



MANIPAL UNIVERSITY  
JAIPUR



MANIPAL  
UNIVERSITY JAIPUR

*University under Section 2(f) of the UGC Act*

## **PROGRAMME PROJECT REPORT (PPR)**

**For**

**Master of Arts (Economics)  
(ONLINE DEGREE PROGRAMME)**

**CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)**

**MANIPAL UNIVERSITY JAIPUR**

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Manipal University Jaipur





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## **PROGRAMME PROJECT REPORT**

### **Introduction**

At every step in one's life, one needs to transform, to compete, and improve. In today's dynamic economic environment, being acquainted with concepts is not enough. It is essential to acquire and constantly upgrade knowledge about various dimensions of economics. The **Manipal University Jaipur** Online MA Economics Programme imparts knowledge and skill sets to students to achieve this, and face real world challenges. It teaches application of innovative practices to current economics situations. It incorporates analysis of contemporary issues besides providing a strong theoretical foundation. It provides a collaborative learning environment with dedicated faculty to ensure students achieve their full potential. The online MA Economics Programme teaches one to work smartly, take the lead in critical situations, and influence business decisions more effectively. It teaches one to not only work efficiently, but also shape the business environment and create opportunities for further growth.

The Online Master of Arts, Economics (MA Economics) Programme is a two-year Programme. With inclusion of various specialisations, the Programme aims at developing focused individuals with a strong understanding of their area of specialisation, even as the core subjects equip the students with fundamental economic theories and concepts along with less tangible, but equally important soft skills. The Programme is designed to instil confidence, improve knowledge, and act as a catalyst in the search for success and growth.

### **1. Programme's Mission and Objectives**

To offer a high-quality Master's degree in arts - Economics (MA Economics) through Online mode to the students and working professionals to help them develop Managerial and Leadership skills to enhance their career prospects. The students will be able to move up their career ladder and/or launch out on an entrepreneurial career.

The objectives of the programme include:

- Introduce students to the basic concepts and domains of economics including core concepts of economics as well as new specialized areas like Rural Economics, Agriculture Economics, Neuroeconomics, International Financial System, etc.
- Equip students with analytical skills and decision making.
- Hone Skills of students and enable them to practice quantitative method techniques.



- Inculcate entrepreneurial skills Managerial concepts with Leadership skills.
- Develop knowledge about emerging economic situations.

## **2. Relevance of Programme with Manipal University Jaipur Mission and Goals**

In order to align with the mission and goals of Manipal University Jaipur the Online MA Economics Programme is planned to enable students and working professionals gain knowledge in various domains of economics, specialize in a domain of their choice, gain knowledge of not only managerial skills including analytical, data based decision making and entrepreneurship, but also introduce them to Leadership role in newer and emerging economies and economic situations.

### **Vision**

Global Leadership in Higher Education and Human Development

### **Mission**

- Be the most preferred University for innovative and interdisciplinary learning
- Foster Academic research and professional excellence in all domains
- Transform young minds into competent professionals with good human values.

## **3. Nature of Prospective Target Group of Learners**

It is by now well accepted that a MA Economics degree is an important tool for professionals to enhance their knowledge of various challenging careers, expand their career options and move up their career ladder, acquired analytical skills or embark on a researcher's journey.

This Online programme has been designed for conventional learners, as well as working professionals and other individuals aspiring to acquire knowledge and associated academic credentials. Considering that all candidates interested in pursuing a degree may not be able to afford the same through a campus mode for reasons of paucity of time or financial constraints, online delivery is a feasible option to enable them to acquire knowledge and skills. Delivery through this mode also contributes towards Gross Enrolment Ratio (GER) of 50% by 2035, as envisaged by the Government of India.

The programme is so designed that the prospective students who may not be able to afford full time MA Economics are provided with high value learning, anytime, anyplace, at one's own pace.

#### **4. Appropriateness of programme to be conducted in Online mode to acquire specific skills and competence**

The courses in the programme are delivered through Self-Learning e-Module which is a modular unit of e-learning material which is inter-alia self-explanatory, self-contained, self-directed at the learner, and amenable to self-evaluation, and enables the learner to acquire the prescribed level of learning in a course of study and includes contents in the form of a combination of the following e-Learning content, and made available through four-quadrant approach namely,

(a) e-Tutorial - faculty led Audio - Video Lectures, (b) e-Content (combination of PDF/ epub) Text Materials, (c) Discussion forum for raising of doubts and clarifying the same on real time basis by the Course Coordinators/Course Mentors assigned to students (d) Self-Assessment Quiz, Test and Assignments to reinforce learning. Reference books are also mentioned in the syllabus. Latest Edition of Reference books may be referred to.

A robust Learning Management System that keeps track of delivery of e-Learning Programmes, learner's engagement, assessment, results and reporting in one centralized location, is in place. All of the above can be done/delivered by online and other platforms without much loss of fidelity. Hence the MA Economics programme is suited for Online mode of learning.

#### **5. Instructional Design**

##### **5.1. Curriculum design**

Curriculum has been designed by experts in the area of Economics and care has been taken to include contemporary topics, as well as topics that also inculcate environmental and economic awareness in students. The curriculum and syllabus are approved by the Board of Studies, Centre for Internal Quality Assurance (CIQA) and University Academic Council which consists of experts from Academia and Industry.



