			
K6: Creating				6	6

Mean: 4.8

PEC 4337MATHEMATICAL METHODS AND APPLICATIONS   4 Hrs/3Cr

Students can benefit to use the techniques of mathematical methods which are commonly applied to understand and analyze economic problems

At the end of the course, students will be able to

i.   Apply maximization/minimization principles in economic analysis
ii. Determine price, output and profit under different market conditions
iii. Estimate the extent of surplus realized in taking appropriate economic decisions with the help of application of integration
iv. Make use of difference equation in inventory management and investment decision making
v.   Solve complex economic decisions of conflicting nature with help of linear programming and input - output model

Unit – I: Differential Calculus

Concept and Rules of Differentiation – Derivatives of Higher Order – Maximum and Minimum Values of a Function – Partial Derivatives – Applications – Utility, Production and Cost Functions with and without Constrained Optimization and Determination of Output and Profit Under Different Market Structures

Unit – II: Integral Calculus

Concept of Integration – Basic Rules and Methods of Integration – Applications in Economics – Consumer Surplus and Producer Surplus

Unit – III: Difference Equation

First Order Difference Equation and Applications – Cobweb Model – Market Model with Inventory – Multiplier and Accelerator Model

Unit – IV: Matrices and Linear Programming

Matrices – Types – Application of Matrices to the Solution of Linear Equations – Input-Output Analysis – Formulation of LP Problem – Concept of Duality – Graphical Solutions – Simplex Method

Unit – V: Game Theory

Concept of Game – Two-Person Zero-Sum Game - Pay-Off Matrix - Pure and Mixed Strategies, Maximum and Minimax Solutions – Graphical method -Saddle Point Solution – Non-Constant Sum Game – Prisoner's Dilemma

Text Books:

1. Henderson, J.M and R.E Quandt (2000). Micro Economic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
2. Chiang, A.C. (2011), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.

References:

1. Allen, R.G.D.(1976), Mathematical Economics, Macmillan, London.
2. Kothari, C.R (1982) , An Introduction to Operations Research, Vikas Publishing House, New Delhi.
3. Carl P Simson and Lawrence Blume, (2006), Mathematics for Economists, Viva Books (P) Ltd., New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO3	CO4	CO5	CO6
K1: Remembering					
K2: Understanding					

K3: Applying		**3**			
K4: Analyzing		**4**	**4**		
K5: Evaluating				**5**	
K6: Creating					**6**

Mean: 4.4

PEC4339STATISTICAL METHODS AND APPLICATIONS   4 Hrs/3 Cr

Learners will get training in the application of statistical methods to enrich the understanding of economics and instill the scientific rigor in economic thinking and they can equip in use of the statistical tools to understand the economic theory better.

At the end of the course, students will be able to

i.   Understand the significance of statistical applications in economic analysis
ii.   Apply the methods of sampling to draw sample from population
iii. Examine distributional characteristics (level, spread and shape) of sample distribution
iv.   Explore causal relationships among economic variables
v.   Analyze inter-temporal changes in economic behavior over time and space

Unit-I: Introduction to Statistics

Meaning of Statistics - Characteristics – Functions – Importance – Limitations – Methods of Sampling –   Sources of Data – Methods of Collecting data

Unit – II: Distributional Characteristics

Central Tendencies – Mean, Median, Mode – Measures of Dispersion – Range, Mean Deviation, Standard Deviation, Co-efficient of Variation, Quartile Deviation, Skewness and Kurtosis

Unit –III: "Bi-variate Analysis"

Correlation – Types – Karl Pearson Coefficient – Spearman Rank Correlation - Regression – Regression Co-efficient – Correlation Vs Regression-Attributes – Difference between Correlation and Attributes – Methods of Studying Association-Non-Parametric methods – Chi-square Test – Sign Test

Unit-IV: Time Series and Index Numbers

Time series analysis and its Components –-Index Numbers – Importance and Classification of Index numbers – Price, Quantity, Value: Laspeyer's, Paasche's and Fisher, Family Budget Method – Problems and Limitations of Index Number

Unit- V: Probability and Hypothesis testing

Probability and its related Concepts – Theorems of Probability – Addition and Multiplication- Theoretical Distribution – Binomial, Poisson and Normal: their Properties and Uses- Hypothesis testing – type I and II errors Z-test, t-test, F-test and ANOVA

Text Books

1. Gupta S P (2008), Statistical Methods, Sultan Chand & Sons, New Delhi.
2. **Pillai R S N and Bagavathi** , Statistics: Theory and Practice,(2009), S.Chand & Company Pvt.Ltd. New Delhi.

References

1. Elhance, D.N and Aggarwal, B.M (2006), Fundamentals of Statistics, Kitab Mahal, Allahabad.
2. Gupta, S.C and Kapoor, V.K (2007), Fundamentals of Applied Statistics, Sultan Chand and Sons, New Delhi.
3. Arora.P.N, Sumeet Arora and S.Arora (2007), Comprehensive Statistical Methods, Sultan Chand and Sons, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding	2				
K3: Applying		3			
K4: Analyzing			4	4	
K5: Evaluating					
K6: Creating					6

Mean: 3.8

PEC 4341 GLOBALISATION AND ECONOMIC REFORMS   4 Hrs/3 Cr

The course enables students to acquaint with contemporary global economic affairs concerning economic, political and cultural dimensions of globalization, country experiences and economic reforms in India

At the end of the course, students will be able to

i.   Understand social, economic, political, cultural and philosophy of globalization
ii.   Analyze the role of international organizations in globalization
iii. Address issues and challenges in globalization
iv.   Examine critically emergence of neo-liberalism in light of globalization
v.   Assess Indian experience of economic reforms and globalization

Unit I: Introduction to Globalization

Meaning and Definition- Origin- Related Concepts- Profile of the World- Economic System- Features of Globalization – Process- Causes- Stages – Major Players-Ideology of Globalization: Economics, Political and Religious Dimensions – Globalization at the Firm and Corporate Level – Cross Border Mergers and Acquisitions – Advantages and Disadvantages – Essential Conditions for Globalization

Unit -II: International Organization and Globalization

IBRD, IMF, WTO – Origin, Objectives, Functions – WTO Agreements- Basic Principles – Main Elements- Agreements on Agriculture – Industry – Trade – Services – Property Rights – Rules of Origin

Unit- III: Globalization Issues and Challenges

State Vs Market – Deregulation and Decontrol – Investment: MNC's FDI and Capital Flows – Global Financial Crisis – Technology Transfer – Privatization – Factor Mobility - Alternatives to Globalization - Challenges

Unit- IV: Experiences of Countries on Globalization

Benefits of Globalization across Countries - Developed Vs. Developing, Small Vs. Large - Rich Vs. Poor - Experiences Asian Tigers

Unit -V: Globalization and Economics Reforms in India.

Economic Reforms – Origin – Features – Strategies (LPG) – Process - Agricultural and Industrial Sector Reforms - External Sector Reforms - Financial Sector Reforms – Fiscal and Banking Sector Reforms – Labour Reforms- Health and Education Sector Reforms

Text Books:
1. Martin Hhor (2001), Rethinking Globalization: Critical Issues and Policy Choices, Zed Books, London.
2. Jagdish Gandhi, P. (2003), Globalised Indian Economy: Contemporary Issues and Perspectives, Deep and Deep Publications Private Limited, New Delhi..
3. Datt, Ruddar (2015), Indian Economy, S. Chand and Company, New Delhi.
4. Radhakrishna, R (2008), India Development report, Oxford University press, NewDelhi.

