



Fergusson College (Autonomous), Pune
Learning Outcomes-Based Curriculum for
M.A. II - Economics

NEP 2020

With effect from Academic Year

2024-2025

Program Outcomes (POs) for M.A Programme

PO1	<p>Disciplinary Knowledge: Demonstrate comprehensive knowledge and a strong theoretical grounding in their area of work.</p>
PO2	<p>Critical Thinking and Problem solving: Identify problems by closely examining the situations around them and think holistically about the phenomena and generate viable solutions to these problems. Exhibit the skill of critical thinking and understand scientific texts and place scientific statements and themes in contexts and also evaluate them in terms of generic conventions. Identify the problem by observing the situation closely, take actions and apply lateral thinking and analytical skills to design the solutions.</p>
PO3	<p>Social competence and communication skills: Demonstratability to accommodate the views of others and present their own opinions and complex ideas, in written or oral form, in a clear and concise manner in group settings. Exhibit thoughts and ideas effectively in writing and orally; communicate with others using appropriate media, build effective interactive and presenting skills to meet global competencies. Elicit views of others, present complex information in a clear and concise and help reach conclusion in group settings.</p>
PO4	<p>Research-related skills and Scientific temper: Infer scientific literature, build sense of enquiry and able to formulate, test, analyse, interpret and establish hypothesis and research questions; and to identify and consult relevant sources to find answers. Able to plan and write a research paper/project while emphasizing on academics and research ethics, scientific conduct and creating awareness about intellectual property rights and issues of plagiarism.</p>
PO5	<p>Trans-disciplinary research competence: Create new conceptual, theoretical and methodological innovations that integrates and transcends beyond discipline-specific approaches to address a common problem.</p>
PO6	<p>Personal and professional competence: Perform independently and also collaboratively as a part of team to meet defined objectives and carry out work across interdisciplinary fields. Execute interpersonal relationships, self-motivation and adaptability skills and commit to professional ethics.</p>
PO7	<p>Effective Citizenship and Ethics: Demonstrate empathetic social concern and equity centred national development and act with an informed awareness of moral and ethical issues and commit to professional ethics and responsibility.</p>
PO8	<p>Environment and Sustainability: Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.</p>
PO9	<p>Self-directed and Life-long learning: Demonstrate attitudes of being a life-long learner who passionately pursues self-determined goals in the broadest context of socio-technological changes. Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.</p>

PSO No.	Program Specific Outcomes(PSOs) Upon completion of this programme the student will be able to
PSO1	Academic Competence: (i) To understand theoretical and analytical aspects involved with advanced economic theories and concepts. (ii) To conduct economic analysis using mathematical and statistical techniques.
PSO2	Personal and Professional Competence: (i) To apply both oral and written communication skills within the discipline.
PSO3	Research Competence: (i) To identify and demonstrate research questions in Economics and conduct the research independently with the help of qualitative and quantitative methodologies.
PSO4	Entrepreneurial and Social Competence: (i) To apply economic theory to real world issues. (ii) To critically analyse and evaluate economic issues in the country and around the world.

Programme Structure

Year	Course Code	Course Title	Credits
F.Y. M.A.	Semester I		
	ECO -501	Micro Economics-I	4
	ECO -502	Public Economics-I	4
	ECO -503	Macro Economics-I	4
	ECO -504 OR	Statistical Techniques	4
	ECO -505	Indian Economic Policy	
	ECO -510	Research Methodology	4
	Semester II		
	ECO -551	Micro Economics-II	4
	ECO -552	Public Economics-II	4
	ECO -553	Macro Economics-II	4
	ECO -554 OR	Mathematical Economics	4
	ECO -555	Agricultural Economics	
	ECO -560	OJT/FP OJT: On Job Training: Internship/ Apprenticeship; FP: Field projects	6
S.Y. M.A.	Semester III		
	ECO -601	International Economics and Finance-I	4
	ECO -602	Growth & Development-I	4
	ECO- 603	Modern Banking	4
	ECO -604 OR	World Economy	4
	ECO -605	Econometrics	
	ECO -610	Research Project I	4
	Semester IV		
	ECO -651	International Economics and Finance-II	4
	ECO -652	Growth & Development-II	4
	ECO-653	Advanced Research Methods	2
	ECO -654 OR	Economics of Environment	2
	ECO -655	Economics of Finance	
	ECO -660	Research Project II	6