## 5.2. Programme structure and detailed syllabus

### 5.2.1. Programme Structure

	1st Semester	
Course	Title	Credits
DEC1101	Microeconomics -I	4
DEC1102	Macroeconomics- I	4
DEC1103	Fundamentals of Mathematics and Statistics	4
DEC1104	Indian Economy	4
DEC1105	Public Economics and Policy	4
	2nd Semester	
DEC1201	Microeconomics -II	4
DEC1202	Macroeconomics -II	4
DEC1203	Intermediate Econometrics	4
DEC1204	History of Economic Thought	4
DEC1205	Economics of Innovation and Entrepreneurship	4
	3rd Semester	
DEC2101	Application of Data Science in Economics	4
DEC2102	Environmental Economics	4
DEC2103	Development Economics	4
DEC2104	Game Theory	4
DEC2105	Term Paper	1
	1 Subject in area of elective (4 credit)	
DECE201	Health Economics	4
DECE202	Behavioural Economics	
DECE203	Agriculture Economics	
	4th Semester	
DEC2201	International Economics	4
DEC2202	Monetary Economics	4
DEC2203	Operation Research in Economics	4
	1 Subject in area of elective (4 credit)	
DECE204	Labor Economics	4
DECE205	Economics of Human Development	
DECE206	International Financial System	
DEC2204	Dissertation	6
	Total Credits	83



### 5.2.2. Detailed syllabus

## SEMESTER – I

<b>Course Code- DEC1101</b>	<b>MICROECONOMICS - I</b>
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### **Learning objectives:**

- To familiarize the students with the fundamental concepts, theories, and approaches.
- To understand the behavior of microeconomic principles in the market economy.
- To familiarize the students with the working of microeconomic concepts in real life.

**Unit I:** Concepts and Methods of Micro-economic Analysis, Scarcity and Choice, Optimization and Equilibrium, Comparative Statics.

**Unit II:** Theory of Consumer: Preference relations and their properties, Consumption Decision, Comparative statics of the consumer's decision, Slutsky Equation.

**Unit III:** Derivation of Demand Curves, Demand elasticities, Welfare evaluation of economic change (prices), Consumer's surplus.

**Unit IV:** Theory of Production and Costs: The Production function- Assumptions, Variation in Scale, Variation in input proportions, The multi-product firm and production possibility set.

**Unit V:** Minimization of costs in the long and the short run, Derivation of cost functions from production functions.

**Unit VI:** Derived demand for factors of production, Profit maximization in the short and the long run, The multi-product case.

**Unit VII:** Comparative statics- The firm's Supply function, Technical progress.

**Unit VIII:** Cobb-Douglas, CES, and Trans-log production functions and their properties.

**Unit IX:** Theory of Market: Price and Output Determination under alternative markets perfect competition — short run and long run equilibrium of the firm and industry, supply curve.

**Unit X:** Monopoly — short run and long run equilibrium, price discrimination, welfare aspects, monopoly control and regulation.

**Unit XI:** Monopolistic competition — general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation.



**Unit XII:** Selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition.

**Unit XIII:** Oligopoly — Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, kinked demand curve and Stackelberg's solution).

**Unit XIV:** Collusive (Cartels and mergers, price leadership and basing point price system) models, Price. Output determination under monopsony and bilateral monopoly, Workable competition — Structure, conduct and performance norms.

**Textbook:**

Ahuja H.L (2016). Modern Economics, An Analytical Study, S. Chand & Company Ltd. New Delhi, 20th Edition.

**Reference Book:**

- P. Samuelson and Nordhaus. (2009). Economics, 10th Edition, Tata McGraw-Hill Publishing Company Limited. New Delhi.
- C. E. Case and C. Ray. (2007). Principles of Economics. Pearson Education. Inc., 8th edition.
- J. E. Stiglitz and C. E. Walsh. (2007). Economics, W.W. Norton & Company Inc., New York. International Student Edition. 4th edition.
- N, Gregory Mankiw. (2014). Economics, Principles and Applications. Indian edition. Cengage Learning. 7th Edition.
- Salvatore Dominick. (2012). Micro Economics, Oxford.
- Dhingra I.C , Garg V.K. (2012), Principles of Micro Economics, Sultan Chand and Sons.
- Lipsey & Chrystal. (2011). Economics, Oxford University Press.
- Anna Koutsoyiannis. (2008). Modern Microeconomics, Macmillan.

**Course Code- DEC1102**

**MACROECONOMICS - I**

**Learning objectives:**

- To understanding the objectives, tools, and transmission mechanisms of monetary policy, including the role of central banks in controlling the money supply, interest rates, and credit conditions to achieve macroeconomic goals.
- To acquaint learners with analyzing the objectives, tools, and limitations of fiscal policy, including government spending, taxation, and budget deficits, and their impact on aggregate demand, economic growth, and inflation.

**Unit I – Keynesian Models:** Simple Keynesian Model, assumptions.

**Unit II-** Concepts of involuntary unemployment, liquidity preference, investment function.

**Unit III-** IS-LM model, two sector model, goods and money market equilibrium.

**Unit IV-** Multiplier, liquidity trap, three sector model.





**Unit V-** Role of government in terms of monetary and fiscal policy.

**Unit VI-** Keynesian Models versus Classical Models: Say's Law, quantity theory of money, price flexibility and full employment.

**Unit VII-** Patinkin's money demand functions, equilibrium concept in classical model.

**Unit VIII-** Synthesis between classical models and Keynesian models, interpretation, and policy analysis.

**Unit IX-** Expectations and Macroeconomic Adjustments: Adaptive and rational expectations hypothesis, partial adjustment model, Lucas's critique.