References
1. Marjan and H W Singer (1996), The World Economy: Challenges of Globalization and Regionalization, Macmillan Press Ltd., London.
2. Sumi Krishna (2004), Globalization and people's development choices-Hivos-Netherlands.
3. Greg Buckman (2004), Globalization: Tame It or Scrap It? University Press, Dhaka
4. Stefano Pelle (2007), Understanding Emerging Markets, Response Book, New Delhi.
5. Thomas Sebastian (2007), Globalization and uneven Development, Rawat Publications, New Delhi.
6. Pranab Kanti Baxe (2008), Globalization An Anti-Text- A local view, Aakar Books – New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3				
K4: Analyzing		4			4
K5: Evaluating				5	
K6: Creating			6		

Mean: 4.4

PEC4343   **HUMAN DEVELOPMENT**   **4 Hrs/3 Cr**

The course enables students to acquaint Human Growth and Development is planned to acquaint you with developmental concepts in psychology and to give you an understanding of the basic dynamics, which underlie human behavior at various stages in the lifespan. Investigating these processes in relation to biological, psychological, socioeconomic and cultural factors

At the end of the course, students will be able to

i. Comprehend different dimensions of human development
ii. Analyze notion of human development within the framework of human capabilities and entitlement
iii. Appraise role of gender and its partnership in development
iv. Enable to perceive wholesome human development with inclusiveness of psychological and disabilities dimensions
v. Evaluate human development efforts, policies and strategies

Unit -I: Introduction to Human Development

Concept of Human Development - Defining Human Development - Measuring Human Development- HDI - Human Poverty Index - Gender Development Index (GDI) Gender Empowerment Measure (GEM) - Changes in and Implications of HDI and GDI Across the Countries - Need for and Significance of Separate Study of Human Development - Nature and Scope and Major Concerns of Human Development as a Branch of Economics.

Unit - II: Economic Growth and Human Development

Relationship between Economic Growth and Human Development - Sustained Human Development - Disrupted Human Development - Missed Opportunities for Human Development - Efficiency in Human Development - Financing Human Development - Growth as a Means to Human Development - Human Capabilities Approach to Development.

Unit- III: Gender and Governance Perspectives of Human Development

Gender Disparities in Human Development - Valuing Women's Work - Towards Gender Equality - Feminization of Poverty - Democratic Governance for Human Development - Deepening Democracy for Human Development

Unit- IV: Holistic approach to human development

Psychological bases: Intelligence –types of intelligence-Emotional Behavior and Adaptations – Personality: Features, types, measures to personality development and social responsibility and accountability –Disability: types, causes and promotional measures to partnership in development-Disability Act 2016

Unit- V: Human Development in the New Millennium

New Dimensions of Human Security - Human Rights and Human Development - Interlinks - The Struggles for Human Freedoms - Promoting Rights in Human Development - The Millennium Development Goals: Concept and Goals - Priority Challenges in Meeting the Goals - Achieving Goals Relating to Hunger, Education, Health, Water Supply and Sanitation - Public Policies to Ensure Environmental Sustainability - Community Engagement - Sustainable Development Goals and Human Development - Challenges Ahead.

Text Book

1. Richard M. Lerner (1997),Concepts and theories of Human Development**,** Lawrence Erlbaum Associates Publishers, Mahwah, New Jersey
2. Marc H. Bornstein and Jerome S. Bruner (1989), Interaction in Human Development**,** National Institute of Child Health and Human Development New York University, Lawrence Erlbaum Associates, Publishers, New Jersey

References:

1. Sen, Amartya K (1985), Commodities and Capabilities, North-Holland, Amsterdam.
2. United Nations Development Programme, Human Development Reports, (1990), Oxford University Press, Oxford.
3. Haq , Mahbub, Ul (1995), Reflections on Human Development , OUP, New York.
4. Nussabaum Martha C and Sin, Amartya (Ed) (1996) The Quality of Life, Clarendon Press, Oxford
5. Sen, Amartya K (2000), Development As Freedom, Oxford University Press, Oxford.
6. Hurlock, E.B. (2007), Developmental psychology: A life – span approach-New Delhi: Tata McGraw Hill.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3				

K4: Analyzing		4			
K5: Evaluating			5		5
K6: Creating				6	

Mean: 4.6

PEC 4432   **PRICE THEORY - II**   **6 Hrs/4Cr**

The students can understand the theoretical underpinnings of managerial and behavioral theories of firms, methods of factor pricing and decision making in the asymmetric realm.

At the end of the course, students will be able to

i. Understand the essentials of average cost pricing as an alternate to marginalism
ii. Enable to analyze innovative approaches in limit pricing
iii. Comprehend managerial strategies of firms in face of asymmetric information
iv. Assess factor pricing under different market conditions
v. Evaluate various dimensions of subjective approaches to maximizing social welfare

Unit- 1: A Representative Model of Average Cost Pricing
Goals of the Firm – Demand and Cost Schedules – Price and Mark-up Rule – Prediction of Average Cost Pricing Theory in Changing Market Conditions – Skimming and Penetrating Price

Unit- II: Limit Pricing
Bain's Model – Sylos Labini Model – Franco Modigliani Model – Bhagwati Model – Pashigian Model

Unit -III: Managerial Theories
Baumol's Theory of Sales Maximisation – Marris Model of Managerial Enterprise – Williamson's Model of Managerial Discretion – Asymetric Information and Markets – Market Signaling – Moral Hazards

Unit -IV: Factor Pricing
Factor Pricing in perfectly and Imperfectly Competitive Markets – Bilateral Monopoly – The Adding-up Problem

Unit -V: Welfare Economics

Criteria of Social Welfare: Growth of GNP – Bentham's Cardinalist Criterion – Kaldor-Hick's Compensation Criterion – Bergson Criterion – Pareto Optimality – Welfare Maximisation and Perfect Competition

Text Books:

1. Ahuja, H.L. (2000), Advanced Economic Theory, Chand and Company Limited, New Delhi.

2. Koustoyiannis, A. (2003), Modern Micro Economics, Mac Millan Press Limited, London

References

1. Joshi, J.M. and Joshi, R. (1994), Micro Economic Theory: Analytical Approach, Vishwa Prakashan, New Delhi.

2. Watson, D.S., and Getz, M. (1996), Price Theory and its Uses, AITBS Publishers and Distributors, New Delhi.

3. Peter Pashigian, B. (1999), Price Theory and Applications, Irwin Mc Graw Hill, Boston, USA.

4. Gould, J.P. and C.E. Ferguson, (2003), Micro Economic Theory, AITBS, New Delhi.

5. Robert S. Pindyck and Daniel L. Rubengeld, (2006), Micro Economics, Prentice Hall of India Limited, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying		3			
K4: Analyzing	4				4
K5: Evaluating				5	
K6: Creating			6		

Mean: 4.4

PEC 4434   MACRO ECONOMIC ANALYSIS – II   6 Hrs/4Cr

The Sequential course helps the students to evaluate macroeconomic policies and their impact on macroeconomic process, theories, and theory of investment, inflation and Phillip's curve.

At the end of the course, students will be able to

i. Evaluate the effectiveness of monetary and fiscal policies in light of IS-LM model
ii. Examine modern approaches to demand for money in view of Keynesian demand for money
iii. Understand macroeconomic behavior in open economic frame work
iv. Appraise models of containing inflation and evaluating effectiveness of monetary and fiscal policies
v. Assess the effects of business cycle on macroeconomic behavior

Unit- I: IS – LM Model and its variants

Keynesian and Neo-classical views on Interest; The IS-LM model; Extension of IS-LM model with Government Sector; Relative effectiveness of Monetary and Fiscal policies; Extension of IS-LM models with Labour Market and Flexible Prices

Unit- II: Post-Keynesian Demand For Money

Post - Keynesian approaches to demand for money — Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory; Crisis in Keynesian economics and the revival of monetarism

Unit -III: Macroeconomics in an Open Economy

Mundell - Fleming model — Asset markets, expectations and Exchange Rates; Monetary approach to balance of payments

Unit -IV: Theory of Inflation

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis — Short run and long run Philips curve; Samuelson and Solow — the natural rate of unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectations; Policies to control inflation

Unit -V: Business Cycles

Theories of Schumpeter, Kaldor, Samuelson and Hicks, Goodwin's model; Control of business cycles — Relative efficacy of monetary and fiscal policies

Text Books
1. Rana and Verma, (2007), Macro Economic Analysis, Vishal Publication, Jalandhar.
2. Edward Shapiro, (2011), Keynes and Post – Keynesian Economics, Kalyani Publishers, New Delhi.