SY MA Semester III

ECO601	International Economics and Finance I	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		
CO1	Understand advanced level of theoretical and factual nuances of trade and finance	
CO2	Analyse export and import management	
CO3	Comprehend international economy and financial management in an open economy	
CO4	Analyse trade and investment patterns	
CO5	Analyse foreign trade production, finance and foreign trade accounting	
CO6	Comprehend basic functions of trade and finance transactions	

Unit No.	Title of Unit and Contents	No. of Lectures
I	International Economy and Globalization 1.1 Overview of International Economics and Globalization 1.2 Concepts of Gains from Trade, Pattern of Trade and terms of trade, Foreign Trade Multiplier 1.3 Meaning and different shapes of Production Possibility Frontier	8
II	International Trade Theories: Orthodox and New 2.1 Mercantilism 2.2 Adam Smith's Absolute Cost Advantage 2.3 David Ricardo's Principle of Comparative Advantage 2.4 New trade theories: Skill as a Source of Comparative Advantage 2.5 Increasing Returns to Scale and Comparative Advantage 2.6 External Economies of Scale and Comparative Advantage 2.7 Linder Hypothesis 2.8 Intra-industry Trade, Gruber-Lloyd Index 2.9 Product Life Cycle Theory – Vernon 2.10 Government Regulatory Policies and Comparative Advantage Transportation Costs and Comparative Advantage	16
III	Tariffs & Nontariff Trade Barriers 3.1 The Tariff Concept 3.2 Types of Tariffs 3.3 Tariff Effects: An Overview 3.4 Tariff Welfare Effects: Consumer Surplus and Producer Surplus 3.5 Tariff Welfare Effects: Small-Nation Model 3.6 Tariff Welfare Effects: Large-Nation Model 3.7 How a Tariff Burdens Exporters 3.8 Import Quota, Types of Quotas, Quotas Versus Tariffs, Tariff-Rate Quota: A Two-Tier Tariff, Export Quotas, Domestic Content Requirements, Subsidies, Dumping.	18

IV	Trade Regulations and Industrial Policy 4.1 General Agreement on Tariffs and Trade 4.2 World Trade Organization 4.3 Protection From Imports 4.4 Protection Against Foreign Dumping/Export subsidies 4.5 Foreign Trade policy of India 4.6 Developing-Nation Trade Characteristics 4.7 Trade Problems of the Developing Nations 4.8 The OPEC Oil Cartel	18
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References:

1. Paul R. Krugman & Maurice Obstfeld (2009) International Economics Theory and Policy. Pearson Education Publication New Delhi
2. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle River, N.J., New York.
3. Robert J. Carbaugh, International Economics
4. James Gerber (2012) International Economics Pearson Publication. New Delhi
5. Chacholiades, M. (1990), International Trade : Theory and Policy, McGraw Hill, Kogakusha, Japan.
6. Kindleberger, C.P. International Economics, R.D. Irwin, Homewood.
7. Soderston, Bo (2005), International Economics, The Macmillan Press Ltd., London

ECO602	Growth and Development-I	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		
CO1	Familiarise students with the concepts of growth and development in LDC's and developing countries.	
CO2	Discuss the issues of economic development	
CO3	Examine the evolution of growth models as well as important concepts such as poverty, inequality and population dynamics in the context of developing countries.	
CO4	Examine the theory of demographic transition, rural urban migration, problems in urban and rural areas.	
CO5	Discuss issues of urbanization	

Unit No.	Title of Unit and Contents	No.of Lectures
I	Development and Underdevelopment: An Overview 1.1 Concepts of growth and Development 1.2 Problems in defining economic development 1.3 Characteristics of LDCs – structural view of underdevelopment 1.4 The world distribution of income and Development gap 1.5 Per capita income as an index of development 1.6 Alternative measures of development gap – HDI, PCI, HPI, PQLI, Planetary pressure adjusted HDI	15

