



VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY
JNANASAGARA CAMPUS, BALLARI-583105

DEPARTMENT OF STUDIES IN

Economics

SYLLUBUS

Master of Arts in
Economics

(III Semester)

Effective

From

2021-22



VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY



Department of Economics Jnana Sagara, Ballari - 583105

Distribution of Courses/Papers in Postgraduate Programme I to IV Semester as per Choice Based Credit System (CBCS) Proposed for PG Programs

III – SEMESTER

Without Practical

Semester	Category	Subject code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
				IA	SEE	Total	L	T	P		
THIRD	DSC11	21ECO3C11L	Economics of Growth and Development	30	70	100	4	-	-	4	3
	DSC12	21ECO3C12L	Public Economics	30	70	100	4	-	-	4	3
	DSC13	21ECO3C13L	Econometrics	30	70	100	4	-	-	4	3
	DSE1	21ECO3E1AL	Rural Economics	30	70	100	4	-	-	4	3
		21ECO3E1BL	Financial Economics								
		21ECO3E1CL	Economics of Service Sector								
	DSE2	21ECO3E2AL	Economics of Regional Disparity	30	70	100	4	-	-	4	3
		21ECO3E2BL	Environmental Economics								
		21ECO3E2CL	Time Series Analysis								
	GEC1	21ECO3G1AL	Managerial Economics	20	30	50	2	-	-	2	1
21ECO3G1BL		Monetary Economics									
21ECO3G1CL		Karnataka Economy									
DSC13T3	21ECO3C3T	Econometric Techniques	20	30	50	-	2	-	2	1	
Total Marks for III Semester										24	

M. A in Economics; Semester-III
Subject Title: Economics of Growth and Development

Sub. Code: 21ECO3C11L	L: T:P = 4+0+0=4
Credits: 04	Category: DSC11

Course Objectives:

1. to familiarize the students with different approaches to economic development.
2. to gain knowledge about various economic development and economic growth theories.

Course Outcome:

After Completion of this course, the students will be able to:

CO1: understand the dynamics of human development indices.

CO2: learn various stages of economic development.

CO3: apply the economic growth theories to public policy issues.

CO4: analyze structural aspects of economic development.

Module I	Economic Development: An Overview	11
Meaning, Economic Growth and Development - Measurement of Economic development, Human Development Approach - Human Development Index. Inequalities in income distribution - Lorenz curve - Gini co-efficient - Inverted U hypothesis - Sen's capability approach, Development versus Displacement.		
Module II	Economic Development Theories	10
Theories of Development Models - Classical and Neo-Classical Theories of Development - Schumpeter and Capitalist Development - Marxian Growth Sates and Development Model. Smith-Ricardo – Malthus – Marx – Schumpeter- Joan Robinson –Kaldor theories.		
Module III	Partial Theories of Growth	12
Harrod-Domar Growth Model - Solow's Model - theory of the Big Push- Minimum Critical Effort and low-level Equilibrium Trap. Lewis Model of an unlimited supply of labour - The Theory of Balanced and Unbalanced Growth - Myrdal on economic growth - Dependency theory		
Module IV	Stages Economic Growth	12
Rostow's stages in economic growth - Simon Kuznets Economic Structure and Change. Choice of Techniques - Capital, labour and appropriate technology – Romar's endogenous growth model Dualism, Dependency theory of development. New growth theories (Lucas, Romer, Grossman, and Helpmann - Convergence/Divergence debate).		
Module V	Structural Aspects of Economic Development	12
Role of agriculture in economic development - new technology and sustainable agriculture - Rationale and pattern of industrialization in developing countries - WTO and developing		

countries- Planning- Democratic, decentralized and indicative planning- Review of Indian plan models and planning, Types of technological change.

Suggested Readings:

1. Basu, Kaushik (2002): Analytical Development Economics, Oxford University Press.
2. Adelman Theories of Economic Growth and Development, Standard University Press, Stanford
3. Mishra S.K. and V.K. Puri (2021): Economics of Development and Planning, Himalaya Publishing House, Mumbai, 18th Edition.
4. India-Social Development Report, Council for Social Development, OUP-various issues
5. Human Development Reports, Technical Notes: UNDP-various issues
6. Ray, Debraj (1998), Development Economics, Oxford University Press.
7. Sen, A.K. (Ed.) (1990), Growth Economics, Penguin, Harmondsworth.

M. A in Economics; Semester-III

Subject Title: **Public Economics**

Sub. Code: 21ECO3C12L	L: T:P = 4+0+0=4
Credits: 04	Category: DSC12

Course Objectives:

1. to familiarize the students with concepts of public economics
2. to develop the knowledge of public policy issues in the economy.

Course outcome:

After Completion of this course, the students will be able to:

CO1: gain insight into the role of government in the economy.

CO2: critically understand the causes and consequences of market failure.

CO3: analyze the public expenditure theorems.

CO4: understand the various taxation and public debt theories.