References

1. Danlio, EA. (1974), Macro Economic Theory, Prentice Hall of India, New Delhi
2. Brooman, F.S. (1976), Macro Economics, Blackie and Son Limited, London.
3. Campbell R Mconnel and Harish C Gupta, (1987), Introduction to Macro Economics, Tata Graw Hill Publishing Company Limited, New Delhi.
4. Gupta, R D and A.S. Rana, (1997), Keynes and Post-Keynesian Economics, Kalyani Publishers, New Delhi.
5. Branson, (2003), Macro economic theory and policy, AIMBS, New Delhi..
6. Richard T. Froyen, (2003), Macro Economics – Theories and Policies, Pearson Education, New Delhi

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying				3	
K4: Analyzing			4		
K5: Evaluating	5	5			
K6: Creating					6

Mean: 4.6

PEC 4436   ECONOMETRIC THEORY AND APPLICATIONS   6 Hrs/4Cr

This course aims at imparting analytical skill essential to validate economic phenomenon. It includes linear, multiple linear regression models, ANOVA, and violation of OLS assumptions.

At the end of the course, students will be able to

i.   Comprehend the relevance of econometrics and econometric methodology
ii.   Test bi-variate causal relationship between economic variables
iii. Explore multivariate causal relationships among economic variables
iv.   Deduct and correcting violation of OLS assumptions in econometric models
v.   Examine relationship between analysis of variance and regression

Unit -I: Introduction

Definition – Scope – Goals and Division of Econometrics – Methodology of Economic Research

Unit -II: Simple Linear Regression Model

Simple Linear Regression Model – Assumption of the Linear Regression Model – Properties of OLS estimators – Sampling   Distribution of OLS estimators – Statistical tests of Significance of the Estimates Confidence Intervals and Hypothesis Testing – Goodness of Fit with R^2 – Applications.

Unit -III: Multiple Linear Regression Model

Multiple Linear Regression Model – Assumptions of the Multiple Linear Regression Model – Properties of OLS estimators – Generalization to More Than Two Variables – Both Normal and Matrix Approach – Application.

Unit -IV: Violation of OLS Assumptions

Tests of the Assumptions of the Linear Regression Model-– Normality – Autocorrelation – Meaning , Consequences, Detections and Methods of Removal- Hetrocdeasticity – Multi collinearity – Meaning – Consequences – Detections and methods of removal

Unit -V: Analysis of Variance and Regression Model

Analysis of Variance – Difference between Regression and Analysis of Variance – Sampling Distribution of OLS Estimators – Statistical Tests of Significance of the Estimates – Confidence Intervals and Hypothesis Testing – Goodness of Fit with R – Applications.

Text Books

1. Gujarati,D. (2009) , Basic Econometrics, Tata McGraw-Hill
2. G M K Madnani (2010), Introduction to Econometrics,Oxford & IBH Publishing Co Pvt.Ltd, New Delhi, India.

References

1. Johnston (1985), Econometrics, McGraw Hill, New York.

2. Koutsoyiannis, A. (2003), Theory of Econometrics, Harper and Row Publishers, Inc.,

3. Kements (2003), Elements of Econometrics, Harper and Row Publishers, New York.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding	2				
K3: Applying					
K4: Analyzing		4			4
K5: Evaluating			5		
K6: Creating				6	

Mean: 4.2

PEC 4338   RESEARCH METHODOLOGY   4 Hrs/3Cr

Students can get training in scientific thinking and helps to develop socially concerned and competent researchers, administrators and activists. Students also acquaints with the identification of researchable problem, hypothesis formulation, research methods and techniques and ultimately the method of report writing

At the end of the course, students will be able to

i. Understand the basic skill of social science research and its relevance in addressing socio economic issues

ii. Identify researchable issues and developing a suitable research methodology

iii. Corroborate and formulating testable hypotheses

iv. Validate sources of data in relation to workable hypotheses

v. Apply qualitative and quantitative techniques to test hypotheses and arrive at statistical inferences for the chosen research

Unit- I:Introduction

Meaning – criteria for good research – assumptions, objectives and difficulties of social research – qualities of a good research

Unit- II: Dimensionsof Research

Classification of research - fundamental – applied – descriptive – historical –exploratory-experimental - case study – characteristics of case study- sources -utility and limitations of case study method - survey research - evaluation – comparative method –precautions used in comparative method and inter disciplinary research

Unit- III:Hypothesis and Research problem

Selection of the research problem - types of research problem – sources-criteria of good research problem – justification of the problem evaluating the problem. Definition of hypothesis – types - functions, sources of hypothesis - criteria of usable hypothesis-utility - difficulties in formulation of hypothesis

Unit -IV: Sources of Data and Research Design

Meaning of research design - concepts relating to research design - major steps in preparing a research design - factors affecting research design - evaluation and advantages of research design-Sources of data – primary and secondary data - census and sampling method – essentials of a good sample - methods of sampling – observation - types of observation –merits and limitations

Unit -V: Scaling Techniques and Report Writting

Statistical applications in research-scaling techniques - criteria of validity of a scale - difficulties in scaling - kinds of scales - point scales - Bogardus scale - intensity scale, ranking scale - Scale and Likert scale - Processing, analysis and interpretation of data meaning of research report - purpose and structure of research report

Text Books
1. Thanulingam, N., (2012), Research Methodology, Himalaya Publishing House, Mumbai.
2. Kothari, C.R, (2013), Research Methodology: Methods and Techniques, Wiley Eastern Limited, New Delhi.

References
1. Kurein, C.T., (1973), A Guide to Research in Economics, Sangam Books, Madras.
2. Wilkinson and Pandarkar, (1984), Methodology and Techniques of Social Research, Himalaya Publishing House, Bombay.
3. Goode, William J. and Hatt, Paul K (1987), Methods in Social Research, Mc Graw Hill, London.
4. Sonachalam, K.S., (1988), Research Methodology of Social Sciences, Emerald Publication, Madras.

5. Diwivedi, R.S., (1997), Research Methods in Behavioral Sciences, Macmillan, New Delhi.
6. Sarvanavel, P., (1999), Research Methodology, Kitab Mahal, Allahabad.
7. Loraine Blaxter, Christina Hughes and Malcom Tight, (1999), How to Research, Viva Books Private Limited, New Delhi.
8. Martyn Denseombe, (1999), The Good Research Guide for Small-Scale Social Research Projects, Viva Books Private Limited, New Delhi.
9. Uma Sekaaran, (2006), Research Methods for Business- A skill building Approach, Wiley India (P) ltd, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding	2				
K3: Applying			3		
K4: Analyzing					4
K5: Evaluating				5	
K6: Creating		6			

Mean: 4.0

PEC 4340   AGRICULTURE AND RURAL DEVELOPMENT   4 Hrs/3Cr

This course enables the students to obtain a detailed treatment of issues in agricultural economics and to get familiarized with policy issues that are relevant to Indian agricultural economics.

At the end of the course, students will be able to

   i.   Experience agriculture as a mainstay for development

   ii.   Enrich modernization, mechanization and labour absorption in agriculture

   iii. Engage in development of integrated farming systems to enhance sustainable farm income

iv.   Understand the relevance of building up rural infrastructure as a pre-requisite for viable agriculture

v.   Assess the access and utilization of agricultural credit

Unit -I: Agriculture and Economic Development: Nature and Scope of Agricultural and Rural Economics - Traditional Agriculture and Its Modernization - Role of Agriculture in Economic Development - Interdependence between Agriculture and Industry - Models of Interaction between Agriculture and the Economy

Unit -II: Agricultural Production and Productivity: Agricultural Production - Agriculture Growth Debate - Farm Size and Laws of Returns – **S**ize-Productivity Debate - Farm Budgeting - Resource Use Efficiency in Agriculture – Impact of Modernization and Mechanization on Agriculture - Reforms and Revolutions - Labour Absorption - Gender Issues in Agriculture

Unit- III: Diversification of Rural Economic Activities: Rural Livelihood System - Nature and Types of Rural Economic Activities - Livestock and Animal Husbandry Activities - Livestock Resources and Their Productivity -White Revolution - Fishery and Poultry Development - Blue Revolution- Forestry - Horticulture and Floriculture - Issues and Problems in Rural Industrialization - Development of Agro-based Industries - Problems of Agricultural Marketing