II	Poverty and inequality 2.1 Defining poverty and problems of measurement 2.2 Income distribution - Income inequality, measurements of inequality, understanding inequality in developed and underdeveloped worlds; Vicious circle of poverty 2.3 Impact of inequality on the process of development 2.4 Debate on poverty in India	15
III	Theories of Economic Growth and Development 3.1 The Harrod Domar growth model and its application to LDCs 3.2 The Cobb Douglas Production Function 3.3 Karl Marx and Schumpeter – surplus labour 3.4 Big push (Rosenstein–Rodan) 3.5 Balanced growth : (Nurkse) & Unbalanced growth (Hirschman) 3.6 The Sen –Bhagwati Debate 3.7 Dual-economy models – broad policy implications -Lewis, Ranis-Fei, models and limitations 3.8 The process of cumulative causation (Myrdal) 3.9 The centre and periphery hypothesis – the dependency school	15
IV	Population growth and economic development 4.1 Population and Economic development in India 4.2 Population– the theory of demographic transition 4.3 Age structures of population and Sex ratio, Rural-urban migration and urban unemployment (Harris-Todaro model) 4.4 Problems of urbanization – Sanitation, Transportation, Housing, Employment markets formal, informal. 4.5 Rural-urban wage-gap (Labour turnover model and wage-efficiency model – their extensions and limitations)	15

References:

1. Todaro & Smith, Economic Development, Pearson
2. Debraj Ray Development Economics, Oxford
3. Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
4. Thirwal, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.
5. Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
6. Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols.1 & 2, Elsevier, Amsterdam.
7. Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
8. Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.
9. Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York Economics
10. Meier, G.M. (1995), Leading Issues in Economic Development, (6th Edition), Oxford University Press, New Delhi.
11. Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.
12. Meier G.M. leading Issues in Development Economics

ECO603	Modern Banking	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		
CO1	Show the role of Financial system in economic development and describe how bank works for their liquidity, safety & profitability & make balance sheet.	
CO2	Classify the whole structure of NBFCs in India and explain the working and role of IMF, IBRD, IDA, IFC.	
CO3	Examine the role & nature of Foreign Exchange markets & its impacts on Indian.	
CO4	Differentiate between the forms of foreign capital & regulation of it.	
CO5	Evaluate the impacts of Global Financial Crisis 2008 on developed & developing countries.	
CO6	Formulate solutions to the problems ahead to banking sector.	

Unit. No.	Title of Unit and Contents	No. of Lectures
I	Introduction 1.1 Nature, Structure and Role of Financial System in Economic Development 1.2 Functions of Financial System 1.3 Theory of Financial Development: Multiple Credit Creation Theory 1.4 Investment Policy of a Bank - Liquidity, Safety and Profitability. 1.5 Balance Sheet of a Commercial Bank.	16
II	Modern Banking in India 2.1 Evolution, Role and Functions of Modern Banks in India 2.2 Role of RBI in Modern Banking 2.3 Indian Money Market - Characteristics and Functions 2.4 Indian Capital Market - Characteristics and Functions 2.5 Reforms of Indian Money and Capital Market after 1991 2.6 Changing Trends in Banking Sector since 1991 2.7 Comments on the Present Status of Cooperative Banks and RRB 2.8 Foreign Banks in India and Their Impact on Indian Banking Sector 2.9 Capital Adequacy - Basel 2 & 3 2.10 Bank Holding Companies: Public and Private (EXIM Bank, SPB, ICICI & IDBI) 2.11 Current Challenges Faced by Banking Sector – Mergers and Amalgamations 2.12 Introduction to Financial Inclusion, and Benefits of Financial Inclusion 2.13 Other Topics: Microfinance, SHGs, and Chit Funds	28

III	Non-Banking Financial Institutions in India	16
	3.1 Nature, Types and Significance of NBFIs in India	
	3.2 Growth of NBFCs & Overview of Regulation of NBFCs in Current Scenario.	

References:

1. Bhole, L. M. [2000] 'Indian Financial System,' Chugh Publications, Allahabad.
2. Bhole, L. M. [2012]. 'Financial Institutions and Markets,' Tata McGraw Hill Co. Ltd. New Delhi.
3. Pathak, Bharati. [2009] 'The Indian Financial System,' Pearson Education Publication, New Delhi.
4. Harker, P.T. and S. A. Zenios.[2000]Ed. 'Performance of Financial Institutions, CUP, UK.
5. Prasad, K.N.[2001] 'Development of India's Financial System,' Sarup and Sons, New Delhi.
6. D. Muralidharan.[2009]'Modern Banking Theory and Practice,' PHI Learning Pvt. Ltd. New Delhi.
7. Sharma, K.C.[2007]'Modern Banking in India,' Deep and Deep Pub. New Delhi.
8. Uppal,R.K. [2009]' Modern Banking in India – Dimensions and Risk' New Century Pub. New Delhi.
9. Shiller, Robert J.[2008 'The Sub-Prime Solutions- How Today's Global Financial Crisis happened and what to do about it.'
10. International Banking' Ed. MacMillan Pvt. Ltd. 2011. Indian Institution of Banking and Finance, New Delhi.
11. Practice of Law and Banking- G.S. Gill

Other Readings-

1. RBI Annual Reports and web site
2. Reports on Currency and Finance
3. Basel Committee Report on Banking Supervision, 2001.
4. RBI Bulletins, Economic and Political Weekly issues, Prajnan [NIBM] Daily, The Economic Times etc.