Module I	Introduction	11
Meaning, Nature and Objectives of public economics, Instruments of public economics. Role of government in the mixed economy. Functions of Budgetary policy -Allocation distribution and stability functions. Provision of public goods -public goods and private goods, Market failure-Causes, Consequences and remedial measures, Economies of externalities, Second best theory.		
Module II	Public choice and Policy	13
Public Policy for Allocation of Resource,Public Choice- Majority Voting rule, Implications of Allocating Resources and Aggregation of Preference Revelation; Arrow's Impossibility Theorem, Sen's Theory of Social Choice, Economic Theory of democracy, Rent-Seeking and Directly Unproductive Activities. Contributions of Samuelson and Musgrave, Clarke, Grooves and Ledyard Model; Tie bout Model- Theory of Club Goods. Social Goals- Poverty Alleviation and Removal of Regional Imbalances.		
Module III	Public Expenditure	11
Wagner's Law Increasing State Activities; Wiseman-peacock Hypothesis – Samuelson's pure theory of public expenditure -Criteria for public investment; Social Cost-Benefit Analysis - Project Evaluation, Reforms in Expenditure Budgeting System- Zero Based Budgeting and program-based budgeting.		
Module IV	Taxation	11
Public Revenue: Sources and Classification, Taxation, Tax Elasticity and Buoyancy, Taxable Capacity and Tax Effort, Theory of Incidence; Different Concepts of Incidence, Benefits and Ability to Pay Approaches, Taxation and Dead Weight Loss, Theory of Optimal Taxation, Problem of double taxation: Allocative and Equity Aspects of Individual Taxes.		
Module V	Management of public Debt	11

Theories of Public Debt: Classical and Modern (Keynesian, Buchanan, Bowen-Devis-Kope), Reasons for Growing Public Debt; effects of public debt on the economy. The burden of Public Debt; Principles of Debt Management and Repayment methods. Budget deficit and public debt; Public Borrowings and Price Level- Crowding out of Private Investment and Activity.

Suggested Readings:

1. AT Kinson, A.B., J.E. Siglitz (1980): Lectures on Public Economics, Tata McGraw Hill, New York.
2. Averbach, A.J. & Feldstern (1985): Handbook of Public Economics, North Holland.
3. Amesterdam Jha, R (2009): Modern Public Economics, Routledge, London
4. Buchanan J.M, (1970) The Public Finance, Richard D. Irwin, Homewood.
5. Musgrave, R.A. (2017): The Theory of Public Finance, McGraw Hill, Tokyo.
6. Musgrave R.A and P.A. Musgrave (1989) Public Finance in Theory and Practice, McGraw-Hill Kogakusha, Tokyo.
7. Stiglitz J.E, (2015) Economics of Public Sector, Norton, New York.
8. Tyagi B.P, (2016) Public Finance, Jaiprakash Nath and Company, Meerut, India.

M. A in Economics; Semester-III

Subject Title: **Econometrics**

Sub. Code: 21ECO3C13L	L: T:P = 4+0+0=4
Credits: 04	Category: DSC13

Course Objectives:

1. To familiarize the students with basics of econometrics.
2. To train the students to apply the quantitative techniques to economic problems

Course Outcome:

At the end of the course students are able to:

CO1: Understand the idea of the General Linear Model.

CO2: Estimate basic regression models.

CO3: Apply appropriate diagnostics and remedial measures to the issues in regression.

Module I	SIMPLE LINEAR REGRESSION	12
Definition, Scope and Division of Econometrics - Methodology of econometrics and other interrelated disciplines. Concept of Population Regression Function- Sample Regression Function- Significance of Stochastic Disturbance term- Point and Interval Estimation. Dummy variables - Lagged variables.		
Module II	MULTIPLE REGRESSION -ESTIMATION	12
OLS - Properties of the Least Squares estimates: Classical Normal Linear Regression Model (CNLRM)- Gauss Markov Theorem- Derivation of OLS Estimators – Consistency, Linearity and Unbiasedness of Least Squares estimates- ANOVA approach to Regression: ANOVA Table; Measures of Goodness of fit: R^2 and Adjusted R^2 -Maximum Likelihood estimation		
Module III	PROBLEMS OF LINEAR REGRESSION MODEL	10
Multicollinearity –Nature – Causes -Consequences – Detection - Remedial measures. Heteroskedasticity- Nature – Causes -Consequences – Detection - Remedial measures. Auto-correlation - Nature – Causes -Consequences – Detection - Remedial measures		
Module IV	HYPOTHESIS TESTING	12
Confidence intervals for Regression Coefficients- Hypothesis testing: Confidence interval approach- One tail test, two tail test, Test of significance approach- testing significance of regression coefficients – t test, F test p value. Concepts of Likelihood Ratio, Wald and Lagrange Multiplier tests.		
Module V	REGRESSION MODELS -CONCEPTS	10

Regression through Origin- Scaling and units of measurement-Regression of standardized variables-Functional forms- Log linear and log-log models, Model Selection criteria- AIC, SBC.

