



Effective from Session: 2024-25							
Course Code	HE510	Title of the Course	Rural Economics	L	T	P	C
Year	II nd	Semester	IV th	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				

Course Objectives
To provide an elaborative understanding related to issues in rural economics and also to familiarize students with policy issues that is relevant to rural economics.

Course Outcomes	
CO1	Critically and creative thinking about the rural economies.
CO2	Understand the structure of rural economies interactions, rural organizations and problems in rural economies
CO3	Gain insight into the socio-economic structure of rural India.
CO4	Understand the prospects and problems of rural development in India
CO5	Evaluate the application of local strategies for economic development.

Unit No.	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction Rural Economics; Concept, Scope, Basic Elements, Objectives and Importance of Rural Economics, Characteristics of Rural Economy; Rural-Urban Linkages, Rural Economy of India; Size and Structure of Rural Economy.	12	CO1
2	Connotations of Rural Development Approaches to Rural Development in India-Gandhian Approach, Rural development through Green Revolution, Rural prosperity through direct attack on Poverty, Rural Development through Financial Inclusion, Multi-sectoral, Territorial and Local Resource Use; Land Utilization and Land Reform.	12	CO2
3	Rural Issues Natural Resources and their importance in Rural Development Diversification of Rural Economy; Rural Industrialisation: Problems of Rural Economy; Poverty, Unemployment, Inequality.	12	CO3
4	Strategies of Rural Development Strategies of Rural Development; Growth oriented strategy, Welfare strategy, Responsive strategy, Holistic strategy, Right-based strategy. Rural Development Programmes; Objectives and Appraisal (SJGSY and MGNREGS) Rural Economy; Diversification as strategy of Development.	12	CO4
5	Institutional Development for Agricultural Growth Asset distribution of rural households in India over time, Indebtedness of rural households, non-institutional and institutional sources of credit, role of co-operatives, Schedule Commercial Banks, Regional Rural Banks and NABARD, Schemes of Financial Inclusion.	12	CO8

Reference Books:

1. Bilgrami S. A.R. An Introduction to Agricultural Economics, Himalaya Publishing House, Mumbai.
2. Dandekar V.M The Indian Economy 1947-92 Vol 1: Agriculture, Sage Publishing House
3. Lekhi R.K., and Joginder Singh, Agricultural Economics, Kalyani Publishers
4. Schultz T.W. Economic Growth and Agriculture, McGraw Hill
5. Surinder S. Jodhka, A Handbook of Rural India, Orient Blackswan.
6. Relevant Government publications

E-Learning Source:
<https://swayam.gov.in/>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)												
PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PS01	PS02	PS03	PS04	
CO1	3	3	3	-	-	3	-	3	3	1	3	
CO2	3	3	3	-	-	3	-	3	3	1	3	
CO3	3	3	3	-	3	3	-	3	3	1	3	
CO4	3	3	3	-	1	3	-	3	3	2	3	
CO5	3	3	3	-	3	3	-	3	3	2	3	

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

<p>Name & Sign of Program Coordinator</p>	<p>Sign & Seal of HoD</p>
---	-------------------------------



Effective from Session: 2024-25							
Course Code	HE509	Title of the Course	Theories of Economic Growth	L	T	P	C
Year	IInd	Semester	4 th	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	To introduce students to the theories and empirics of economic growth. Upon completion of this course students should be able to discuss the important models, theories and implications of the alternative approaches to growth.						