World Economy		
ECO604	World Economy	Number of Credits: 04
Course Outcomes (COs)		
On completion of the course, the students will be able to:		
CO1	Describe the state of the world economy in the 21 st Century.	
CO2	Discuss common issues faced by the world e. g. world recession, inflationary trends, impact of fluctuating prices of crude oil, gold etc.	
CO3	Examine these global economic issues in the light of India's development efforts.	
CO4	Analyse the development of the world economy over the years.	
CO5	Evaluate the role played by various Economic organizations and Regional Trading Blocs.	
CO6	Create recommended solutions towards world crises scenarios.	

Unit. No	Title of Unit and Contents	No. of Lectures
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I	Introduction to Global Economy 1.1. Meaning of Global Economy and its History 1.2. Structure and Components of Global Economy 1.3. Role of MNC's in World Economic Development 1.4. Effects of Globalization on Indian Economy	10
II	Regional Trade Blocs in the developed and developing economies Objectives and Role of: 2.1. OECD - Organization for Economic Cooperation and Development 2.2. OPEC - Organization of Petroleum Exporting Countries 2.3. EU - European Union and Creation of Euro 2.4. ASEAN - Association of South East Asian Nations 2.5. SAARC - South Asian Association for Regional Cooperation 2.6. BRICS – Brazil, Russia, India, China and South Africa	20
III	Introduction to transition economies. 3.1 Eastern Europe 3.2 Disintegration of the Soviet Union. What has been its impact on the region, Instability in the Balkans, Integration of former Soviet Bloc countries in the EU. 3.3 China: The emergence of China in world trade and industry, growth reforms. 3.4 Africa: Composition of the industry and trade, Possibilities and limitations. 3.5 Latin America: Debt crises. Brazil. Argentina. Mexico.	18
IV	Major World Economic Issues and its impact on India 4.1. Issues in South East Asia – The flying geese model 4.2. The Japanese bubble in real estate 4.3. U.S. Debt Crisis and its impact on India 4.4. Euro zone Crisis and its impact on India	12

References:

1. Francis Cherunilam .International Economics– The McGraw Hill Education Private limited, New Delhi
2. KenchandKeswani, International relations in Modern World, Himalaya Publication
3. P. V. Patwardhan ,World Economy 1914-1964, , Rajas Publication
4. Johnson Harry, World Economy at the crossroads, Oxford University Press
5. World Development Report
6. ShariEFF Afzal, World Political Geography Sarip Book Publication
7. Mishra and Puri , Indian Economy, Himalaya Publication
8. Bimal Jalan (2002) India's Economy in the New Millenium Bimal Jalan (2005) The Future of India: Politics, Economics and Governance

ECO605	Econometrics	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		
CO1	Illustrate the use of statistical techniques to analyse Economic data and relations.	

CO2	Understand regression models.
CO3	Carry out hypothesis testing.
CO4	Break down economic relationships with regression model.
CO5	Evaluate statistical significance of relationships.
CO6	Select appropriate statistical models for use in economic modelling. Generate economic models using simultaneous equations, qualitative data and time series data.