Suggested Readings:

1. Greene, William (2018): *Econometric Analysis*. Eighth ed. Pearson Education ISBN:9353061075.
2. Gujarathi, Damodar (2007): *Basic Econometrics* McGraw Hill, International Student edition.
3. Gujarathi, Damodar (2022): *Econometrics by Example*. Bloomsbury India, 2022. ISBN: 9354356117
4. Johnston, Jack and John Dinardo (1997): *Econometric Methods*. McGraw Hill / Asia; 4th edition, ISBN-10 : 0071259643.
5. Kennedy, Peter (2002): *A Guide to Econometrics*. Wiley-Blackwell; 6th Ed. ISBN: 1405182571
6. Koutsogiannis (2001): *Theory of Econometrics (Second Edition)* by Palgrave Publication.
7. Woolridge, Jeffrey (2019): *Introductory Econometrics: A Modern Approach*. South-Western College Publishing; 7th edition, ISBN: 1337558869

M. A in Economics; Semester-III

Subject Title: **Rural Economics**

Sub. Code: 21ECO3E1AL	L: T:P= 4+0+0=4
Credits: 4	Category: DSE1

Course Objectives:

1. To be familiar with the Nature, Scope and Features of Rural Economy
2. To identify the Rural Poverty, Unemployment, Banking, Infrastructure, Industries and Agriculture

Course Outcome:

At the end of the course students are able to:

CO1: alternative approaches to rural development

CO2: understand root causes for rural poverty and unemployment their solutions.

CO3: examine the various financial facilities to rural economy

CO4: know importance of Co-Operative marketing.

CO5: analyse the different policy efforts of Government to improve rural infrastructure.

Module I	Introduction of Rural Development	12
Nature, Scope, Features, and Importance of Rural Economy. Rural Development Indicators, Importance of Inclusive growth and Sustainable development in Rural Economy Various approaches of Rural Development; Basic Needs Approach, Employment-oriented Integrated Approach to Rural Development, Integrated Development Approach, Growth Centre Approach, Community-driven development (CDD) or Approach and Gandhian Approach and its current relevance.		
Module II	Poverty and Unemployment in Rural Economy	11
Rural Poverty: Nature, Causes and consequences of rural poverty, Types of Rural poverty, Concepts of AAY, BPL and APL. Various estimation criteria for Rural Poverty, N.C. Saxena Committee on Rural Poverty Rural Unemployment: Nature, Causes and consequences of rural Unemployment, Types of Rural Unemployment, Disguised Unemployment and Rural Agriculture Various Poverty Alleviation and Employment Generation Programmes in Indian Rural Economy		
Module III	Banking and Finance for rural Economy	10
Banking system in Rural Economy; Cooperative Societies, RRBs, NABARD, NBFCs; MFI and		

SHGs-BLP.		
Rural Economy; Priority Sector Lending, Financial Inclusion, Kisan Credit Card, Swabhiman scheme and PMJDY, Bank Mitra / Banking Correspondent Agent (BCAs), MUDRA		
Module IV	Rural Agriculture Finance and Marketing	11
Agriculture, Nature, Type of Agriculture, Subsistence, Commercial Agriculture, Rural Dairying. Agricultural Finance – Need for Agricultural Finance, Sources of Agricultural Finance, role of NABARD in financing agriculture Agricultural Marketing – Marketing of Agricultural produces, Cooperative Marketing. NAFED		
Module V	Rural Industries and Infrastructure Programmes	11
Rural Industry; Features and Problems of Rural Industries, Cottage, Handlooms and Khadi Industries in Rural Economy. Infrastructure Programmes: Bharat Nirman, MGNREGA, PMAY-G, PMGSY, DDUGKY, Mission Antyodaya, DAY-NRLM,		

Suggested Readings:

1. Dutt and Sundaram (2013): Indian Economy, S.Chand Publications, New Delhi.
2. Katar Singh (2016): Rural Development –Principles, Policies and Management, SAGE Publications India Private Limited
3. Katar Singh (2009): Rural Development: Principles, Policies and Management, SAGE Publications Pvt. Ltd
4. K. Venkata Reddy (1988): Rural Development in India: Poverty and Development, Himalaya Publishing House, Mumbai.
5. K. Venkata Reddy (2017): Agriculture and Rural Development, Himalaya Publishing House, Mumbai
6. Manoj Dolli and R Panduranga (2021): Bharathada Arthikate (Indian Economy), HSRA Publication, Bangalore
7. Mishra, S.K. and Puri V.K. (2012) - Economics of Development and Planning, Himalaya Publishing House, Mumbai.
8. Mukundan, N. (2009): Rural Development and Poverty Eradication in India, New Century Publications.
9. R. C. Meena (2010): Indian Rural Economy, Shree Niwas Publications
10. Vasant Desai (1983): A study of Rural Economics: A systems approach, Himalaya Publishing House, Mumbai.
11. Vasant Desai (2012): Rural Development in India, Himalaya Publishing House, Mumbai.