**Unit X-** Phillips curve, time consistency, inflation targeting, interest rate rules.

**Unit XI-** Effects of spending and Taxes in models with flexible and sticky prices, perverse effects of fiscal expansion.

**Unit XII-** Macroeconomics: Open Economy Aspects: Market for foreign exchange, devaluation, and depreciation.

**Unit XIII-** Real and nominal exchange rate, Mundell-Fleming model, fixed versus floating exchange rate, price adjustment.

**Unit XIV-** Role of fiscal and monetary policies under alternative exchange rate regimes, purchasing power parity concept.

**Textbook:**

Froyen, R. T., Macroeconomics: theories and policies. (8th edition), New Delhi, Pearson Education.

**Reference Book:**

- Acemoglu, D., Macroeconomics, New Delhi, Pearson education India.
- Barro, R.J., Macroeconomics, Fifth edition, MIT Press.
- 3. Blanchard, O., Macroeconomics. (4th edition), New Delhi, Pearson Education.
- Branson, W. H., Macroeconomics: Theory and policy, (3rd edition), New Delhi, East-West press Pvt. Ltd.
- Dornbusch, R.; Fisher, S. and Startz, R. (, Macroeconomics, New Delhi, Tata McGraw hill education India Pvt. Ltd.
- Froyen, R. T., Macroeconomics: theories and policies. (8th edition), New Delhi, Pearson Education.
- Fuller, Neil, Principles of macroeconomics, Delhi, Overseas Pres



<b>Course Code- DEC1103</b>	<b>FUNDAMENTALS OF MATHEMATICS AND STATISTICS</b>
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**Learning objectives:**

- To be able to demonstrate a solid understanding of differential and integral calculus.
- To understand application of Matrix and LPP.
- To be able to understand the relevance of Statistics, Correlation and Regression.
- To acquaint learners with performing variance ratio tests-f-test and chi-square test for statistical analysis.

**Unit I-** Calculus: Differential & Integration calculus, Rules of differentiation.

**Unit II-** Integration: simple and definite, Partial and total differentiation.

**Unit III-** Matrix & Determinants: addition, multiplication and Inversion of matrix, Cramer's Rule

**Unit IV-** Input-output analysis: Hawkins-Simon conditions for viability, computation of Gross output.

**Unit V-** Linear programming Problems: Profit Maximization, cost minimization.

**Unit VI-** Fundamentals of Statistics: Measures of Central Tendency.

**Unit VII-** Measures of Dispersion, Skewness, Moment & Kurtosis.

**Unit VIII-** Correlation & Regression: Simple Correlation; Simple linear Regression.

**Unit IX-** Probability & Distribution: simple probability, conditional probability, Discrete Probability Distribution- Binomial and Poisson, Continuous Probability Distribution-normal.

**Unit X-** Hypothesis Testing: meaning, formulation of hypothesis, type and type II errors.

**Unit XI-** Testing of hypothesis of mean and the variance of a normal population.

**Unit XII-** T test and Z-test: relevance and its applications.

**Unit XIII-** Analysis of Variance (ANOVA) -one way: Ftest, its scope, application and importance.

**Unit XIV-** Chi-square test: Test of goodness of fit and Test of Independence.

**Textbook:**

B.C. Mehta and G.M.K. Madnani (2008) Mathematics for Economists, \$ Chand and Sons.

**Reference Book:**



- Alpha C Chiang and Kevin Wainwright (2005), Fundamental Methods of Mathematical Economics, McGraw-Hill, 4th Edition.
- J.M. Henderson and R.E. Quandt (2000), Microeconomic Theory: A Mathematical Approach (Economic Handbook Series),
- McGraw-Hill College, 3rd Edition. Peter J Hammond (2002), Mathematics for Economic Analysis.
- Pearson Educational Asia. Srinath Baruah (2012), Basic Mathematics and its Application in Economics, Trinity Press Pvt Ltd
- Levin, Stephan, Krehbiel, Berenson (2012), Statistics for Managers Using Microsoft Excel, PHI Learning, New Delhi
- S.P Gupta (2014), Statistical Methods, Sultan Chand & Company, New Delhi
- Aczel Amir D. (2010), Complete Business Statistics, Tata McGraw Hill Publishing Company Limited, New Delhi.
- D.C Sancheti & V.K Kapoor (2010), Statistics: Theory, Methods and Applications, Sultan Chand & Company, New Delhi
- Ken Black (2012), Business Statistics for Contemporary Decision Making, Wiley Publications, New Delhi.
- Naval Bajpai (2013), Business Statistics, Pearson Education, New Delhi.
- Richard I Levin and David S. Rubin (2013), Statistics for Management, Pearson Education, New Delhi.

**Course Code- DEC1104**

**INDIAN ECONOMY**

**Learning objectives:**

- To understand the basic concept of Indian Economy.
- To gain knowledge about the trend analysis of Indian agricultural sector.
- To gain knowledge about the trend analysis of Indian industrial sector.
- To be able to analyze the role of World Trade Organization.

**Unit I-** Indian Economy in Global Context : India is a developing economy, meaning, Characteristics, growth of India in world economy.

**Unit II-** Global Economic Issues and Indian Economy : National Income, Demography and human resource development, occupational structure, comparison with global economy.

**Unit III-** Indian Agriculture and Trend Analysis in Global Context : Development, role and issues, agriculture marketing, agriculture export, direction and volume, infrastructure needs.