Unit. No.	Title of Unit and Contents	No. of Lectures
I	Introduction to Econometrics 1.1 Introduction 1.2 Uses of econometrics, 1.3 Specification of mathematical model and econometric model. 1.4 Types of Econometrics, Types of data	6
II	Single-Equation Regression Models 2.1 Two-Variable Regression Model -The Classical Linear Regression Model 2.2 The Assumptions Underlying the Method of Least Squares Estimation - The Method of Ordinary Least Squares Properties of Least-Squares Estimators: 2.3 The Gauss-Markov Theorem; 2.4 The Coefficient of Determination R^2 : A Measure of "Goodness of Fit" 2.5 Classical Normal Linear Regression Model (CNLRM), 2.6 Properties of OLS estimators under the normality assumption, the method of maximum likelihood (ML) 2.7 Demonstratiion and application through software	20
III	Interval estimation and hypothesis testing 3.1 Confidence intervals for regression coefficients 3.2 Hypothesis testing: confidence interval approach - two-sided test, one-sided test 3.3 Hypothesis testing: the test of significance approach 3.4 Demonstratiion and application through software	12
IV	Multiple regression analysis 4.1 Three variable model; notation, assumption, interpretation 4.2 The multiple coefficient of determination R^2 and the Multiple coefficientof correlation R 4.3 Regression n with Dummy Variables (ANOVA) 4.4 Testing for Structural Stability 4.5 Interactio n Effects. 4.6 Use of Dummy variables in Seasonal Analysis, use of dummy variables inCombining Time series and Cross Sectional Data 4.7 Demonstr	12

	ation and application through software	
V	Violations of Assumptions 5.1 Heteroscedasticity 5.2 Autocorrelation 5.3 Multicollinearity 5.4 Specification Bias 5.5 Demonstratiion and application through software	6
VI	Advanced topics in Econometrics 6.1 Simultaneous Equations Model – Identification problem, Order and Rank Conditions, ILS, 2-SLS 6.2 Qualitative Response Variable Models – LOGIT, TOBIT & PROBIT 6.3 Time Series – Random Walk Models, Unit Root Processes, Tests for Stationarity 6.4 Demonstratiion and application through software	4

References:

1. Damodar Gujarati: Basic Econometrics
2. A. H. Studenmund: Using Econometrics: A Practical Guide
3. Christopher Dougherty: Introduction to Econometrics
4. D. M. Nachane: Econometrics - Theoretical Foundations and Empirical Perspective
5. Jeffrey Wooldridge: Introductory Econometrics: A Modern Approach
6. Koutsoyinnis: Theory of Econometrics
7. G. S. Maddala: Introduction to Econometrics
8. G. S. Maddala: Econometric Methods
9. Hamilton: Time Series Econometrics

SY MA Semester III		
ECO651	International Economics and Finance II	Number of Credits: 04
Course Outcomes (COs) On completion of the course, the students will be able to:		
CO1	Understand advanced level of theoretical and factual nuances of trade and finance	
CO2	Analyse export and import management	
CO3	Comprehend international economy and financial management in an open economy	
CO4	Analyse trade and investment patterns	
CO5	Analyse foreign trade production, finance and foreign trade accounting	
CO6	Articulate various trade finance instruments via experiential learning	
Unit No.	Title of Unit and Contents	No. of Lectures

I	Regional Trading Arrangements and Economic Integration & The International Trade Accounting: The Balance of Payments 1.1 Regional Integration Versus Multilateralism 1.2 Types of Regional Trading Arrangements 1.3 Effects of a Regional Trading Arrangement 1.4 The European Union 1.5 Economic Costs and Benefits of a Common Currency: The European Monetary Union 1.6 The Multinational Enterprise 1.7 Motives for Foreign Direct Investment 1.8 Supplying Products to Foreign Buyers: Whether to Produce Domestically or Abroad 1.9 Country Risk Analysis 1.10 International Joint Ventures 1.11 International Labor Mobility: Migration	12
II	The Balance of Payments and Foreign Exchange 2.1 Double-Entry Accounting 2.2 International Payments Process 2.3 Balance of Payment structure 2.4 Foreign-Exchange Market 2.5 Types of Foreign-Exchange Transactions 2.6 Interbank Trading 2.7 Forward and Futures Markets 2.8 Foreign-Currency Options 2.9 Exchange-Rate Determination 2.10 Indexes of the Foreign-Exchange Value of the Dollar: Nominal and Real Exchange Rates 2.11 Arbitrage, Hedging, Speculation 2.12 Interest Arbitrage	11