Course Outcomes	
CO1	Students should be able to comprehend the concept and meaning of economic growth and economic development.
CO2	Students should be able to distinguish between economic growth and economic development.
CO3	Students should be able to comprehend the issues and challenges in economic growth and development.
CO4	Students should be able to comprehend and explain the concept of poverty and human development & the related concepts.
CO5	Students should be familiar with the approaches to development.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1.	Economic Growth Theories	Economic growth- Meaning, Characteristics, Measurement and Factors of Economic Growth; Balanced and Unbalanced Economic Growth; Marx's Stages of Growth; Rostow's Stages of Economic Growth; Structural Diversity and common characteristics of developing nations.	08	CO1
2.	Modern Theories of Economic Growth	Conceptual framework and methodology of modern growth theories; Harrod-Domar Growth model; Contemporary growth theories of neo-classical, Solow, Meade, and Swan-Uzawa.	08	CO2
3.	Cambridge theories of growth	Cambridge theories of growth; Joan Robinson, Kaldor, Pasinetti, the capital controversy, money and economic growth-Tobin and Johnson's models.	08	CO3
4.	Technological Progress and Economic Growth	Technological Progress- embodied and disembodied; Neutral and Non-Neutral (Hicks and Harrod); Arrow's learning by doing approach to economic growth; total factor productivity and growth accounting.	08	CO4
5.	Optimal & Endogenous Growth Theory	Optimal growth theory: Ramsay, Von Neumann, Golden Rule of Accumulation; Endogenous growth Models-AK model and Romer model; Explanations of cross country differentials in economic growth.	08	CO5

Reference Books:	
Barro, Robert J and Xavier Sala-i- Martin, Economic Growth, The MIT Press, Cambridge, Latest Edition.	
Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.	
Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007	
Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.	
Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)	
Hayami, Yujiro & Godo, Yoshihisa (2005): Development Economics: From the Poverty to the Wealth of Nations, Oxford University Press.	
Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005	
Jhingan, M.L (2013): Economics of Development and Planning, Vrinda Publications, New Delhi.	
Mishra, S.K & Puri, V.K (2012): Economics of Development and Planning, Himalaya Publishers, Mumbai.	
E-Learning Source:	
https://swayam.gov.in/	
http://www.ignouhelp.in/ignou-study-material/	

Course Articulation Matrix: (Mapping of COs with POs and PSOs)											
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	1	2	3	1	1	2	1	3	2	1
CO2	2	3	2	1	1	3	1	2	2	1	1
CO3	3	1	2	1	2	1	2	3	1	3	2
CO4	1	2	1	2	3	2	3	1	3	2	1
CO5	3	3	2	3	2	3	2	3	1	1	2

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
---	-------------------------------

**Effective from Session: 2024-25**

Course Code	HE516	Title of the Course	Industrial Economics	L	T	P	C
Year	2nd	Semester	IVth	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	To familiarize and acquaint the student with revolve around understanding, analyzing, and evaluating the behavior, structure, performance, and development of industrial sectors. It aims to provide insights and guidance for policymakers, industry practitioners, and researchers to make decisions and policies in the field of industrial economics.						

Course Outcomes

CO1	To equip with a solid foundation in the basic concepts of industrial economics, an understanding of its evolution and importance, and an ability to analyze and evaluate Indian industries and the role of entrepreneurship in industrial development.
CO2	To understand the meaning and scope of Market Concentration.
CO3	To analyze industrial location decisions, evaluate policies, and assess industrial performance in various contexts.
CO4	To analyze and evaluate the financial aspects of industrial operations, identify financing solutions for small-scale enterprises, and assess the implications of foreign investment on industrial growth.
CO5	To critically assess industrialization processes, evaluate government policies, and understand the complexities and challenges associated with industrial Development.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1.	Introduction	Basic Concepts and Definitions of Industrial Economics, Evolution and Importance of Industrial Economics, Relationship with other Branches of Economics, Appraisal of Important Indian Industries PSUs, Role of Entrepreneurship in Industrial Development.	08	CO1
2.	Market Concentration	Measurement of Concentration and Monopoly Power, Concentration and Market Performance of the Firm, Product Pricing Theory, The Indian Regulatory Framework.	08	CO2
3.	Industrial Location Theories	Determinants of Industrial Location - Technical, Economic, Infrastructural and other factors. Theories of Industrial Location - Weber, August Losch, Sargant Florence, Measurement of Industrial Performance Indicators.	08	CO3
4.	Source of Industrial Finance	Necessity and significance of Industrial Finance, Specialized Institution of Industrial Finance. Challenges finance before tiny and MSMEs. Role of FDI and FII to develop industry.	08	CO4
5.	Industrialization & Industrial Policy	Industrialization: Rationale, Objectives, Strategies and Policies. Industrialization and Regional Development. Employment Implications of Industrialization. Need for Government Intervention in Industry. New Industrial Policy of India.	08	CO5