**Unit IV-** Indian Industrial Sector and Trend Analysis : NSME, large scale industries, industrial exports, direction and volume. make in India.

**Unit V-** Increasing Role of Service Sector in Indian Economy : Trends and performance of service sector in Indian economy, types of services, growth and contribution of service sector in India.



**Unit VI-** ITs and ITEs : IT and knowledge economy, IT in India in global context, major issues, future prospect, National knowledge commission, skill development in India.

**Unit VII-** Foreign Trade and Foreign Capital : India's Foreign Trade Policy, globalization and Indian economy, foreign capital and aid, MNCs, WTO, FDI.

**Unit VIII-** Black Economy in India : Causes, Consequences, government measures, demonetization.

**Unit IX-** Agriculture and Rural Credit in Indian Economy : meaning, types , need of rural credit, Objectives of rural credit, institutional sources of rural credit, classification of rural credit and problems of rural credit in India.

**Unit X -** Role of WTO in Indian Economy : Meaning and Objectives of WTO in Indian economy, India and WTO, global trade rules, WTO agreements, Building trade capacity in developing economies.

**Unit XI-** Corporate Social Responsibility : Concept of CSR, Need for CSR, three pillars of CSR, Barriers to implementing corporate social responsibility, economic responsibility, current approaches and standards related to CSR.

**Unit XII -** Role of IT in Industrial Sector Development and Agricultural sector: advantages IT has provided to various industries, Industry trends, government initiatives for the IT sector, role of modern technology in agriculture, classification of ITs, initiatives of Information and Communications Technology for farming and rural development.

**Unit XIII-** Regulatory Framework in Indian Economy : Industries Development and regulation Act, Monopolies and Restrictive Trade Policies Act, Foreign Exchange Regulation Act, Foreign Exchange Management Act, Prevention of Money Laundering Act, Impact of regulatory framework on industrial structure and performance.

**Unit XIV-** Recent Trends in Indian Economy : Indian Economy at a Glance, factors facilitating ease of doing business in India, growth of banking sector in India, factors contributing towards growth and development of Indian economy.

**Textbook:**

Datta R & Sundaram K. P. M (2018). Indian Economy, S. Chand & Co. New Delhi, 72nd edition.

**Reference Book:**

- Misra S.K. & Puri V.K (2018). Advanced Microeconomic Theory, Himalaya Publishing House, New Delhi, 36th edition.
- Fernando A.C (2016). Indian Economy, Pearson India Education Services Pvt. Ltd., New Delhi, 7th edition.



- Ghosh C & Ghosh A (2016). Indian Economy- A Macro Theoretic Analysis, PHI Learning Pvt. Ltd., New Delhi, 2nd edition.
- Dhingra I. C (2010). Indian Economy, Sultan Chand & Sons, New Delhi, 28th edition.

**Course Code- DEC1105**

**PUBLIC ECONOMICS AND POLICY**

**Learning objectives:**

- To be able to understand the concept of Public Economics.
- To be able to analyze the public and private sector approach.
- To be able to elaborate the government role in public sector related to tax and the policy related to it.
- To gain knowledge regarding different revenues and expenditure related to public sector.

**Unit I-** Introduction to Public Economics: Nature , Scope , Significance.

**Unit II-** Public Goods and Public Sector: Concept, Characteristics of Public Goods, Determination of provision of Public goods, Externality, Market failure, Imperfections, Public Provision.

**Unit III-** Pricing of Public Goods: Vertical Summation, impossibility of decentralized provision of public goods, asymmetric information.

**Unit IV-** Revenue Resources: Principle of taxation, ability to pay principle, Benefit Approach with actual example.

**Unit V-** Distribution and Stabilization: Source and importance of public borrowing, effects of public debt, tax v/s debt, burden of public debt, shifting of debt burden, crowding of private investments, method of debt redemptions.

**Unit VI-** Role of Government in public sector: Government measure to promote economic development, rationale of public sector in economic development, Government as an agent in economic planning.

**Unit VII-** Public Choice: Problem of allocating Resources, problems of revealing preferences and their aggregations, compensation principle, alternative measures of resource mobilization.

**Unit VIII-** Public expenditure: The pure theory of public expenditure, classification of public expenditure, Canons of public expenditure, effect of public expenditure and reforms.

**Unit IX-** Public Debt: Classical view of public debt, Compensatory aspects of Public debt,



Comparison of private debt and public debt. Redemptions and repayments of public debt.

**Unit X-** Issues in Debt management in India: Trade and pattern of public expenditure, effect of public debt and money supply, economic growth and economic stability.

**Unit XI-** Tax structure in India and recent Reforms: GST.

**Unit XII -** Fiscal Policy: meaning, Fiscal v/s Monetary policy, Fiscal policy for economic development, Types of budgetary deficit and their implications.

**Unit XIII-** Centre-State Finance Relations: Federalism and Federal finance, transfer and allocation of resources, problems of federal finance, suggestion and improvement.

**Unit XIV-** Financial Resources of Urban local bodies: Source of revenue, fiscal transfers , Expenditures of urban local bodies, Resources- expenditure gaps, Fiscal powers.

**Textbook:**

J. Hindriks, G. Myles: Intermediate Public Economics, MIT Press, 2006

**Reference Book:**

- M. Govinda Rao, 2011, —Goods and Services Tax: A Gorilla, Chimpanzee or a Genius like Primates, Economic and Political Weekly, February 12-18.
- State Finances: A Study of Budgets, Reserve Bank of India (Latest).
- Economic Survey, Government of India (Latest).
- Mahesh Purohit, Value Added Tax: Experiences of India and Other Countries.