III	Exchange-Rate Determination and Mechanisms of International Adjustment 3.1 What Determines Exchange Rates? 3.2 Long-Term Exchange Rates 3.3 Short-Term Exchange Rates: The Asset-Market Approach	8
IV	Exchange-Rate Adjustments and the Balance of Payments & Exchange-Rate Systems and Currency Crises 4.1 J-Curve Effect: Time Path of Depreciation 4.2 Fixed Exchange-Rate System, 4.3 Floating Exchange Rates, 4.4 Managed Floating Rates	9
V	Macroeconomic Policy in an Open Economy 5.1 Monetary in a Closed Economy 5.2 Fiscal Policy in a Closed Economy 5.3 Monetary in a Open Economy 5.4 Fiscal Policy in an Open Economy	9
VI	International Banking: Reserves, Debt, and Risk 6.1 Financing of Foreign Trade: Pre-shipment/Post-shipment finance, 6.2 Instruments: Letter of credit, Packaging credit, Bill of Lading, 6.3 Other instruments: Factoring, Forfeiting, Buyer's credit, Suppliers' credit, Overdraft, etc.	11

References:

1. Heller, Robert H., NJ: International Monetary Economics Prentice Hall, Englewood Cliffs
2. Kindleberger, Charls P., D.B. International Economics, Taraporewala and Sons, Mumbai
3. Rugel, Thomas A. International Economics, McGraw Hill, New Delhi.
4. Ellsworth P.T. and Clark J. Leith, The International Economy New York Macmillan Publishing Co.
5. RBI, Report ON Currency and Finance (annul).
6. Gowda, Venkatagiri K., Eurodollar Flows and International Monetary Stability, Geetha Book House, Mysore.
7. Verghese, S.K., Foreign Exchange and Financing of Foreign Trade, Vikas Publishing House, New Delhi.
8. Heller, Robert, H., International Monetary Economics Prentice Hall, Cliffs.
9. Salvatore, Dominick, International Economics Macmillan, New York Publishing Co. New York
10. International Trade Finance, Indian Institute of Banking and Finance, India.

11. Tarsem Bhogal; Arun Trivedi, International Trade and Finance, Palgrave Publication, New Delhi.

ECO652	Growth and Development-II	Number of Credits: 04
Course Outcomes (COs)		
On completion of the course, the students will be able to:		
CO1	Familiarise students with the problems of growth and development in developing and developed countries	
CO2	Articulate the role of agriculture and industrial sector in the development process of developing countries.	
CO3	Examine the various development models pertaining to financing development in developing countries	
CO4	Discuss issues affecting economic development in the modern world, concerning gender equality, forms of governance, political stability etc. And to study strategies relating to the same.	
CO5	Analyze the role of the government in the process of development and growth of a economy.	

Unit No.	Title of Unit and Contents	No. of Lectures
I	The role of agriculture and Industry in development 1.1 Role of Agriculture in development ‘Market surplus’ Size of holding, Price policy-FPC 1.2 Disguised unemployment 1.3 Role of industry – Major reasons for industrialization in LDCs 1.4 The Role of Infrastructure – social and physical infrastructure – education and health infrastructure	15
II	Policy Environment for growth and development 2.1 The infant industry argument – The employment argument Policy Environment 2.2 Ease of doing business India 2.3 Monetary Policy – trade policy 2.4 Trade as an engine of growth - foreign borrowing - Savings – Investment gap – The foreign exchange gap 2.5 Foreign borrowing and debt – servicing problem	15
III	Financing Development 3.1 Prior Savings approach 3.2 Fiscal Policy and Taxation 3.3 Tax Reform in Developing Countries 3.3.1 Inflation, Saving and Growth	15

	3.3.2 Foreign Direct Investment 3.4 The Keynesian Approach to the Financing of Development 3.5 The Quantity Theory Approach to the Financing of Development 3.6 The Dangers of Inflation	
IV	The role of the government 4.1 Market failures, government failures, role and emergence of institutions, role of state in economic development 4.2 Disinvestment Policy 4.3 Corruption - sources of corruption, channels through which it impacts economic development directly and indirectly, critical analysis of potential strategies to tackle corruption 4.4 Major Indian Policy reforms for growth and Development 4.5 Recent issues in Gender Development	15

References:

1. Thirlwall, A.P. (1999), (6th Edition), Growth and Development, Macmillan, U.K.
2. Ray, D. (1998). *Development Economics*. Princeton University Press.
3. Todaro, M. P., & Smith, S. C. *Economic Development*. Addison-Wesley.
4. Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols.1 & 2, Elsevier, Amsterdam.
5. Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
6. Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development,(3rd Edition), W.W. Norton, New York.
7. Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York
8. Meier, G.M. (1995), Leading Issues in Economic Development, (6th Edition), Oxford University Press, New Delhi.
9. Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.
10. NIPFP An autonomous research institute under the Ministry of Finance.
11. Economic and Political Weekly.