M. A in Economics; Semester-III

Subject Title: **Financial Economics**

Sub. Code: 21ECO3E1BL	L: T:P = 4+0+0=4
Credits: 04	Category: DSE1

Course Objectives:

1. To impart the knowledge on various financial Economics aspects
2. To make students familiar with financial theories and reforms in financial market

Course Outcome:

At the end of the course students are able to:

CO1: understand different financial market

CO2: know various instruments of financial economics

CO3: analyse theories financial economics

CO4: find out reforms in financial markets

CO5: understand Indian Financial Markets

Module I	Introduction to Financial Economics	10
Introduction to Financial Economics: Meaning, Principals, Nature and Scope of Financial Economics, Behavioural Finance, Financial Economics v/s Traditional Economics, Indian Financial system, intermediaries of Indian financial system Finance and Development and Role of Financial Economics		
Module II	Money Market	13
Introduction to Money Market: meaning, objectives and features of money market. Money market instruments: Treasury Bills, Commercial Bills, Certificate of Deposit, Commercial Paper and Call Money; Importance of Money Market; Regulatory framework of Money Market RBI, FIMMDA (Fixed Income, Money Market and Derivatives Association) and FEDAI (Foreign Exchange Dealers Association of India)		
Module III	Capital Market	12
Introduction to Capital market; meaning, types, Features and Functions of Capital Market Capital market instruments; Equities, Debt Securities, Derivatives, Exchange-Traded Funds, and Foreign Exchange Instruments. Functions and Role of Securities and Exchange board of India in Indian Capital Market,		
Module IV	Financial Economics Theories	11
Theory of Monetarism, Milton Friedman's Monetary Theory, James Tobin's Monetary Theory, Modern Monetary Theory, Rational Expectations Theory, Efficient Markets Hypothesis, Greater Fool Theory, Monetarism v/s Keynesianism.		

Module V	Reforms in Financial Markets	12
Reforms in Money Market:Deregulation of Interest Rates, Reforms in Call and Term money market, Introduction of new money market instruments, setting up Discount and Finance House of India, Introducing Liquidity Adjustment Facility and Debt Recovery; Reforms in Capital Market; SEBI, Creditors Rating Agencies (CRISIL,ICRA,CARE),OTCEI. BSE and NSE		

Suggested Readings:

1. Bharati V. Pathak (2007): The Indian Financial System: Markets, Institutions and Services, Pearson Publications.
2. Gautam Chikermane (2021): India 2030: Rise of a Rajasic Nation: A deep dive into India's financial and economic policies, Penguin eBury Press.
3. H R Machiraju (2010): Indian Financial System, Vikas Publication House (Pvt.) Ltd.
4. Namit Arora (2022): Financial Management & Economics for Finance, Taxman Publishers.
5. Niti Bhasin (2014): Indian Financial System: Evolution and Present Structure, New Century Publications
6. Sanjay Prakash Sharma AC Mittal (2002): Indian Financial Economics, RBSA Publishers
7. Paramita Mukherjee (2022): Revisiting the Indian Financial Sector: Recent Issues and Perspectives, Springer Verlag, Singapore
8. M. Y. Khan (1980) Indian Financial System: Theory and Practice, Mc Graw Hill Publications.

M. A in Economics; Semester-III

Subject Title: **Economics of Service Sector**

Sub. Code: 21ECO3E1CL	L: T:P = 4+0+0=4
Credits: 04	Category: DSE1

Course Objectives:

1. To make students familiarise with Economics Services Sector
2. To make understand Higher Education, Health Sector and Insurance sector and transport and banking sector in India

Course Outcome:

At the end of the course students are able to:

CO1: understand basic concepts of Service sector

CO2: analyse the Indian higher education system

CO3: find out various regulatory authority in health and insurance sector

CO4: examine impact of Health on education and poverty

CO5: find out problems of transport and banking sector in India

Module I	Introduction	11
Basic Concept of Services, Services vs. Goods, Participants in services. Types of services, Growth of Service Sector. Sector Composition, Changes in employment structure. Trade in Services, Four Modes, Liberalization in Services, and General Agreement on Trade in Services (GATS). Classification of Services, Central Product Classification (CPC). Importance of Service sector in economic development		
Module II	Service Sector in India	10
Introduction, Service sector and GDP, Employment in Services, State-wise Comparison of services, FDI in Service Sector. Causes of Growth in Service Sector; Factors behind Increased Share of Service Sector, Demand Side Factors, Supply Side Factors: Trade Liberalization and Reforms, Causes for Change in Employment Structure. Long Term Growth Implications		
Module III	Indian Higher Education in Service Sector	12
Human Capital, Introduction, Human Capital Theory and importance of Human capital Introduction, Review of Educational Principles. University Grants Commission (UGC), RUSA, National Education Policy 2020 (NEP 2020); Education Quality Upgradation and Inclusion Programme (EQUIP) Gross Enrolment Ratio (GER), Global Initiative Academic Network (GIAN) and Public-private Partnership (PPP) in Education		
Module IV	Health and Insurance Sector	11
Introduction, health Sector, Poverty v/s Health. Education and Health; education v/s health.		

Nutrition and Health. Over-nutrition and under-nutrition, Rural Health, National Health Mission, budget allocation for health sector.

Insurance, meaning, types of insurance and Role of Insurance Regulatory and Development Authority of India (IRDAI)

Module V

Transport and Banking Sector

12

Introduction, modes of transport in india, PPP Model in transport system, government schemes for upgrading transport system, role of transport in economic development.

Structure of Indian Banking System; RBI- Commercial Banks-Cooperative banks- Regional Rural Banks, scheduled & non-scheduled banks, Role of banking system in the economic development.