Unit-IV: Agriculture and Rural Infrastructure: Importance of Economic and Social Infrastructures - Land Resources, Water Resources - Energy Resources - Rural Transport - Communication - Banking - Extension Services - Rural Electrification - Rural Social Infrastructure: Education - Health - Information Dissemination

Unit -V: Rural Finance: Rural Indebtedness: Status, Causes and Remedies - Role of Capital and Rural Credit - Organized and Unorganized Capital Market - Rural Savings and Capital Formation - Characteristics and Sources of Rural Credit — Institutional and Non-Institutional - Reorganization of Rural Credit — Cooperatives, Commercial Banks, Regional Rural Banks- Role of NABARD - Self-Help Groups (SHGs) - Micro Units Development and Refinance Agency Bank (MUDRA Bank)

Text Books:
1. Subba Reddy S, P.Raghu Ram, T.V.Neelakanta Sastry abd I. Bhavani Devi (2010), Agricultural Economics, Oxford & IBH Publishing Co Pvr. Ltd, New Delhi.
2. Tyagi B.P. (2015), Agricultural Economics and Rural Development, Jai Prakash Nath & Co, Meerut
 References:

1. Chaudhary, P. (1972), Readings in Indian Agricultural Development, George Allen & Unwin, London.
2. Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Macmillan, Delhi.
3. Uppal, J.S. (Ed.) (1987), India's Economic Problems — An Analytical Approach, Tata McGraw Hill, New Delhi.
4. Brahmananda, P.R. and V.R. Panchumukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, Bombay.
5. Raj, K.N. et.al. (1988), Essays in the Commercialisation of Indian Agriculture, Oxford University Press, New Delhi.
6. Rao, C.H. Hanumantha (1994), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.
7. Vaidyananthan, A. (1995), The Indian Economy : Crisis, Response and Prospects, Orient Longmans, New Delhi.
8. Soni, R.N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
9. Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
10. Basanta K Pradhan, M.R.Saluja, P K Roy and S'L.Shetty (2003), Household Savings and Investment Behaviour in India, EPW Research Foundation, Mumbai

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding	2				
K3: Applying			3	3	
K4: Analyzing					
K5: Evaluating					5
K6: Creating		6			

Mean: 3.8

PEC 4342   CHINA AND GLOBAL ECONOMY   4 Hrs/3Cr

The students get familiarized with the basic characteristics of Chinese Economy, its development process and its challenges and prospects. It helps to understand how each country is peculiar and enable them to learn from other economies.

At the end of the course, students will be able to

i.   Familiarize the history, profile and features of Chinese economy

ii.   Understand the ideology, political system and governance in China

iii.   Analyze growth performance of China

iv.   Examine China's approach to foreign relations and diplomacy

v.   Trace the emerging market and the rise of China as a global power

Unit -I: Introduction to Chinese Economy

Profile of China – History – Culture – Resources – Infrastructure – Special   Features   of Chinese Economy – Relevance of Chinese Studies

Unit- II:China's Political System

Political Ideology - Party State - Structure and levels of Governance - Central and Local Relations

Unit -III:Economic Growth and Development of China

Dimensions of Growth and Development of China – Composition and Trends in National Income - Growth Models and New Economic Strategy - Achievements of China –Challenges and Prospects

Unit- IV:China's Foreign Relations and Policy

Priorities of Chinese Diplomacy – Relations with Nations of Groups (developed,   developing and neighboring countries) - Dimensions of International Relations –   China's   Relations with India – China and International Organizations.

Unit- V:Emerging Market and China

Emerging Market- China's Contribution to World Economy - China and   Globalization - Rise of China as a Global Power –   World's View of China -   Learning   from   China's Development Experience

Text Books:

1. Robert L. Worden, Andrea Matles Savada, and Ronald E. Dolan (1987): China, A Country Study. Area Handbook Series, Federal Research Division, Library of Congress Washington, D.C.

2. Shuxun Chen and Charles Wolf, Jr (2001): China, the United States and the Global Economy, RAND, Santa Monica, CA.

References:

1. Jan Joost Teunissen (2003) China's Role in Asia and the World Economy: Fostering Stability and Growth, FONDAD, The Hague.

2. Edward Friedman and Bruce Gilley (2005): Asia's Giants: Comparing China and India, Palgrave Macmillan Ltd, New York.

3. Dwight H. Perkins (2006): The Challenges of China's Growth, AEI Press, Washington, D.C.

4. Shaun Breslin (2007): China and the Global Political Economy, International Political Economy Series, Palgrave Macmillan Ltd, New York.

5. Martin Jacques (2009) When China Rules the World, Allen Lane, Penguin Books Ltd, London. England.

6. Vittorio Valli, Donatella Saccone (2009) Structural Change and Economic Development in China and India, Working paper No. 7/2009, University of Torino, Italy.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding		2			
K3: Applying					3
K4: Analyzing			4		
K5: Evaluating				5	
K6: Creating	6				

Mean: 4.0

PEC 4344   SMALL BUSINESS MANAGEMNET   4Hrs/3Cr

Students will get betterunderstanding of small business entrepreneurship that includes the concept of Enterprise; Project planning, financial and marketing feasibility and they will also

learn the challenges of small business such as Innovation, and Crisis Management and inculcates in students the spirit of enterprise.

At the end of the course, students will be able to

i. Understand the types, role and environment of small business
ii. Identify business ideas and preparation of a project report
iii. Analyze marketing aspects of small business enterprises
iv. Examine the problems of small business and preparing SWOT analysis
v. Develop managerial skills in managing growth and transition of small enterprises

Unit -I: Small Enterprise – An Introduction

Definition – Classification – Environment of Small Business – Role – Risk and Survival Strategy – Entrepreneurship and Small Enterprises – Nurturing Entrepreneurship

Unit- II: Project Planning

Search for a business idea – Environment scanning – concepts of Projects and classification – Project Identification – Formulation – Design and Network Analysis – Project Report – Project Appraisal: Factory Design and Layout – Shop Floor Environment – Forms of Organization – Incentives and Subsides – Finance and Consultancy supports

Unit- III: Marketing Assessment

Definition and Functions of Marketing – Marketing Mix – Marketing Channels – Packaging, Branding , Buying Motive – Marketing Institutions and Assistance – Marketing Research and Marketing Information System – Pricing – Market Segmentation and Marketing Strategies – Export Potential

Unit- IV: Challenges of Small Business

Problems of Small Business – Sickness – Reasons and Remedies – Creativity and Innovation – Opportunities – SWOT analysis – Product and Process Protection – Measures

Unit -V: Branding and Crisis Management

Patents – Trade Marks – Copy Rights – Managing Growth and Transition - Crisis Management – Time Management and Quality Management

Text Books

1. Suri, K.B. (2006) Small-Scale Enterprises in Industrial Development: The Indian Experience, SAGE publications, New Delhi.

2. Vasanth Desai (2010) Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, New Delhi

References

1. Paul, (2006), 'Business Environment', Tata McGraw-Hill, New Delhi
2. David, Holt (2008), Entrepreneurship, New Venture Creation, Prentice Hall, New Delhi.
3. David Campbell and Tom Craig, (2011), Organizations and the Business Environment
4. Peter J. Buckley, Peter Ender wick, Adam R. Cross, (2018), International Business, Prentice Hall, New Delhi
5.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding	**2**				
K3: Applying				**3**	
K4: Analyzing					
K5: Evaluating		**5**	**5**		
K6: Creating					**6**

Mean: 4.2

PEC 5431   ENVIRONMENTAL ECONOMICS   6 Hrs 4Cr
(Equivalence to the Course Code: PEC 5502)

The course deals with the integration of ecology and economics, impact, analysis, environment planning and environmental strategies with the view to creating awareness and also the ability to analyze environmental issues.