ECO653	Research Methodology	Number of Credits: 04
Course Outcomes (COs)		
On completion of the course, the students will be able to:		
CO1	Identify the information systems or sources of Internet.	

CO2	Categorise collected data by classification & tabulation and by using graphs & diagrams.
CO3	Employ statistical techniques to use like ANOVA and regression using SPSS and other software.
CO4	Identify the criteria for good research.
CO5	Decide on appropriate research techniques to use.
CO6	Prepare a research report by understanding stages & types of report writing and formulate a research problem hypothesis & research design.

Unit. No.	Title of Unit and Contents	No. of Lectures
I	Introduction to Research Methodology 1.1 Social Science Research – Objectives, Nature, Importance, Utility, Limitations and Difficulties 1.2 Types of Research 1.3 Meaning & Need for Research Design, and Stages Involved in Designing of Research 1.4 Research Eco System – Funding Models 1.5 Research Ethics – Intellectual Property Rights (IPR) 1.6 Research Process – Criteria of Good Research 1.7 Problems Encountered by Researchers in India	15
II	Sources of Data & Research Techniques 2.1 Data Collection - Sources of Data: Big Data and Technology 2.2 Primary - Interviews, Questionnaire, Observation, and Schedule 2.3 Collection of Secondary Data 2.4 Case Studies & Historical Methods, and Experiments & Surveys 2.5 Hypothesis - Definition, Formulation and Role 2.6 Sampling Technique – Need for Sampling, Fundamental Definitions, Types of Samples: Non-Probability Samples & Probability Samples, and Size of Samples	15
III	Research – Qualitative and Quantitative 3.1 Classification and Tabulation, Coding, Editing, and Questionnaire Checking 3.2 Graphs and Diagrams. 3.3 Measures of Central Tendencies: Mean, Median, and Mode 3.4 Dispersion & Correlation 3.5 Percentage & Bi-Variate Presentation 3.6 Hypothesis Testing, T-Test, and Chi Square Test 3.7 Application – Analysis of Data with Excel	15
IV	Information Systems & Visual Analytics 4.1 Information Systems, and Knowledge Management. 4.2 Global Information - Internet Surfing, Downloading, Blogs, and Mails. 4.3 Stages of Report Writing- Significance of Report Writing, and Types of Reports 4.4 Presentation - Power Point	15

References:

1. Wilkinson and Bhandarkar - Methodology and Techniques of Social research -Pauline, Young - Scientific Social Surveys and Research
2. Goode and Hatt - Methods in Social Surveys and Research
3. Krishnaswamy K.N. and Appa Iyer Sivakumar (2009): Management Research Methodology, Pearson Education Publication, N.Delhi
4. Sharma Prasad and Satyanarayana (ed) Research Methods in Social Sciences
5. Moser and Kalton - Survey Methods in Social Investigations
6. Sadhu and Singh - Research Methodology in Social Sciences
7. Kurein C. T. A guide to research in Economics.
8. Devendra Thakur - Research Methodology in Social Sciences
9. Basotia G.R. Sharma K.K.- Research Methodology.
10. Dr. Pushpa Ranade - Research Methodology & Techniques (Marathi Edition), Diamond Publications

Additional Reading List

1. Acoff. Russel L.(1961) The Design of Social Research, Chicago, Uni. of Chicago,
2. Allen, T. Harrell (1978) New Methods in Social Science Research. New York;Praeges Publishes.
3. Berdie, Douglas R. & Andesson, John F. (1974) Questionnaires, Design and use Metuchen N.J. the sear escrow press Inc.
4. Ghosh B.N. (1982) Scientific Methods & Social Research New Delhi, Sterling Publishers Pvt. Ltd.
5. Goode, William J. & Hatt, Paul K. (1952) Methods in Social Research, New York McGraw Hill.
6. Wilkinson and Bhandarkar – Methodology and Techniques of Social Research.
7. Pauline Young : Scientific Social survey and Research
8. Moser and Kalton : Survey methods in Social Investigations.
9. Kothari C.R. Research methodology New era Publication

ECO654	Economics of Environment	Number of Credits: 02
Course Outcomes (COs)		
On completion of the course, the students will be able to:		
CO1	Identify the key issues regarding sustainability, environmental degradation and economic growth.	
CO2	Examine important phenomenon in the context of environmental resource management.	
CO3	Specify ways in which education can be used for environmental protection and pollution control.	
CO4	Ability to develop an understanding of the economics of environment and various analytical tools to comprehend environmental issues.	