Reference Books:

- Barthwal, R.R.: Industrial Economics, Wiley Eastern, New Delhi.
 Cherunilam F: Industrial Economics: Indian Perspective (3rd Edition) (Himalaya Publishing House, Mumbai, 1994)
 Hay, D. and D.J. Morris: Industrial Economics: Theory and Evidence, OUP, New Delhi.
 Kuchhal, S.C.: Industrial Economy of India, Chaitanya Publishing House, Allahabad

E-Learning Source:

- <https://swayam.gov.in/>
<http://www.ignouhelp.in/ignou-study-material/>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	1	2	1	2	1	3	2	1
CO2	2	3	2	3	1	3	1	2	2	1	1
CO3	3	1	3	1	2	1	2	3	1	3	2
CO4	1	2	1	2	3	2	3	1	3	2	1
CO5	3	3	2	3	2	3	2	3	1	1	2

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
---	-------------------------------



Effective from Session: 2024-25							
Course Code	HE512	Title of the Course	Economics of Infrastructure.	L	T	P	C
Year	II nd	Semester	IV th	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. The emphasis of this paper is on concepts and introduction of various tools required for policy analysis and empirical research in infrastructural economics. This paper would also help the students to understand the strength of infrastructure- physical and social in the process of economic development.						

Course Outcomes	
CO1	The course aims to acquaint and familiarize the students with the economics of infrastructure.
CO2	Students will be able to understand the problem of peak-load pricing.
CO3	The objective of the course is to expose the students to the issues and concerns of Transport and Communication sector in India.
CO4	Students will be able to understand the role of Energy sector.
CO5	Students will be able to understand the characteristics and problems of Renewable and Non-conventional Energy sources.

Unit No.	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction: Infrastructure and economic development; Infrastructure as a public good; Economic characteristics and types of infrastructure; Public utilities – Rationale of state provision; special characteristics of public utilities. Public-private partnership investment in infrastructure.	10	CO1
2	The peak-load-Off-peak load Problem, Marginal Cost Pricing vs. other methods of pricing in public utilities; Social infrastructure – organization and financing of supply of social services, Private vs. Public sector financing.	8	CO2
3	Transport and communication: the structure of Transport Costs and Location of Economic Activities. The supply of transport, Pricing policy; Cost Levels and Structure-Road Transport. Introduction to the setting of postal tariffs; Criteria for Fixation of Postal Tariffs, Cost and Pricing in the telecommunications Industry; Telecommunications in India; New Telecom Policy.	10	CO3
4	Energy and Electricity Primacy of Energy in the Process of Economic Development. Factors Determining Demand for Energy; Effects of energy shortages, Energy Conservation; The Relative Economics of Thermal, Hydel and Nuclear Power Plants.	10	CO4
5	Renewable and Non-conventional Sources of Energy, rural electrification in India- Problems & prospects. The Case for a National Power Grid. Electricity Policy- Main Features, Oil & gas- Recent Initiatives, Pricing Problem.	7	CO5

Reference Books:

1. Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.
2. Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure, Vol. VI, New Delhi.
3. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report: Policy Implications for Growth and Welfare, NCAER, New Delhi.
4. Pachauri, R.K (Ed), Energy Policy for India, Macmillan Co of India, New Delhi.
5. Parikh, K.S. (Ed.) (1999), India Development Report-1999-2000, Oxford University Press, New Delhi.
6. Turvey, R. (Ed.) (1968), Public Enterprises, Penguin, Harmondsworth.

E-Learning Source:
<https://swayam.gov.in/>
<http://www.ignouhelp.in/ignou-study-material/>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)											
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	1	2	1	3	2	1	3	1
CO2	2	3	2	3	1	2	2	1	1	2	3
CO3	3	1	3	1	2	3	1	3	2	1	2
CO4	1	2	1	2	3	1	3	2	1	3	3
CO5	3	3	2	3	2	3	1	1	2	2	3

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
------------------------------------	--------------------



Effective from Session: 2024-25							
Course Code	HE515	Title of the Course	Financial Institution and Markets	L	T	P	C
Year	2 nd	Semester	IVth	4	0	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	The objective of the course is to familiarize the students with Financial Institutions and Market.						