At the end of the course, students will be able to

i. Model environment as public good

ii.   Analyze and triangulating population– development-environment

iii.   Undertake environmental impact analysis on development

iv.   Address environmental issues in a sustainable development framework

v.   Evaluate environmental policies, programmes and strategies towards Green development

Unit-I: Basic Concepts

Environment as Public Goods, as Exhaustible and Renewable Resources – Environmental Quality and Quality of Life – Resource Depletion and Pollution – Externalities and Market Failure – Coase Theorem – Cake Eating Model – Conservation Model – Limits to Growth – Tragedy of Commons.

Unit- II: Environmental Issues

Population-   Poverty- Environment Triangle – Urbanization and Toxicity – Socio – Cultural Factors leading to Environmental Problems.

Unit -III: Environmental Impact Analysis

Social Cost-Benefit Analysis – Risk Benefit Analysis – Decision Analysis – EIA Methodologies – Contingent Valuation Method

Unit- IV: Environmental Planning

Sustainable Development as a basis for Rural and Urban Environmental Planning – Participative Rural Appraisal – Waste Disposal Strategies– Slum Clearance versus Slum Renewal

Unit- V: Environmental Policy and Strategies

Role of Government – Fiscal and Legal Measure: Tax versus Subsidy – International Policy on Environment.-Role of Voluntary Agencies – Environmental Movements - Voluntary Agencies versus "service learning" - People Participation – Environmental Education as Participatory Experience – Eco-Tourism – Appropriate Governance provided by Government.

Text Books

1. N.Rajalakshmi and Dhulasi Birundha (1994), Environomics, Economic analysis of Enviroment, Allied publishers, Ahmedabad.
2. M. Karpagam (2010), Environmental Economics, Sterling Publishers, New Delhi
3. S. Sankaran(2011) Environmental Economics, Margham , Madras

References:

1. Madhu Raj (2001), Environmental Economics, Ivy Publishing House, New Delhi.

2. Prakash Gole (2001), Nature Conservation and Sustainable Development in India, Rawat Publication, Jaipur.
3. Sudhir Dawra (2001), Environmental Economics, Mohit Publication, New Delhi.
4. Sankar, U. (2002), Environmental Economics, Oxford University Press, New Delhi.
5. Benimadhab Chatterjee (2003), Environmental laws, Deep and Deep Publication Private Limited, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding			2		
K3: Applying				3	
K4: Analyzing		4			
K5: Evaluating					5
K6: Creating	6				

Mean: 4.0

PEC 5433   FINANCIALMARKETS AND SERVICES IN INDIA   6 Hrs/4 Cr

The objective of the course is to familiarize students with innovations in financial services. It covers financial system and institutions with focus on stock training. New instruments and services such as ventures capital, factoring, forfeiting are also included

At the end of the course, students will be able to

  i.   Understand the functioning of financial system in relation to primary and secondary cash/equity market
 ii.   Expose stock market and mutual funds and participating in imaginary stock market trading
iii.   Apprise the role and functions of depositing system and regulating body
 iv.   Identify innovations in financial services
  v.   Design the role of securitization of debt and credit rating.

Unit -1: Financial system and Capital Market

Financial Markets: Role and functions of financial markets – Classification of Financial Markets - Instruments of Financial Markets – Weakness of Indian financial system. Primary Market (New Issue Market)**:** Methods of Flotation - Secondary Market:Services of Stock Exchanges – Listing of Securities – Listing procedure – Criteria – Stock Brokers: Code of Conduct – Genuine Trading vs. Speculative Trading – Kinds of Brokers and Speculators

Unit II: Understanding equity markets and mutual funds

Stock market: online trading – trading mechanism in stock markets – clearing and settlement of equities – Pitfalls of investing: insider trading – price rigging – business cycle – Government policy.. Mutual funds: meaning – importance – operation of the fund – advantages of mutual funds – types of mutual funds – Equity linked Saving Schemes - Exchange Traded Funds (ETF)

Unit III: Investing in Equity markets

Fundamental Analysis: - Economic Analysis – Industry Analysis – Economic Activity and Security markets. Company Analysis: Financial Statement – Profit and Loss Account – Ratio analysis – Shareholding Pattern – Quality of management. Technical analysis: Charts – Types of Charts – Chart patterns – Volume and its importance – Moving Averages – Us

Unit -IV: SEBI and Depository System

Securities and Exchange Board of India (SEBI): Objectives, Functions, Powers - Investors Protection from unfair trade practices- Depository System in India: Objectives – Meaning and Objectives – Depository Process – NSDL – CDSL - Depository participants

Unit -V: Financial Services in India

Financial Services: Fund and Non-fund Based Activities – Financial Innovation – New Financial Products and Services - Challenges Facing the Financial Sector. Merchant Banking-Venture Capital - Hire-Purchase and Leasing: Features – Hire-purchase and Credit Sale, Installment Sale and Leasing - Types of Leasing. Discounting, Factoring and Forfeiting: Meaning – Modus Operandi – Types – Discounting vs Factoring vs Forfeiting - Edifactoring – Advantages and Disadvantages

Text books

1. Gordon, E and Natarajan, K., (1999), Financial Markets and Services, Himalaya Publishing House, New Delhi.
2. Vinod Kumar and Raj Sethi Nangia, (2017), Ane Books Private Limited, New Delhi.

References:

1. L.M.Bhole, (2009), Financial Institutions and Markets, Tata Mc Graw Hill, New Delhi.
2. V.A.Avadhani, (2011), Indian Capital Market, Himalaya Publishing House, Bombay.
3. M.Y. Khan, (2015), Indian Financial System, Tata Mc Graw Hill, New Delhi.
4. Vasant Desai, (2017), Indian Financial System, Himalaya Publications, Bombay.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding	2	2			
K3: Applying				3	
K4: Analyzing					
K5: Evaluating			5		
K6: Creating					6

Mean: 3.6

PEC 5435   **ADVANCED ECONOMETRICS**   **4Hrs. / 4Cr.**

(Equivalence to the Course Code: PEC 5506)

The objective is to comprehend the factual data and obtain conceptualizing ability. Time series analysis, co-integration, distributed lag models, identification and estimation of simultaneous equation models are covered.

At the end of the course, students will be able to

i. Apply lagged distribution models in exploring economic relations

ii. Enable to use dummy as binary variable in assessing policy shocks

iii. Estimate the ILS, 2SLS and Equivalence between ILS and 2 SLS

iv. Acquire the skill of exploring data generating process

v.   Explore possible long-term equilibrium relationships between economic variable if any

Unit – I Distributed Lag Models

Koyck and Almon lag structure – distributed lag models – method of estimating lagged models – nature of dummy variables – use of dummy variables –ANOVA Models- linear probability model – logit and probit models – applications.

Unit – II Simultaneous Equation Model: Identification

Simultaneous equation system – structural, reduced and recursive models – problem of identification – implications of the identification state of a model – FORMAL rules for identification – identification and choice of econometric method. Problems – Indirect Least Squares (ILS) – Two Stage Least Squares (2SLS) – Equivalence between ILS and 2 SLS.

Unit – III Time Series Analysis

ARIMA representation – random walk model – white process – data generating process – stationary versus non-stationary – unit root testing – drifting and stochastic trend – Dickey-Fuller(DF) test – Engle-Granger's augmented DF test – applications

Unit– IV Co-integration Model

Co-integration – distribution co-integration from integration – co-integration frame work – co-integration test – stochastic trend – relevance of co-integration tests in equilibrium analysis – Angel arranger co integration Test -Johensent Co-integration Test.

Unit – V Causality and Error Correction

Granger representation theorem – error-correction model – ECM approach to granger causality – multiple rank F test – criteria for model selection –Theil's residual variance criterian, Akaiki's information criterion, Amemiya's prediction criterion, schwarz's Bayesian information criterian, Hannan's criterion – applications

Text Books

1. Enders, W. (2013) Applied Econometric Time Series, John Wiley & Sons Inc.,
2. Gujarati, D.(2014), Basic Econometrics, McGraw Hill Book company, New Delhi.
3. Patterson, (2016), An Introduction to Applied Econometrics: A Time Series Approach, Palgrave, NewDelhi.