Suggested Readings:

1. Chakradhar (2020): Economics of Social Sector and Environment, Shri Chakradhar Publication (Pvt.) Ltd.
2. Dwivedi (2009): Service Sector in India, NehaPublishers, ISBN: 9788184350340, 9788184350340
3. Gullybaba (2019): Economics of Social Sector and Environment, Gullybaba Publishing House Pvt Ltd.
4. Jayasheela (2011): Service sector in India a sectoral analysis, Neha Publishers
5. Jan Owen Jansson (2013): The Economics of Services: Microfoundations, Development and Policy, Edward Elgar Publications, USA.
6. Nayyar Gaurav (2010): The Service Sector in India's Development, Cambridge University Press
7. Rashmi Joshi (2008): Issues and Experiences in Service Sector Growth, ICFAI University Press
8. S. JeyakumarV. Muthukumar (2020): Service Sectors in India Issues, Challenges & Opportunities, Right Books India, ISBN: 9789386088505, 9386088509
9. Sreenivas Talluru (2010): Service Sector in Indian Economy, Discovery Publishing House Pvt. Ltd.

M. A in Economics; Semester-III

Subject Title: **Economics of Regional Disparity**

Sub. Code: 21ECO3E2AL	L: T:P= 4+0+0=4
Credits: 4	Category: DSE2

Course Objectives:

1. To describe the various regional disparities in India
2. To understand the theories and remedial measures for Regional Disparities

Course Outcome:

At the end of the course students are able to:

CO1: know the Causes and Consequences of Disparities

CO2: recognize the various theories of Regional Disparities

CO3: know centralised and decentralised planning and regional planning processes

CO4: be familiar with the background of Kalyan Karnataka Region

CO5: understand the D M Nanjundappa Committee Report

Module I	Introduction	12
	Regional Disparity, Meaning, Types, Causes, Consequences, Indicators, Regional Disparity and Domestic Product, Regional Disparity V/S Agricultural Development, Industrial Development and Infrastructural Development, Measuring Regional Disparities and remedial measures for Regional Disparities.	
Module II	Disparities and Regional Development Theories	12
	Liberally endogenous development approach, exogenous Keynesian approach, extremely intervention Marxist-socialist approach, modern neo-endogenous approach, balanced growth theory and unbalanced growth theory. Classification Of Regional Disparities, vertical perspective, horizontal perspective.	
Module III	Identification and Decomposition Of Disparities	10
	Disparities of physical nature, Disparities of economic nature - Economic potential, Economic structure, Development potential, Disparities of social nature-Population, Social infrastructure, social pathology, social infrastructure.	
Module IV	Planning for Regional Disparities	13
	Development strategy of planning: Need of planning for natural, social and economically background regions. Tribal area development planning. Regional Planning Processes – sectorial, temporal, and spatial and multi level planning.	

Centralized and Decentralized planning; Block and District level planning and Integrated Area Development Planning (IADP), constitutional provision for regional disparities.		
Module V	Regional Disparity and D M Nanjundappa's Committee	12
Features of Kalyan Karnataka Region, Causes for backwardness of Kalyan Karnataka Region, HDI report of Kalyan Karnataka Region. D M Nanjundappa's Committee; introduction, Implementation Process, highlights and Recommendations of the Committee. Constitutional Provision of Article 371 (J) and its achievements.		

Suggested Readings:

1. Kanak Kanti Bagchi (2011) ; Regional Disparities in India's Socio-Economic Development, New Century Publications; 1st edition
2. Nachimuthu V ;Regional Economic Disparities in India,New Century Publications
3. Pulla Rao (2012); Regional Economic Disparities In India, Abhijeet Publications
4. R.K. Gulati (2002); Regional Disparities in Economic Development,Deep & Deep Publications
5. D M Nanjundappa's Report
6. http://disparity.vsb.cz/edice_cd/cd11_regdis_mono_angl/pdf/Regional%20disparities.pdf

M. A in Economics; Semester-III

Subject Title: **Environmental Economics**

Sub. Code: 21ECO3E2BL	L: T:P = 4+0+0=4
Credits: 4	Category: DSE2

Course Objectives:

1. To Provide a deeper understanding of economic issues related to natural resources and environmental issues
2. To provide an introduction to environmental valuation techniques.

Course Outcome:

At the end of the course students are able to:

CO1: Understand basic issues in environmental economics.

CO2: examine taxonomy of environmental economics

CO3: describe various command and control measures of environmental pollution.

CO4: find out various accounting and valuation system of environment

Module I	Introduction to Environmental Economics	10
Meaning –scope-Importance –Linkages between Environment and Development –Market Failure and Externalities – Environmental Problems –Trade-off between Economic Principles and Environmental Principles – Irreversibility and Uncertainty in Environmental Process –Limits to Growth – Sustainable Development.		
Module II	Economics of Use of Natural Resources	12
Resource Taxonomy, Economics of Exhaustible Resource-Scarcity Rents, Hotelling’s Theory of Optimum Depletion and Club of Rome Approach - Recent Developments - Common Property Resources- physical and economic measures of Resource Scarcity as Limits to Growth - the resource curse hypothesis - Inter-Temporal Efficiency, Inter-Generational Equity; Nexus between Poverty and Environment - Energy and Economic Development.		
Module III	Environmental Pollution	12
Pollution as Externality; Extent, Causes and Consequences of Degradation of Land and Mineral Resources, Water, Forests, Coast Lines, and Air – Loss of Bio-diversity; Economics of exhaustible resources – optimal depletion, inter-temporal efficient allocation, role of substitutes; Pollution Abatement - Polluter Pay Principle - Theory of Environmental Regulation – Property Rights approach, and Transaction costs, Pigouvian approach and Taxes, Free-Lunches: The Double Dividend and Porter Hypotheses Environmental Taxes, Coase theorem, Command and Control Versus Market Based Instruments, Standards, Quotas, Tradable Permits; Environmental Regulation System-Design, Monitoring and Enforcement.		
Module IV	Environmental Accounting and Valuation	12
Need for Natural/Environmental Accounting, benefits, Use and Non-use Values – Valuation of Environmental inputs - Green GDP methods of Environmental Valuation-Cost Benefit Analysis - Valuation of Selected Environmental Assets- Valuation of Agricultural land, forests, and aqua-		