Course Outcomes

CO1	Students will demonstrate a comprehensive understanding of key financial terms related to financial institutions and the money market.
CO2	Students will be able to differentiate between various types of financial institutions.
CO3	Students will be able to discuss the impact of technology on financial institutions and the money market.
CO4	Students will be able to identify, describe, and analyze different money market instruments, demonstrating a nuanced understanding of their features, risks, and benefits.
CO5	Students will be able to analyze financial markets, interpret interest rates, exchange rates, and market trends.

UnitNo.	Content of Unit	Contact	Mapped
1	Introduction: Financial and non financial Assets Financial intermediation and role of financial intermediaries. The structure and function of financial system. Indicators of financial development Financial development and economic development Globalization of financial system.	12	CO1
2	Central Bank and Commercial Banks: Functions of Central Bank Aims and effectiveness of monetary policy. Transmission and effectiveness of monetary policy. Monetary policy reforms. Commercial Banks. Profitability Vs liquidity credit creation. Term structure of interest rates resolution of NPAS : One time settlement policies, hiving off etc BASEL norms, Banking sector reforms. Cooperative Banks.	12	CO2
3	International Financial Institutions: Introduction, International liquidity. International Financial Flows form and volume. IMF, IBRD and IDA. European investment Bank (EIB), ADB , IFC, BIS (Bank for international settlement) BRICs bank.	12	CO3
4	Money market: Treasury Bill Market, Commercial Bill market including commercial Paper and certificates of deposits. Inter bank call money market, mutual funds, discount market etc. Securities Market: Capital market: primary and secondary market bonds market, Futures options and other derivatives, pricing of derivatives, Government Securities market Commodity market, Infrastructure financing.	12	CO4
5	International Financial Markets: Foreign exchange market: Nature organization and participants, Exchange rate determination. REER and NEER, Devaluation and depreciation, Fixed and floating exchange rate system, Working of Floating exchange rate system since 1973 currency convertibility the Indian experience. Risk hedging and futures in exchange rates.	12	CO5

Reference Books:

1. Avadhani, V.A. (2012): Financial Services and Markets, Himalaya Publishing House, India
2. Bhole, L. M. (2015): Indian Financial System, Chugh Publications, Allahabad, India
3. Bhole, L. M. (2016): Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi, India
4. Houthakker, H. S. & Williamson, P. J. (1996): Economics of Financial Markets, Oxford University Press.
5. Gupta, Shashi K. & Agrawal, Nisha (2013): Financial services, Kalyani Publishers, Indi
6. Khan, M. Y. (2016): Indian Financial System, Tata McGraw Hill, New Yor
7. Gordon and Natarajan (2012): Financial markets and services, Himalaya Publishing House, India

E-Learning Source:

<https://swayam.gov.in/>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)

PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4
CO1	3	3	3	-	-	3	-	3	3	1	3
CO2	3	3	3	-	-	3	-	3	3	1	3
CO3	3	3	3	-	3	3	-	3	3	1	3
CO4	3	3	3	-	1	3	-	3	3	2	3
CO5	3	3	3	-	3	3	-	3	3	2	3

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
------------------------------------	--------------------



Effective from Session: 2024-25							
Course Code	HE597	Title of the Course	Dissertation	L	T	P	C
Year	II nd	Semester	IV th	4	0	4	8
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	Students will learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis, and interpretation and prepare them for writing the research proposal based on the understanding of the subject.						