Unit No.	Title of Unit and Contents	No. of Lectures
I	Introduction to Economics of Environment: 1.1 Economics of Environment – Meaning, Nature, Scope, and Significance. 1.2 Inter linkages between the economy and environment 1.3 Environment as an Economic and a Social Good – Exhaustive and Renewable Common Property Resources 1.4 Sustainable Development	15

II	Environmental Challenges	15
	2.1 Environment and Agricultural Development – Technological Change –Use of Water, Fertilizers, Pesticides – Groundwater and Forest Depletion 2.2 Environment and Industrial Development – Pollution, Urbanization 2.3 Global Environmental Issues – Depletion of Ozone Layer, Green House Effect, GlobalWarming, Climate Change, Loss of Bio-diversity 2.4 India’s Environmental Policy, Environment Protection Laws	

References:

1. Baumol, W.J. & Oates, W.E. (1997), The Theory of Environmental Policy, Prentice Hall, Englewood-cliffs
2. Bhattacharya, R. N. (2006), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi
3. Field, Barry & Field, Martha (2016), Environmental Economics: An Introduction, McGraw-Hill Education, New York.
- 4 Managi, Shunsuke & Kuriyama, Koichi (2017), Environmental Economics, Routledge, London and New York
- 5 Singh, Katar & Shishodia, Anil (2010), Environmental Economics: Theory and Applications, Sage Publications, New Delhi
- 6 Smith, Stephen (2011), Environmental Economics: A Very Short Introduction, Oxford University Press, New York
- 7 Ulaganathan, Sankar (2006), Environmental Economics, OUP, New Delhi
Hanley N, Shogren J.F. & White B. Environmental Economics in Theory and Practice, Macmillan
9. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003.
- 10Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey Journal of Economic Literature, Volume 30:675-740.

ECO655	Economics of Finance	Number of Credits: 02
Course Outcomes (COs)		
On completion of the course, the students will be able to:		
CO1	Identify the role played by financial institutions in the growth and development of an economy.	
CO2	Explain the structure and functions of the various participants of the financial sector.	
CO3	Calculate security prices using the Capital Asset Pricing Model and Asset Pricing Theory.	
CO4	Analyse the mechanism and importance of derivative instruments in the functioning of the financial sector.	
Unit No.	Title of Unit and Contents	No. of Lectures

I	Financial Sector, Financial market and Economy 1.5 Role, Structure and Regulations of Financial sector in India. 1.6 Structure, Functions & instruments of Financial market in India. 1.7 Role of Rate of Interest, present value and future value of income. Internal Rate of Return, Net Present Value, Payback Period, ARR – its application as an evaluation criterion.	15
II	Portfolio Theory and Derivatives market 2.1 Capital asset pricing model and its validity 2.2 Arbitrage pricing theory 2.3 Modern portfolio theory 2.4 Derivatives - Futures Markets History, Hedgers, Speculators, Arbitrageurs 2.5 Swaps & Options market - Mechanics and types	15

References:

1. Bailey, R. E. (2009). *The Economics of Financial Markets*. Cambridge Univ. Press.
2. Baye, M. R., & Jansen, D. W. (1995). *Money, banking, and financial markets: an economics approach*. Houghton Mifflin.
3. Bodie, Z., Merton, R. C., & Cleeton, D. L. (2009). *Financial economics*. Pearson Prentice Hall.
4. Chandra, P. (2015). *Financial Management* (9th ed.). McGraw Hill.
5. Houthakker, H. S., & Williamson, P. J. (1996). *The Economics of Financial Markets*. New York: Oxford University Press.
6. Hull, J., & Basu, S. (2018). *Options, futures, and other derivatives*. Pearson.
7. LeRoy, S. F., & Werner, J. (2014). *Principles of Financial Economics*. Cambridge University Press.
8. Luenberger, D. G. (2014). *Investment science*. Oxford University Press.
9. Mishkin, F. S. (2016). *The Economics of Money, Banking, and Financial Markets*. Pearson.
10. Pathak, B. V. (2018). *Indian Financial System* (5^{ed.}). Pearson.
11. Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2019). *Fundamentals of corporate finance*. McGraw-Hill Education.
12. Smith, P. F. (1978). *Money and Financial Intermediation: the theory and structure of financial systems*. Prentice-Hall.