**SEMESTER – II**

**Course Code- DEC1201**

**MICROECONOMICS - II**

**Learning objectives:**

- To familiarize the students with the fundamental concepts, theories, and approaches to understand the behavior of microeconomic principles in the market economy.
- To familiarize the students with the working of microeconomic concepts in real life.

**Unit I-** Theory of Distribution: Neo-classical approach — Marginal productivity theory, Product exhaustion theorem, Elasticity of technical substitution, technical progress and factor shares.

**Unit II-** Theory of distribution in imperfect product and factor markets.

**Unit III-** Marginalist Controversy and Average Cost Pricing I: Marginalist Controversy and Average Cost Pricing.



**Unit IV -** Marginalist Controversy and Average Cost Pricing II: Hall and Hitch Report and Full-Cost Pricing, Recent developments in Limit Pricing Theory.

**Unit V-** General Equilibrium: Partial and general equilibrium, Walrasian excess demand and input-output approaches to general equilibrium.

**Unit VI-** Existence, stability and uniqueness of equilibrium and general equilibrium, coalitions and monopolies.

**Unit VII-** Production without consumption — one sector model, homogeneous functions, income distribution.

**Unit VIII-** Theory of Games: Theory of Games and collusive oligopoly, Two-person Zero-Sum Game.

**Unit IX-** Certainty and Uncertainty Model, Non Zero-Sum Game, The prisoner's Dilemma, Nash- Equilibrium.

**Unit X-** Welfare Economics: Pigouvian welfare economics, Pareto optimal conditions, Value judgment, Social welfare function.

**Unit XI-** Compensation principle, Inability to obtain optimum welfare — Imperfections, market failure, decreasing costs, uncertainty and non-existent and incomplete markets.

**Unit XII-** Theory of Second Best — Arrow's impossibility theorem, Rawl's theory of justice, equity-efficiency trade off.

**Unit XIII-** Market failure and the Second best: Causes of Market Failure, Instances of Market failure.

**Unit XIV-** The theory of Second Best, Government action and Government Failure.

**Textbook:**

P. Samuelson and Nordhaus. (2009). Economics, 10th Edition, Tata McGraw-Hill Publishing Company Limited. New Delhi.

**Reference Book:**

- Ahuja H.L (2016). Modern Economics: An Analytical Study, S. Chand & Company Ltd. New Delhi, 20th Edition.
- C. E. Case and C. Ray. (2007). Principles of Economics. Pearson Education. Inc., 8th edition.
- J. E. Stiglitz and C. E. Walsh. (2007). Economics, W.W. Norton & Company Inc., New York. International Student Edition. 4th edition.
- N, Gregory Mankiw. (2014). Economics: Principles and Applications. Indian edition. Cengage Learning. 7th Edition.



- Salvatore Dominick. (2012). Micro Economics, Oxford.

**Course Code- DEC1202**

**MACROECONOMICS - II**

**Learning objectives:**

- To familiarize the students with the macro concepts, model, and theories to understand the usage and effect of macroeconomic principles on overall economy.
- To explore the relationship between the different model and long-run economic growth and development, including the importance of macroeconomic policy and their interdependence.

**Unit I-** Macro Economics in Short Run - Fluctuations of macroeconomic variables, the stylized facts, wage price rigidities and Keynesian cycles.

**Unit II-** Open Economy Issues Part I- open economy issues, open economy IS-LM-MP.

**Unit III-** Open Economy Issues Part II- The Mundell Fleming model, stabilization. Policy framing - Macroeconomic policy and exchange rate regimes.

**Unit IV-** Exchange Rate: Asset price volatility, Interest rate and exchange rate.

**Unit V-** Exchange rates: Floating Exchange Rates with Zero Capital Mobility Floating Exchange Rates and Perfect Capital Mobility: Exchange Rate Expectations Rational Exchange Rate Expectations; Dornbusch's Overshooting Model Policy Interdependence and The World Equilibrium Rate of Unemployment.

**Unit VI-** Crisis Model and strategic interaction.

**Unit VII-** Micro-Foundation of Real and Nominal Rigidities I – Non walrasian model and Economic fluctuations, imperfect information, imperfect competition.

**Unit VIII-** Micro-Foundation of Real and Nominal Rigidities II: Asymmetric information, solving for rational expectation equilibrium, coordination failure.

**Unit IX-** The Firm's I: Tobin's 'q' theory of investment, research and development.

**Unit X-** The Firm's II: human capital and externalities empirical issue.

**Unit XI-** Real and business cycle dynamics: types, effects and significance.

**Unit XII-** Macro Policy I: macro policy, types and usage of macro policy.

**Unit XIII-** Macro Policy II: Coordination of fiscal and monetary policy, rules versus direction, credibility, commitment devices.





**Unit XIV-** Monetary transmission mechanism and targeting.

**Textbook:**

Wendy Carlin and David Soskice (2008) Macroeconomics: Imperfections, Institutions & Policies; Oxford University Press

**Reference Book:**

- Wendy Carlin and David Soskice (1996) Macroeconomics and the Wage Bargain; Oxford University Press
- Mankiw, N. Gregory (2000) – Macroeconomics (4th Ed, Macmillan-Worth)) 7
- Obstfeld, M. and K. Rogoff (1996), Foundations of International Macroeconomics, Cambridge, Ma: Mit Press..
- Branson, W. (1989) – Macroeconomic Theory and Policy; (3rd Ed, Harper & Row)

**Course Code- DEC1203**

**INTERMEDIATE ECONOMETRICS**

**Learning objectives:**

- To be able to understand the concept of econometrics.
- To acquaint learners with the knowledge to apply different techniques of econometrics achieve organizational objectives.