resources – System of Integrated Environmental and Economic Accounting (SEEA); Hedonic Pricing method - Housing and labour markets; Travel Cost Method, Random Utility Model (RUM); Contingent Valuation Method, Valuing Longevity and Health, Production Function Approach.

Module V	Global Environmental Issues	10
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Globalisation and Environment -Trade and Environment - Implications for Environmental Sustainability- International Agreements and Mechanisms National Initiatives – Role of NGOs - Global warming – climate change and Environmental Management; the Montreal Protocol, WTO and TRIPS as related to environmental issues, IPCC Assessments.

Suggested Readings:

1. Baumol, W.J. and W.E. Oates (1986): *The Theory of Environmental Policy*, Cambridge University Press, Cambridge.
2. Bhattacharya, R.N. (2002): *Environmental Economics: An Indian Perspective*, Oxford University Press, New Delhi.
3. Chay, K. and Greenstone, M () 2005: “Does Air Quality Matter? Evidence from the Housing Conrad, Jon M.: *Resource Economics*, Cambridge University Press.
4. Daly, H.E. (1999): *Ecological Economics and Ecology of Economics*, E. Elgar Publisher.
5. Fisher, Anthony C. (1981): *Resource and Environmental Economics*, Cambridge University Press.
6. Goulder and Parry (1984): “Green Tax Reform and the Double Dividend.” *RFF Newsletter*.
7. Hahn and Dudley (2007): “How Well Does the US Government Do Benefit-Cost Analysis?” *Review of Environmental Economics and Policy*. 1(2):192-211.
8. Hamilton (1995): “Testing for Environmental Racism: Prejudice, Profits, and Political Power?” *Journal of Policy Analysis and Management*. 14(1):107-132.
9. Hanley, N., J.F.Shogren and B.White (1997): *Environmental Economics*, Macmillan, New Delhi. (Travel cost method)
10. Hartwick, J.M. and N. Oliwiler (1997): *The Economics of Natural Resource, Use Harper and Raw*, New York
11. Karpagam, M. (2007): *Environmental Economics: An Introduction*, Sterling Publishers, New Delhi.
12. Kerr and Others (Eds) (1997): *Natural Resource Economics: Theory and Applications for India*, Oxford University Press, New Delhi.
13. Kolstad, C.D. (2010): *Environmental Economics*. Oxford University Publications USA; 2nd edition. ISBN: 9780199732647
14. Krupnick, A. and Juha Siikamaki (2002): “How people value what nature provides.” *Resources. Market” Journal of Political Economy*, (Hedonic method).
15. Matyhew A. (1996): Cole Trade Liberalization, Economic Growth and the Environment. Power?” *Journal of Policy Analysis and Management*. 14(1):107-132. *Science*, 272: 220-222
16. Sengupta, R. (2003): *Ecology and Economics*, Oxford University Press, New Delhi
17. Shankar, U. (2001): *Environmental Economics*, Oxford. *University Press*.

18. Singh, Katar and nil Shishodia (2007): Environmental Economics; Theory and Applications, Sage Publications, New Delhi
19. Spring (2007): 14-16. http://www.rff.org/rff/News/Features/upload/28493_1.pdf .
(Contingent Valuation Method)
20. Tietenberg, T (2008): Environmental and Resource Economics, Routledge Publications

M. A in Economics; Semester-III

Subject Title: Time Series Analysis

Sub. Code: 21ECO3E2CL	L: T:P = 2+0+0=2
Credits:02	Category:

Course Objectives:

1. The objective is to provide students with essential expertise to understand the theory of time series econometrics.
2. To understand the empirical models of time series econometrics

Course Outcome:

At the end of the course, students are able to:

CO1: Understand the tools and techniques of univariate and multivariate time series.

CO2: Understand the nature and technique of analysing the time series data.