References:

1. Davidson, J. (2000) Econometric Theory, Blackwell, USA

2. Goldberger, A.S. (2000) Introductory Econometrics, Harvard University Press, Cambridge.
3. Hayashi, F (2000), Econometrics, Princeton University Press, Princeton.
4. Pattreson, Kerry (2000) An Introduction to Applied Econometric: Time Series Approach, Palgrave Macmillan, New York
5. Ramanathan Ramu (2002), Introductory Econometrics with applications, Thomson South Western, Singapore
6. Greene, W. (2004) Econometric Analysis, Prentice Hall, New York.
7. Cameroon Samuel (2005), Econometrics, McGraw Hill, New York.
8. Asteriou Dimitrious,(2006), Applied Econometrics, Palgrave Macmillan, New York
9. Wooldridge (2006), Introductory Econometrics, Thomson-South Western, Singapore

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying	3	3			
K4: Analyzing			4		4
K5: Evaluating				5	
K6: Creating					

Mean: 3.8

PEC 5437   ACTUARIAL ECONOMICS   4 Hrs   4 Cr

The course imparts actuarial techniques that are used for insurance purposes. It covers the techniques drawn from statistics, financial mathematics along with the insights of economic theory to equip the learners with the insurance processes.

At the end of the course, students will be able to

i.   Enable to differentiate benefits of annuity contracts

ii. Develop marketable premiums and appropriate annuities

iii.   Predict possible survival chances of human life in chaotic world

iv.   Build up rational expectation models for all contract types

v.   Factor heterogeneity in life insurance contracts for risk management

Unit I: Life Assurance and Annuity Contracts

Pricing of life insurance contracts, equations of value, allowance for investment income, present value random variable, expected present value, variance of the present value random variable for life assurance contracts; life assurance benefits payable immediately on death; claim acceleration approximation; life annuity contracts: immediate annuity; annuity-due; temporary annuity; temporary annuity-due; deferred annuities; deferred annuities-due; and continuous annuities

Unit II: Quantity Theory of Life Contingencies

Advance Problems in mathematical theory of life contingencies; force of mortality; laws of mortality; premiums and reserves for insurance and annuities based on a single life- sums and integrals for mean and variance of present value of benefit payments; annuities payable in advance and in arrears; temporary and deferred and whole lifetime annuities; net premiums and reserves-prospective and retrospective reserves; Gross and net premium reserves; profit contracts

Unit III: Joint Life Probabilities

Joint life probabilities, annuities and insurances; cash flow dependent upon death or survival of either or both of two lives; competing risks; transition intensities for given dependent probability

Unit IV: Multiple-Decrement Theory and Pension fund Mathematics

Multiple decrement theory; pension fund mathematics-techniques of discounting emerging cost, for use in pricing, reserving and assessing profitability for all contract types and for pensions; expected cash flow dependent upon more than one decrement; expected cash flow contingent upon risks other than human risks

Unit V. Principal Forms of Heterogeneity within a Population

Variations in mortality and morbidity; main forms of selection-temporary initial selection, time and class selections, spurious and adverse selection, different mortality tables for different lives; risk classification of life insurance, genetic information of risk classification in life insurance, directly and indirectly standardized mortality rates

Text books:

1. Bowes, N.L., Gerber, H.U., Hickman, J.C, Jones, D.A., and nesbitt, C., J. (1986). Actuarial Mathematics, Society of Actuaries, Lthaca, lllins, U.S.A
2. Mc Cutchheon, J.J. and Scott, W.F., (1997), An introduction to Mathematics of finance.

References:
1. Spurgeoin,E.T .(1972). Life Contingencies. Cambridge University Press.
2. Nall, A (1977), Life Contingencies. Heinemann.
3. Bhole, L.M. (1990), The Indian Financial System, Tata McGraw Hill, New Delhi.
4. Bickelhaupt, D.L. (1992), General Insurance, Irwin Inc., Burr Ridge, Ill.
5. Graves, E.E. and L. Hayes (Eds.) (1994), McGill's Life Insurance, The American College, BlynMawr, Pa.
6. Bailey, R. (Ed.) (1999), Underwriting in Life and Insurance, LOMA, Atlanta

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3				3
K4: Analyzing			4	4	
K5: Evaluating					
K6: Creating		6			

Mean: 4.0

PEC 5439 - COMPUTER APPLICATIONS IN SOCIAL SCIENCES - 4 Hrs. / 4Cr

(Equivalence to the Course Code: PEC 5508)

The course provides hands on training to enable students to develop computer-aided application skills in Social Science research. It covers Windows, SPSS, Spreadsheet analysis and Word Processing.

At the end of the course, students will be able to

    i.   Understand the working of windows

    ii.   Acquire skill of applying in economic analysis

    iii.   Prepare analytical reports using Ms-word

    iv.   Use SPSS package in economic research

    v.   Make use of internet as an knowledge powerhouse for social engineering

Unit- I: Introduction to Windows

IT and Computer Applications – Introduction to Windows – Features - Components – Customizing Windows – Accessories – Control Panel – Windows Explorer

Unit -II: Spreadsheet Analysis

Introduction to Spread Sheet – Basic Skills for working with a spread sheet – Shortcut Menus – Entering, Editing and Protecting Worksheet – Moving , Copying and Deleting cells and Ranges – Creating and Working with formula and Statistical Tools – Data Base in Excel – Graphics and Charts.

Unit- III : Word Processing and Presentations

Introduction to Word Processing – Starting MS Word – Formatting Text and Documents - Customizing   the Work Place – Types of Views and Types of Style – File Management Tools – Columns, Tables and Graphs – Mail Merge – MS Power Basis, Creating, Presentation with Graphs and Multimedia – Interacting with Spreadsheet/Database Application – Desktop Printing and its Application.

Unit- IV: Application of SPSS

Introduction to SPSS (Statistical Package for Social Sciences) Packages – Cross Sectional and Time-Series Analysis – Application in Social Science Research Work

Unit- V: Introduction to R Package

Introductory Statistics with R –Cross Sectional and Time-Series Analysis – Application in Social Science Research Work

Text Books

1. Marija.J.Norusis (2007) SPSS for windows Base System Users Guide Release 6.0 SPSS Inc., Chicago, Illinois.
2. Vikas Gupta (2008) , Comdex Computer Course, Kit Dream Tec. New Delhi
3. ABC of MS-Office 2008 professional, Hart, BPB Publications.

References:

1. Foster,J.J.(2001), Data Analyzing using SPSS For Windows 8.0 – 10.0, A Beginner's Guide
2. Peter Dalgaard (2008): Introductory Statistics with R, 2nd Edition, Springer, New York. (Chapters 1, 2, 3,4,5,6 and 7)
3. Peter Norton's Introduction to computers, Tata McGraw Hill Publishing Co., New York.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding	2				
K3: Applying			3		
K4: Analyzing				4	
K5: Evaluating					5
K6: Creating		6			

Mean: 4.0

PEC 5400   SPECIAL AREA STUDY   6 Hrs. / 4 Cr

(Equivalence to the Course Code: PEC 5609)

The objective is to develop the skill of narrowing down to a specific researchable problem from the branch of Economics

At the end of the course, students will be able to

  i.   Develop the skill of identifying issues of social relevance and national importance
  ii. Review critically the existing body of knowledge to identify the issues requiring to be probing
  iii. Acquire the skill of identifying research gap to formulate workable hypothesis
  iv. Formulate appropriate research design suited for the problem under study
  v.   Prepare a term paper to be used as a ready reckoner

Self-Study: In the pursuit of excellence, the memory power testing has to be downgraded and independent self-study needs to be insisted.

Library Resources: In this course, the learner is expected first to get a synoptic view of economics and in course of time to focus attention on aspects of the topic that are of special interest to him or her. The learner is to make the maximum use of "library resource" in the department. The use of Internet, visit to research institutes and universities are also encouraged.

Empirical Study: The student is guided to narrow down or to adopt a filtering process from general topic to specific topic and then towards a researchable problem. During this semester, the student is expected to acquire the skills of identifying the research gap formulating the workable hypothesis and learning the art of questionnaire and schedule preparation. The student is required to formulate a hypothesis, frame objectives and collect the relevant data and information either through questionnaire/ schedule or from secondary sources.