**Unit I-** Introduction: Nature, scope and methodology of econometric.

**Unit II-** Specification of an econometric model, Nature of data used in estimation.

**Unit III-** Single equation estimations: Method of ordinary least squares (OLS) for simple and multiple regression models.

**Unit IV-** Properties of least squares estimators, the Gauss-Markov Theorem.

**Unit V-** Test of significance of OLS estimates and confidence intervals.

**Unit VI-**  $R^2$  and Adjusted  $R^2$ .

**Unit VII-** Dummy variable regression models: Nature, application and uses of dummy variables ( both as dependent and independent).

**Unit VIII-** ANOVA models (Single and two qualitative variables), ANCOVA models, Problems with OLS estimation: Specification errors, Multicollinearity, Heteroscedasticity, Autocorrelation.



**Unit IX-** Simultaneous equation models: Description, identification problem, rank order conditions.

**Unit X-** Single equation methods of estimation, Indirect Least Squares (ILS).

**Unit XI-** Two stage least squares (2 SLS); System method of estimation, Three stage Least square (3 SLS).

**Unit XII-** Time Series Analysis: Stationarity, Unit roots, Co-integration, Spurious regression, Dickey-Fuller test, Engle-Granger test.

**Unit XIII-** Random walk models, Forecasting with AR, MA, and ARMA models, Box-Jenkins Methodology.

**Unit XIV-** Panel Data Techniques: Fixed effects models, random effect model, Hausman test.

**Textbook:**

Gujarati D. N. and Sangeetha (2012). Basic Econometrics, Tata McGraw-Hill Publishing company Limited, New Delhi, 5th Edition.

**Reference Book:**

- Koutsoyiannis A (2001). Theory of Econometrics, Palgrave Macmillan, 2 nd Edition.
- Gujarati D. N(2011). Econometrics by Examples, Palgrave Macmillan, 2nd Edition.
- Maddala G.S.(2010). An Introduction to Econometrics, Wiley, 3rd Edition.
- Wooldridge J.M (2013). Introductory Econometrics: A Modern Approach, Cennage, 5th Edition,
- Kennedy P (2004), A Guide to Econometrics, Blackwell Publishers, 5th Edition.
- Gupta S.C. (2012). Fundamental of statistics, Himalaya Publishing House, New Delhi, 7th Revised Edition.

<b>Course Code- DEC1204</b>	<b>HISTORY OF ECONOMIC THOUGHT</b>
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**Learning objectives:**

- This course will provide learners with a better understanding of the background of economics, their area of study.
- It offers the learners an additional opportunity to study about economics and to observe how theories related to the subject have evolved and how, occasionally, they have been improved upon.



**Unit I-** Introduction: History of economic thought and economic history; Plato's Economics; Aristotle's Economic Writings, Use and Exchange Value, Aristotle's views on Private Property, Money, Commerce and Justice, and acquisition of Wealth.

**Unit II-** Indian Economic Thought History: Chanakya's Arthshastra; Kautilya's theory of wealth, division, consumption, production, agriculture, and trade; Dadabhai Naoroji thoughts; Gandhian thoughts.

**Unit III-** Mercantilism: Main ideas, Political Economy Emerges; Wage Theory, Monetary Theories, Significance, decline or criticism of Mercantilism.

**Unit IV-** Physiocracy: Rise of physiocrats, Quesnay's tableau economique, Leontief's input-output Model, economic growth and policy.

**Unit V-** Classical School: introduction, thoughts by Adam Smith, J B Say, David Ricardo, Thomas Robert Malthus, and John Stuart Mill.

**Unit VI-** School of Socialism-Karl Marx theory: Labor theory, theory of surplus value; Socialist Critics: Saint-Simon, Sismondi; Different Schools of Socialism- Utopian Socialism, Christian Socialism.

**Unit VII-** Neo-Classical School: Classical vs Neoclassical, Jevons, Walras, Menger; Marshall's Main Ideas; Keynesian and Post Keynesian Development.

**Unit VIII-** Institutional Economics I-Myrdal's Model of Circular and Cumulative Causation, Thorstein Veblen.

**Unit IX-** Institutional Economics II- Romesh Dutt-Criticism of British Economic Policy, Economic Ideas, Wesley Clair Mitchell, Economic Ideas of Wesley Clair Mitchell, Critical Estimate of Mitchell's Economic Ideas.

**Unit X-** Economic Ideas of John Maurice Clark-Economic Ideas of John Kenneth Galbraith, Economic Ideas of John R. Commons, Economic Ideas of Wesley C. Mitchell

**Unit XI-** Indian Economic Thought New I-Thiruvalluvar, Economic Thoughts, Gopal Krishna Gokale, Economic Ideas, Agricultural Ideas.

**Unit XII-** Indian Economic Thought New II- Foundations of Indigenous Capitalism, Dadabhai Naoroji, Drain Theory, Criticisms, Long-Run Relevance, Mahadev Govind Ranade, Agrarian Policy, Railway Investment, Methodology of Economics.