CO3: Build empirical models and application of econometric tools

CO4: Able to analyse the time series data and understand its statistical properties

CO5: Understand both univariate and multivariate time series methods

Module I	Time Series Econometrics: Basic Concepts	13
<p>Some Basic Concepts – Characteristics and Properties of Time series Models – Objectives of Time Series Analysis- Simple time series models – some zero-mean models – Models with Trend and Seasonality-</p> <p>A General Approach to Time Series Modelling -Estimation and Elimination of Trend and Seasonal Components</p>		
Module II	Time Series Econometrics: Stochastic Processes	12
<p>Stochastic Processes – Properties of Stationary Stochastic Processes –</p> <p>Basic Properties of Nonstationary Stochastic Processes – Unit Root Stochastic Process – Trend Stationery and Difference Stationary Stochastic Processes – Integrated Stochastic Processes - Forecasting Stationary Time Series</p>		
Module III	Time Series Econometrics: Tests of Stationarity	11
<p>Tests of Stationarity – Graphical analysis – Autocorrelation Function (ACF) –Partial Autocorrelation Function and Correlogram – Statistical Significance of Autocorrelation Coefficients - Unit Roots in Time Series Models - Unit Roots in Autoregression - Unit Roots in Moving Averages - Unit root tests – ADF Test -The Phillips–Perron (PP) Unit Root Test.</p>		
Module IV	Time Series Econometrics: Nonstationary Series	12

Transforming Nonstationary time series – Difference-Stationary processes and Trend stationary processes - Cointegration: Regression of a Unit root Time series on another unit root time series - Testing for Cointegration.

Module V

Time Series Econometrics : Forecasting

12

Exponential Smoothing Methods – Single Equation Regression Models – Simultaneous Equation Models – ARIMA Models – VAR Models.

Suggested Readings:

1. Brockwell. J.P and Richard A. Davis (2002), Introduction to Time Series and Forecasting, Springer-Verlag
2. Gujarathi. D (2007), Basic Econometrics, Macgraw Hill, International Student Edition.
3. Montgomery. C. Douglas, Jennings L. C and Kulahci, M (2008), Introduction to Time Series Analysis and Forecasting, A John Wiley & Sons, Inc.

M. A in Economics; Semester-III

Subject Title: **Managerial Economics**

Sub. Code: 21ECO3G1AL	L: T:P = 2+0+0=2
Credits: 02	Category: GEC1

Course Objectives:

1. To familiarize with the students the importance of economic approaches in managerial decision making
2. Apply the economic way of thinking to individual decisions and business decisions.

Course Outcome:

At the end of the course students are able to:

CO1: Understand different objectives of business firm.

CO2: Know the determinants of demand and supply.

CO3: Get knowledge about different pricing strategies & practices

Module I	Introduction to Managerial Economics	8
Managerial Economics: Meaning – Nature - Scope and Significance, Role and Responsibilities of Managerial Economist; Theory of the Firm: Firm and Industry; Objectives of the firm, alternate objectives of firm.		
Module II	Demand and Supply Analysis	11
Demand: Definition, Law of Demand - Exceptions to the Law of Demand; Elasticity of Demand: Price - Income and Cross Elasticity of Demand; Uses of elasticity of demand for managerial decision making, Measurement of elasticity of demand. Law of supply, Elasticity of supply.		
Module III	Cost & Production Analysis and Pricing Strategies - Practices	11
Concepts of Production - Production Function - Law of Variable Proportions; Iso-Quant and Iso-Cost line, least cost combination factor, Economies of Scale, Diseconomies of Scale, Cost Curve relations in short run; Break Even Analysis: Meaning - Uses of BEA in Managerial decisions; Pricing Strategies: Full cost pricing - Product line pricing, Pricing Strategies: Price Skimming, Penetration Pricing, Loss leader pricing, Peak Load pricing.		

Suggestive Readings:

1. Ahuja, Samuelson & Marks (2014): Managerial Economics, S.Chanda Publications
2. DwivediD.N. (2016): Managerial Economics, Vikas Publishing Company.

3. Mithani D.M. (2015): Managerial Economics, Himalaya Publication House.
4. Panneerselvam R., Sivasankaran P., Senthilkumar P. (2015): Managerial Economics, Cengage Publications.
5. Samuelson and Marks (2015): Managerial Economics, Wiley Publications, 5th Edition.
6. Varshney L. and K.L. Maheshwari (2015): Managerial Economics by SultanChand and Sons

M. A in Economics; Semester-III

Subject Title: **Monetary Economics**

Sub. Code: 21ECO3G1BL	L: T:P = 2+0+0=2
Credits: 02	Category: GEC1

Course Objectives:

1. To provide an introduction to monetary theory and effects of monetary variables on the macroeconomic system.
2. Enable students to understand the role of the central bank in the conduct of monetary policy.

Course Outcome:

At the end of the course students are able to:

CO1: Understand Indian financial system.

CO2: Know the determinants of demand and supply for money.

CO3: Analyse the interconnection between the monetary forces and real forces

Module I	Introduction to Monetary Institutions	10
Nature of Financial System and Financial Markets in India; Classification of Commercial Banks- Private and Public; Regional Rural Banks; Cooperative Banks; Development Banks; Non-Bank Financial Intermediaries.		
Module II	Demand and Supply of Money	10
Demand for Money: Keynes, Tobin's Portfolio, Baumol's Transaction Demand for Money - Friedman's Restatement of Quantity Theory of Money. Supply of Money: Gurley-Shaw's approach – Behavioural Approach of Money Supply-Concept of Exogenous Money Supply, Friedman's Theory – Endogenous Money Supply.		
Module III	Monetary Policy and Central Banking	10
Functions-credit control-Monetary policy-objectives-instruments of monetary policy-uses of monetary policy-limitations- effectiveness of monetary policy in India. Recent Developments on Financial Inclusion, Jan Dhan Yojana		

Suggested Readings:

1. Bhole, L. M. (1999): Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi

2. Gupta, S B. (1995): Monetary Economics Institutions and policy, S. Chand & Company, New Delhi
3. Gupta, Suraj B. (2016): Monetary Economics: Institutions, Theory and Policy, S. Chand and Company Private Limited, New Delhi
4. Gupta S. B. (2010): Monetary Economics- Institutions, Theory and Policy, S. Chand & Company, New Delhi
5. Jhingan M. L. (2012): Monetary Economics, 7th Edition, Vrinda Publications Pvt. Ltd, New Delhi
6. Paul R. R. (2018): Monetary Economics, Kalyani Publishers.