Presentation: By way of "presentation" of a topic to the audience, the leaner acquires the skill of blending two or more pieces of economic concepts. Eventually the learner will prepare a "term paper". In the mean time, the publication of article by the learner is also advised. Thus, the student lays the foundation for his project work to be pursued in the fourth semester.

References:

1. The Social Science Encyclopedia (1985), Routledge the Kegan.
2. The New Palgrave Dictionary of Economics (1987), Macmillan, 4 volumes.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying			3		
K4: Analyzing				4	
K5: Evaluating	5				5
K6: Creating		6			

Mean: 4.6

PEC 5632 **INTERNATIONAL ECONOMICS** **7 H/5cr**
(Equivalence to the Course Code: PEC 5501)

The course provides a deep understanding about the broad principles and theories which tend to govern the free flow of trade in goods, services and capital –both short term and long term –at the global level. Besides preparing the students about the relevance and limitations of these principles, the contents of the paper spread over different modules lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of trade policies followed both at national and international level

At the end of the course, students will be able to

i. Internalize theoretical considerations in international trade
ii. Enable to bring forth challenges of internationalization of goods and services trading
iii. Assess the role of international organizations in evolving direction and volumes of trade
iv. Acquire the skills of documenting trade related instruments as well as resolving international trade disputes
v. Develop a feasible export –import projects for financial support

Unit- I: Rationale for International Trade

Relevance and bases of International Trade – Classical, Neo Classical and Modern Theories

Unit -II: Trade and Development

Gains from trade - gains from specialization – Foreign exchange – exchange rate – BOP theories – transfer of technology – terms of trade – Singer –Perbish theories – trade as engine of growth and exploitation – Jagdish Bhavati's Immiserising Growth – Rybczynsky theorem – factor mobility – out sourcing of commodities and services.

Unit- III: World Trading System and Institutions

World Trade – bilateral and multilateral trading systems – NIEO – Regional economics groupings – international commodity agreements – multilateral financial institutions: IMF- WORLD BANK- WTO

Unit -IV: Forms of International Trade Contracts and Documentations

Trading methods – international commercial terms – letter of credit – types of L/C – operation of a L/C – documents used in international trade – transport documents – international trade disputes – FERA – FEMA.

Unit- V: International Trade Finance

Financing exports – post shipment finance – project exports – EXIM bank – export credit insurance – export promotion measures: EPZ, EOU, and SEZ – financing imports.

Text Books
1. Francis Chernulium (2007), "International Economics", Tata McGraw Hill Publishing Company Ltd., New Delhi
2. Rana, K.C and Verma, K.N (2007), "International Economics", Vishal Publishing Co, Jalandhar
3. Jeevanandam, C (2008), "Foreign Exchange Practice-Concepts and Control", Sultan Chand and Sons, New Delhi
4. Jhingan M.L. (2015), "International Economics", Virendra publication Pvt. Ltd., New Delhi

References

1. Caves, R. and Jones, R. World trade and payments (chapters 4, 6, and 7). Boston: Little, Brown and Company, 1977.
2. Dixit, A. and Norman, V. The theory of international trade. Cambridge University Press, 1980.
3. Sodersten, B. and Reed, G. International Economics (chapters 1-11, 13-16, 19, 20, 22-24, 26 & 27). Macmillan Company, 1994.
4. Grossman, G. M. and Rogoff, K., eds. Handbook of international economics. Vol III. Elsevier, 1995.
5. Bhagwati, J, Arvind Panagariya, & T.N. Srinivasan: Lectures on International Trade, 2nd ed. MIT Press 2001.
6. Paul Krugman & Maurice Obstfeld (6th ed.) International Economics, (Chapters 2-11) Addison Wesley, 2003

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding	**2**				
K3: Applying				**3**	
K4: Analyzing			**4**		

K5: Evaluating					5
K6: Creating		6			

Mean: 4.0

PEC 5634   **INDIAN ECONOMY**   **7 Hrs /5cr**

The Purpose of this course on Indian Economy is to enable the students to have an understanding of the various issues of the Indian Economy with a policy perspective. The focus of the syllabus is on the development perspectives of Indian Economy during the post Liberalization period since 1991.

At the end of the course, students will be able to

  i.   Explore resource use, demographic dividend, infra development and growth trends
 ii.   Understand impact of technological changes in agriculture on doubling farmers income and access to institutional support
iii.   Examine growth performance of industrial sector in view of industrial policies and programmes
 iv.   Analyze service led growth, trade performance and balance of payments
  v.   Evaluate economic reforms in relation to planning strategies

Unit- I Structure of Indian Economy

   Natural Resources – Land, Forest, Water,-Demographic dividend: Characteristics of population-Infrastructure: - Transport – Power –Communication-Energy. National Income: Trend and sectoral contribution

Unit -II .Agricultural Sector

  Role of Agriculture – low Agricultural productivity- land reforms-– Green Revolution and New Agricultural Strategy - Agricultural Marketing and warehousing-Agricultural Credit

Unit- III Industrial Scenario

  Role of Industrialization – PSU-Rationale and problems, Disinvestment of PSU: Industrial Policy Resolution 1948, 1956 and recent Industrial policies-EPZ-SEZ-MSME-Make in India.

Unit- IV Tertiary Sector and External Sector

Role of Banking, Insurance and Information Technology: Direction and trends in foreign trade, trade policy, Balance of Payments in India-Disequilibrium and corrective measures, MNCs, FEMA and FERA.

Unit -V: Planning and Economic Reforms

Planning in India-Objectives of Five Year Plans, Achievements and failure-New Economic Reforms-Contemporary planning –NITI Aayog-LPG, India and WTO

Text Books

1. Sankaran(2015) –Indian Economy- Markham publications-Chennai-
2. S.K.Misra and V.K. Puri(2016), Indian Economy, Himalaya Publishing House, New Delhi,
3. Dutt and Sundharam (2018), Indian Economy, Sultan Chand Co, New Delhi.

References:

1. Ghosh. Alak(1989), Indian Economy – Its Nature and Problems, The World Press Private Limited,Calcutta,
2. Sen R.K and B.Chatterjee(2001), Indian Economy-Agenda for 21st Century, Deep and Deep Publications, New Delhi,
3. . Jalan.B(2006), The Indian Economy Problems and Prospects, Viking Publications, New Delhi,.
4. Dhingra (2008), The Indian Economy: Environment and policy, Sultan Chand, New Delhi.
5. Agrawal (2008), Indian Economy, Wiley Eastern, New Delhi.
6. Ray, S,K (2008), Indian Economy, Prentice Hall, New Delhi.
7. Ruddar Datt and Sundaram (2008), K.P.M, S.Chand and Company, New Delhi.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying	3				
K4: Analyzing		4		4	
K5: Evaluating					5
K6: Creating			6		

Mean: 4.4

PEC 5436   DEVELOPMENT ECONOMICS   6 Hrs 4Cr

Development Economics represents an engaging branch of Economics. A course on the Economics of Growth and Development connects students of Economics to academic concerns,

policies and practical solutions relevant for progression of all economies. The objective of this paper is to familiarizing students with the conceptual routes, theoretical dynamics and practical strategies of growth and development. It is expected that this course would orient them towards major themes of development, lead them towards more methodical probes and equip them with adequate analytical knowledge.