**Unit XIII-** Selected Nobel Laureates in Economics -Gunnar Myrdal -Theory of under development and development, Simon Kuznets; James Meade, Arthur Lewis - a brief analysis of their contributions.

**Unit XIV-** Welfare Economics-Meaning of Welfare Economics, Education, Health, Poverty.



**Textbook:**

Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007

**Reference Book:**

- N. Gregory Mankiw, Economics: Principles and Applications, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

<b>Course Code- DEC1205</b>	<b>ECONOMICS OF INNOVATION AND ENTREPRENEURSHIP</b>
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**Learning objectives:**

- It examines the fundamental economic trade-offs for entrepreneurs who want to commercialize innovations within start-ups and established firms.
- This study focuses on the entrepreneurs' strategic decisions to disrupt existing market environments and their internal challenges of building new organizational capabilities.
- The course draws on fundamental concepts from economics, strategic management, and related disciplines with technical advancement and innovation but takes a highly applied managerial perspective.

**Unit I-** Innovation and entrepreneurship- Meaning and Role of Entrepreneurship. Innovation and Entrepreneurship, Innovation- Ideas and Screening Opportunities, History of Entrepreneurship Development.

**Unit II-** Entrepreneurship Development Programme Objectives and Phases of EDPs, Importance of Entrepreneurship in Economic Development Problems and Constraints of EDPs, Role of Govt. in organising EDPs.

**Unit III-** Support system and business ideas Entrepreneurial environment, Entrepreneurial Organisation, Entrepreneurship Skill and Decision-Making Process, Mentors and Support Systems, New Business Ideas, Creativity and Innovation, Make in India - Start Up Mission and Students Startup Mission, Technology Business Incubators in India.

**Unit IV-** Institutional support to entrepreneurs Venture Capital, Angel Fund investors - preparation of project report, project appraisal.

**Unit V-** Small Enterprises in Economic Development Challenges of Entrepreneurship: Problems of Small, Medium and Large Enterprise- Role of Small Enterprises in Economic Development.



**Unit VI-** Globalisation and Entrepreneurship Globalisation: Meaning, scope and objectives, Women Entrepreneurship scope, Global Challenges of Women Entrepreneurship in International Growth.

**Unit VII-** Business plan and technical analysis Business concept, Meaning, significance & basic components of business plan, peer consultation, refinement & feasibility study, technical & technological analysis of entrepreneurial projects.

**Unit VIII-** Organisational Change in Economic & Management Practices  
Organisational Change: Meaning, Economic factors affecting organisational change.

**Unit IX-** Ideas, Innovation of Economic Growth Managing business growth: growth dimensions and phases. The role change: from an entrepreneur to a manager.

**Unit X-** Overcoming growth barriers. Self-development and time management, finding balance between business running and personal life. Business succession and exit strategies.

**Unit XI-** Incentives and management of innovation Intellectual property rights – Sequential and complementary innovation – Network effect and standards.

**Unit XII-** Patents and R&D Patents and litigation – Patent pool – R&D tournaments, race, and R&D organization.

**Unit XIII-** Technology transfer and licensing Technology Transfer: Meaning, Importance, Types, and activities involved. Licensing: Regularisation and Standards. Types of Licensing.

**Unit XIV-** Innovation and public policy Policy and Institutional Reform and Entrepreneurship in Developing countries, Innovation Process in institutional setting.

**Textbook:**

Gupta and Srinivasan, 'Entrepreneurial Development', S Chand & Sons, New Delhi.

**Reference Book:**

- Scotchmer, S.: Innovation and Incentives, MIT Press (2004)
- Swann, G.: The Economics of Innovation: An Introduction, Edward Elgar (2014)
- Hall, B. and Rosenberg, N.: Handbook of the Economics of Innovation, Vols 1 & 2, Elsevier (2010)
- Chakraarhi, Bidyut. 'Corporate Social Responsibility in India', Routledge, 2011
- E. Gordon & K. Natarajan, Entrepreneurship Development Himalaya 2008
- Fernando, A.C. 'Business Ethics', Pearson Education, New Delhi. 2009
- G.Barani, Performance of Women Entrepreneurs, Serials Publications New Delhi
- Hisrich R D and Peters M P, "Entrepreneurship" 5th Edition Tata McGraw-Hill, 2002.
- Roy Rajeev, Entrepreneurship, Oxford Latest Edition



- Jerome Katz and Richard Green, Entrepreneurial Small Business, McGraw Hill
- Robert Hisrich and Michael Peters and Dean Shepherd, Entrepreneurship, 11th Edition, 2020

### **SEMESTER – III**

<b>Course Code- DEC2101</b>	<b>APPLICATION OF DATA SCIENCE IN ECONOMICS</b>
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#### **Learning objectives:**

- This course's main goal is to provide learners with an analytical understanding of data science in economics.
- It offers the learners an additional opportunity to study about data science, different methods of analysis and knowledge in regard with economics and to observe how theories related to the subject have evolved and how, occasionally, they have been improved upon.

**Unit I** - Introduction to the power of data and data analytics.

**Unit II** - Leading software and data sources in data analysis, data mining and database management.

**Unit III** - Collecting, Organizing, Analyzing and visualizing data: Categorical data, meta data, numerical data- frequency distribution, relative frequency distribution, numerical variable, cumulative distribution.

**Unit IV** - Techniques of data visualization, misuses and common errors in visualizing data.

**Unit V** - Numerical descriptive measures: measures of central tendency, variations and shapes, correlation, covariance.