M. A in Economics; Semester-III

Subject Title: **Karnataka Economy**

Sub. Code: 21ECO3G1CL	L: T:P = 2+0+0=2
Credits: 02	Category: GEC1

Course Objectives:

1. To familiarize with the students the Karnataka economy
2. Insights about Karnataka state revenue and expenditure of the state

Course Outcome:

At the end of the course students are able to:

CO1: Understand the nature of economic growth and problems of Karnataka state;

CO2: Explain the process of structural growth in Karnataka economy;

CO3: Evaluate the policies and programmes undertaken by the state government

Module I	Introduction to Karnataka Economy	10
Characteristics of Karnataka Economy; Growth of Karnataka Economy; State Domestic Product and PCI; Demographic Features; Human Development Index; Important Anti-Poverty and Employment generation Programmes; Functioning of Panchayat Raj Institutions.		
Module II	Agriculture and Industries in Karnataka	11
Importance of Agriculture; Problems in Agriculture; Land Reforms; Cropping Pattern; Irrigation; Farmers Suicide – causes and solutions. Major Industries in Karnataka - Problems and Prospects; MSMEs - Problems and Measures; Industrial Finance in Karnataka; Industrial Policy of Karnataka		
Module III	Infrastructure and State Budget	11
Infrastructure Development in Karnataka: Transportation - Information and Communication Technology facilities; Social Infrastructure in Karnataka. State Finance: Sources of Revenue and Expenditure pattern - GST – Impact and Collections; Analysis of recent state budget.		

Suggested Readings:

1. Madaiah M & Ramapriya. Karnataka Economy Growth: Issues and Development, Himalaya Pub., House, New Delhi.
2. Adul Aziz and K.G. Vasanti. (Eds) Karnataka Economy.

3. Hanumantha Rao. Regional Disparities and Development in Karnataka.
4. Krishnaiah Gowda H.R. Karnataka Economy, Spandana Publications, Bangalore
5. Nanjundappa D.M. Some Aspects of Karnataka Economy.
6. Puttaswamiah K. Karnataka Economy, Two Volumes

M. A in Economics; Semester-III

Subject Title: **Econometric Techniques**

Sub. Code: 21ECO3C3T	L: T:P = 0+2+0=2
Credits: 2	Category: DSCT

Course Objectives:

1. To provide tutoring support for students taking Econometrics
2. To enhance the understanding of basic econometric techniques.

Course Outcome:

At the end of the course students are able to:

CO1: Understand the idea of the Linear Models.

CO2: Independently analyse data and synthesize results.

CO3: Apply regression models to economic problems.

Module I	Linear Regression - Estimation	8 Hours
OLS - Properties of the Least Squares estimates: Classical Normal Linear Regression Model (CNLRM)- Gauss Markov Theorem- Derivation of OLS Estimators – Consistency, Linearity and Unbiasedness of Least Squares estimates- ANOVA approach to Regression: ANOVA Table- Maximum Likelihood estimation		
Module II	Problems Of Linear Regression Model	10 Hours
Multicollinearity –Nature – Causes -Consequences – Detection - Remedial measures. Heteroskedasticity- Nature – Causes -Consequences – Detection - Remedial measures. Auto-correlation - Nature – Causes -Consequences – Detection - Remedial measures		
Module III	Hypothesis Testing	8 Hours
Confidence intervals for Regression Coefficients- Hypothesis testing: Confidence interval approach- One tail test, two tail test, Test of significance approach- testing significance of regression coefficients – t test, p value. Concepts of Likelihood Ratio, Wald and Lagrange Multiplier tests.		

Suggested Readings:

8. Greene, William (2018): Econometric Analysis. Eighth ed. Pearson Education ISBN:9353061075.
9. Gujarathi, Damodar (2007): Basic Econometrics McGraw Hill, International Student edition.
10. Gujarathi, Damodar (2022): Econometrics by Example. Bloomsbury India, 2022. ISBN: 9354356117
11. Johnston, Jack and John Dinardo (1997): Econometric Methods. McGraw Hill / Asia; 4th edition, ISBN-10: 0071259643.

12. Kennedy, Peter (2002): A Guide to Econometrics. Wiley-Blackwell; 6th Ed. ISBN: 1405182571
13. Koutsogiannis (2001): Theory of Econometrics (Second Edition) by Palgrave Publication.
14. Woolridge, Jeffrey (2019): Introductory Econometrics: A Modern Approach. South-Western College Publishing; 7th edition, ISBN: 1337558869