At the end of the course, students will be able to
  i. Comprehend conceptual and measurement issues in growth vis-à-vis development
  ii. Understand salient features of developing economies and obstacles to development
  iii. Acquire the skill of assessing the development process in light of competing theories
  iv. Examine pace and pattern of growth performance in view of growth models
  v. Analyze mobilization of resources, choice of techniques and appropriate investment criterion

Unit -I: An Overview of Economic Growth and Development

Conceptualization of Economic Growth Vs. Economic Development - Measures of Growth - GNP and Per-Capita Income, Measures of development - HDI,PQLI, GDI and GNHI - Development issues - Characteristics of Developing Economics – Obstacles of Economic Development

Unit-II: Theories of Development

Adam Smith's Development Model - Malthusian Theory - Marxian Theory- Schumpeterian Theory - Rostow's Stages of Economic Growth - Lewis Theory - Big Push Theory - Balanced Growth - Unbalanced Growth

Unit-III: Growth Models

Harrod-Domar Model Dynamic Theory – Kaldor-Pasinetti Model - Solow Model - Joan Robinson Model - Mahalanobis Model - Chakravarthy Model- Vakil and Brahmanandha Model

Unit -IV: Resource Development and Investment Criteria

Capital Formation - Human Capital and Manpower Planning- Migration - Choice of Techniques - Investment Criterion- Project Evaluation

Unit- V: State and Economic Development

Role of State and Sectoral Dimensions - Agriculture, Industrialization and Services in Economic Development - Role of External Sector – Foreign Capital **-** **F**oreign Direct Investment - Technology Transfer – Foreign Aid – New International Economic Order

Text books

1. Meier, G.M. (2000), Leading Issues in Economic Development, Oxford University Press, New York.
2. Michael P. Todaro and Stephen C.Smith, (2004), Economics Development, Pearson Education, New Delhi.
3. Misra and Puri, (2012), Economics of Development and Planning, Himalaya Publications, Mumbai.
4. Jhingan, M.L, (2014), The Economics of Development and Planning, Vrinda Publications Limited.

References

1. Sen, A.K. (1971), Growth Economics, Penguin Books, Harmondsworth, London.
2. Jones H.G. (1976), An Introduction to Modern Theories of Economic Growth, McGraw Hill, Kogakusha, Tokyo.
3. Thirwali, A.P. (1978), Growth and Development, Macmillan, London.
4. Little, I.M.D. (1982), Economic Development Theory, Policy and International Relations, Basic Books, New York.
5. Chakravarthy, S. (1982), Alternative Approaches to Theory of Economic Growth, Oxford University Press, Delhi.
6. Chatek, S. (1986), An Introduction to Development Economics, Allen & Unwin, London.
7. Meier, G.M. and D. Seers, (1987), Pioneers in Development, Oxford University Press New York
8. Jagdish Bhagwati, (2004), Economics of Under Developed Countries, AITBS, New Delhi.
9. Taneja Sharma, (2006), Economics of Development and Planning, Vishal Publishers, Allahabad.
10. Agarwal and Kundan lal, (2007), Economics of Development and Planning, Publications, Ludhiana.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	CO1	CO2	CO3	CO4	CO5
K1: Remembering					
K2: Understanding					
K3: Applying	3	3			
K4: Analyzing				4	
K5: Evaluating					5

K6: Creating			6		

Mean: 4.2

PEC5438 **GENDER ECONOMICS** **4hrs/4 c**

This course makes available a critical overview of economic theories, methods and economic policy-debates from a gender perspective. The course is intended to cover major debates in gender economics relevant to developed and developing countries. The course will propose students the chance to explore alternative gender economic theory and apply these different theoretical understandings to concrete examples in the real world.

At the end of the course, students will be able to

i. Motivate to familiarize students with the key theoretical concepts,
ii. Impart knowledge on theoretical approaches and views related to the role of women in the achievement of development.
iii. Familiarize contribution in gender in development
iv. Analyze the role of gender in social sector
v. Enrich the knowledge on f Feminization of poverty

Unit-I: Introduction to Gender Studies

Basic Concepts - Difference between Gender and Sex - Patriarchy - Feminism - Schools of Feminism - Gender Division of Work - Invisibility of Women's Work - Gender Mainstreaming - Concept of Gender Economics - Gender Concerns in Economic Theory - Sen's Contribution.

Unit -II: Subject and Methods of Gender Economics

The Subject of Gender Economics - Institutionalization of Gender Economics - Methods of Gender Economics - Inter-Disciplinary Approach in Gender Studies - Gender Inequality Factors: Development Factor - Discrimination and Behavioral Factors - Gender Gap in access to Resources and Control over Economic Resources.

Unit- III: Gender and Economic Growth

Globalization of the World Economy and Gender Status - Impact of Economic Growth on Gender Equality - Gender Equality and Economic Growth and Socio-Economic Development- Impact of Globalization on Gender Status - Feminization of Poverty - Gender

Differences in Incomes - Women's Contribution to GDP - Estimation of Women's Unpaid Work.

Unit- IV: Gender Factor in Household Economics

Distribution of Resources and Decision-Making Mechanisms within the Household - Household Time Budgets: Structure, and Problem of Measurement - Work in the Labour Market - Inter-Generational and Gender Aspect - Model of Investment in Human Capital - Marital and Age-Dependent Models of Female and Male Employment

Unit -V: Measuring Gender Equity

Meaning of Gender Equity and Equality - Gender Equity Index - Gender Inequality Index of UNDP - Gender Status Index - Gender in Human Development - Gender Development Index - Gender Empowerment Measure - Gender in Social Development Indicators - Social Institutions and Gender Index (SIGI)

Text Books

1. Seth, M. (2000), Women and Development: The Indian Experience, Sage Publications, New Delhi.
2. Beneria, L. (2003),Gender, Development and Globalisation. Economics As If All People Mattered. New York: Routledge
3. Jacobsen, J. (2007),The Economics of Gender. Cambridge: Wiley Blackwell.
4. Eswaran, M. (2014), Why Gender Matters in Economics, Princeton University Press.

References

1. Boserup E. (1970), Women's Role in Economic Development, George Allen and Unwin, London.
2. Desai, N. and M.K. Raj (Eds.) (1979), Women and Society in India, Research Center for Women Studies, SNDT University, Bombay
3. Devasia Leelamma (1994) Empowering Women for Sustainable Development, Ashish Publishing House, New Delhi
4. Sen, A. and J. Drèze (1995), India: Economic Development and Social Opportunity, Oxford University Press
5. Venkateswaran S. (1995), Environment, Development and the Gender Gap, Sage Publications, New Delhi.
6. Nelson, J. 1995, Feminism, Objectivity and Economics. London: Routledge.
7. Jackson, C. and R. Pearson (eds) 1998. Feminist Visions of Development: Gender Analysis and Policy, London and New York: Routledge
8. Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender, Population and Development, Oxford University Press, New Delhi.
9. UNDP, (2006), Human Development Report, Fighting Climate Change: Human Solidarity in A Divided World. Palgrave, New York.
10. Rai, S. and G. Waylen (eds). 2014. New Frontiers in Feminist Political Economy, London, Routledge.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding	2	2			
K3: Applying					
K4: Analyzing			4		
K5: Evaluating				5	
K6: Creating					6

Mean: 3.8

PEC 5400   **PROJECT**   **6Hrs. / 4Cr**

(Equivalence to the Course Code: PEC 5610)

This is sequential course to Special Area Study, enables students to carry out a project on a researchable topic identified in the Special Area Study. It is a mandatory and independent research work to be carried out by a student under the guidance and supervision of a faculty member. It is in partial fulfillment of the requirements of the M.A. degree programme.

In the light of experience gained during the third semester under Special Area Study, the data collected is processed and tabulated; facts are scientifically analysed with the help of various mathematical, statistical and econometric tools to test and validate the hypothesis. Results in tabular form and illustrations are discussed in the light of the relevant theoretical frame work. The outcome of the project work is to be submitted in the form of a research report of dissemination of knowledge.

At the end of the course, students will be able to

i.   Carry out independently research project on a topic identified in the special area study
ii.   Design theoretical frame work for the research project

iii. Validate data sources to arrive at data reliable for study

iv. Apply relevant statistical tools in testing hypothesis

v. Interpret the empirical results of the study in light of theoretical consideration

Evaluation Pattern

The guide and P.G.H.O.D will be the internal and external examiners respectively to evaluate the project work for awarding credits. They will value the project report separately on 50:50 basis.

1. Literature review and researchable topic : 30 Marks

2. Field work, collection of data and analysis : 50 Marks

3. Defending the report

    i) Oral Presentation : 10 Marks

    ii) Viva-Voce : 10 Marks

          Total **: 100 Marks**

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Bloom's Taxonomy	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
K1: Remembering					
K2: Understanding					
K3: Applying	2				
K4: Analyzing			4		4
K5: Evaluating				5	
K6: Creating		6			

Mean: 4.2