Course Outcomes	
CO1	To enable postgraduate students with guidance and support to conduct independent research and produce a dissertation on a chosen topic within their field of study.
CO2	Students will develop their research skills, critical thinking abilities, and scholarly writing proficiency
CO3	The course will cover the various stages of the research process, from topic selection and proposal writing to data collection, analysis, and the final write-up of the dissertation.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Introduction	Introduction of dissertation, Steps, ethics, and writing dissertation	10	1
2	Literature	Finalizing topic, literature and introduction, deciding methodology, data collection and data analysis	10	2
3	Final Writing	Final Completion of the work and submission. The Dissertation outcomes may be reported in the following form as per the norms : Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc.	20	3

Reference Books:
Based on the topic of dissertation
https://swayam.gov.in/
http://www.ignouhelp.in/ignou-study-material/

Course Articulation Matrix: (Mapping of COs with POs and PSOs)										
PO-PSO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	-	-	-	-	-	-	-	-	-	-
CO2	-	-	-	-	-	-	-	-	-	-

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
------------------------------------	--------------------



Integral University, Lucknow

Effective from Session: 2021-21							
Course Code	MT537	Title of the Course	Quantitative Methods for Economics	L	T	P	C
Year	IInd	Semester	IVth	3	1	0	4
Pre-Requisite	Graduation	Co-requisite	None				
Course Objectives	The objective of this paper is to develop a mathematical approach to the analysis of economic problems. It mainly focuses on those mathematical techniques which are directly useful in economic analysis.						

Course Outcomes	
CO1	Students will be able to understand the basic concept of Differential Equation.
CO2	Students will be able to understand the Difference Equations.
CO3	Students will be able to understand the Linear Programming Problems (LPP).
CO4	Students will be able to understand the Input-Output Analysis & Decision theory.
CO5	Students will be able to understand the Game Theory.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	Differential Equations	Definitions and Concepts, First-order Linear Differential Equations, Exact Differential Equations, Integrating Factors, Separations of variables, Second-order Differential Equations, Economic Applications	08	CO1
2	Difference Equations and Matrices	Definitions and Concepts; First-order and Second-order, Linear Difference Equations, Stability conditions, Economic Applications. Matrices: Definition, different types of matrices, elementary operations, Solution of system of linear equations by Cramer's rule.	08	CO2
3	Linear Programming Problems (LPP)	Definition and formulations, Graphic Approach, Simplex method, Big M method, Primal - Dual formulation and its economic interpretation.	08	CO3
4	Input-Output Analysis & Decision theory	Leontief's static open input-output model, Decision theory, Decision making environments: Certainty, Uncertainty & Risk, Decision tree.	08	CO4
5	Game Theory	Concepts of Game, representation, pure strategy and mixed strategy. Two person Zero sum game, Constant & Non-constant sum game. Prisoner's Dilemma, Dominance, Nash Equilibrium, Value of a Game, Saddle Point Solution, Simple Applications.	08	CO5

Reference Books:
Allen, R.G.D (2006): <i>Mathematical Analysis For Economists</i> , Macmillan And Company Limited
C. Chiang and K. Wainwright (2005): <i>Fundamental Methods of Mathematical Economics</i> , McGraw Hill International Edition.
T. Yamane (2012): <i>Mathematics for Economists</i> , Prentice-Hall of India
K. Sydsaeter and P. J. Hammond (2002): <i>Mathematics for Economic Analysis</i> , Pearson Educational Asia
Mehta and Madhani: <i>Mathematics for Economists</i> , New Delhi: Sultan Chand Company
Dixit, A.K. (1990), <i>Optimization in Economic Theory</i> , 2nd Edition, Oxford University Press, London.
e-Learning Source:
https://byjus.com/maths/differential-equation/
https://www.youtube.com/watch?v=-_POEWfygmU

Course Articulation Matrix (Mapping of Cos with POs and PSOs)																
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	2	1	2	1	2	2	1	1	2	1	2	2	2	2	1
CO2	2	1	2	1	1	2	1	2	2	1	1	1	1	2	1	2
CO3	2	1	2	2	1	1	2	1	2	2	1	2	2	1	2	1
CO4	2	1	2	1	2	1	1	2	2	1	2	1	1	1	1	2
CO5	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1

1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation

Name & Sign of Program Coordinator	Sign & Seal of HoD
---	-------------------------------