**Unit VI** - Descriptive measure for a population.

**Unit VII** - Simple parametric and non-parametric tests: t-test procedures, F-test, Mann Whitney Procedures.

**Unit VIII** - Principal Components, Factor and Cluster Analysis.

**Unit IX** - Multiple regression: Multiple regression including dummy variables.

**Unit X** - Growth rate calculation, Trend analysis, Functional Forms.

**Unit XI** - Testing for multicollinearity, Heteroscedasticity and Autocorrelation and remedial measures.



**Unit XII** - Handling of data: cross-sectional data, time series data, longitudinal or panel data, survey data.

**Unit XIII** - Two Variable Regression Model, Specification error.

**Unit XIV** - Simultaneous Equation Model, Qualitative Response Model.

**Textbook:**

Aczel Amir D.(2010), Complete Business Statistics, Tata Mcgraw Hill Publishing Company Limited, New Delhi.

**Reference Book:**

- AH-Lee C. Adkins and R. Carter Hill (2007) Using Stata for Principal Econometrics, 3rd Edition, December; ( ISBN: 978-0-470-18546-9) John Wiley & Sons Inc.
- D.C.Sancheti & V.K. Kapoor (2010) statistics: Theory, Methods and Applications, Sutan Chand and Company, New Delhi.
- GHL- William E. Griffiths, R. Carter Hill and Guay C. Lim (2008) Using E-views for principles of econometrics, 3rd edition, February; (ISBN: 978-0-471-78711-2) John Willey and Sons Inc.
- GM-Darren- Georgeand Paul Mallery (2010) SPSS for Windows step by step: A simple study guide and reference , 17 .0 update , 10 Edition; ( ISBN: 9788131762257) Pearson Education.
- HGL-R . Carter Hill , William E. Griffiths and Guay C. Lim (2007) Principles of Econometrics, 3 rd Edition, November; (ISBN 978-0-471-72360-8) John Wiley & Sons Inc.

<b>Course Code- DEC2102</b>	<b>ENVIRONMENTAL ECONOMICS</b>
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**Learning objectives:**

- To be able to understand the concept and dimensions of environmental economics.
- The course will give learners an opportunity to develop a critical understanding of the different ways in which economic decisions, market forces, and government policies can affect the environment.

**Unit I** - Introduction to the key concepts from environmental economics: markets; market failures and externalities.

**Unit II** - Indian Government regulation laws, the environment as a social asset.

**Unit III** - Strategic interactions: Coase Theorem; Tragedy of the Commons.

**Unit IV** - Cost Benefit Analysis, Transactions costs and institutions.



**Unit V** - Valuing the environment: Welfare economics; efficiency and optimality in allocation.

**Unit VI** - Approaches to environmental evaluation; environmental ethics; sustainable development.

**Unit VII** - Environmental policy instruments and implementation I: common and control policies in different areas water and land.

**Unit VIII** - Environmental policy instruments and implementation II : for air and forest, Environmental biodiversity and environment.

**Unit IX** - Environmental policy design and implementation.

**Unit X** - WTO and Environmental issues, Environmental Kuznets Hypothesis, Approaches to the allocation of public goods and Tradable permits.

**Unit XI** - Applications: deforestation, tropical deforestation and poverty.

**Unit XII** - Preservation and conservation of environment, climate change.

**Unit XIII** - Carbon trading; international co-operation; Kyoto Protocol.

**Unit XIV** - Health, Safety and Environmental (HSE) modern practices.

**Textbook:**

Ahmed Hussen "Principles of Environmental Economics, Routledge taylor & Francis group, New York.

**Reference Book:**

- Kolstad C.D., Environmental Economics, Oxford University Press, latest edition.
- Johansson Per-Olov: The Economic Theory and Measurement of Environmental Benefits, Cambridge University Press, Cambridge, 1987.
- Bhattacharya R.N. (ed.), Environmental Economics: An Indian Perspective, Oxford University Press, 2001.
- M.N. Murthy Environment, Sustainable Development, and Well-being Valuation, Taxes, and Incentives, OUP May 2009
- Oates W.E. (ed.), The Economics of the Environment, An Elgar Critical Writings Reader, Edward Elgar, 1994.
- Kadekodi, Gopal K., Environmental Economics in Practice, Oxford University Press, 2004.
- Kanchan Chopra and Vikram Dayal (Ed). Hand book of Environmental Economics in India. Oxford University Press 2009.





**Learning objectives:**

- To acquaint the learners, with different approaches and theories of development.
- To make the learners familiarize with the issues of development.
- To make the learners understand the recent literary additions in the field of development.

**Unit I - Meaning of Development:** Factors affecting Economic Development-Economic growth and development –Underdevelopment and Dependence-Historical experience to contemporary Developing and Under Developed countries.

**Unit II - Perspectives on Development:** Dependency theories of development - structural change, surplus labour and dual economy models - Kaleckian model of a dual economy.

**Unit III - Alternative concepts of economic development:** income-based approach and capability-based approach .

**Unit IV - Indicators of development:** GDP as development indicator--Human Development Index-- Gender Related Development Index-Gender Empowerment Measure-Gender Inequality Index , development experience of less developed countries in the recent past.

**Unit V - Unemployment and surplus labour:** surplus labour and efficiency wage - efficiency wage theory as explanation for wage rigidity and involuntary unemployment.

**Unit VI - Collusive theory of unemployment - disguised unemployment:** characterization and policy implications (Sen's Model).

**Unit VII - Economics of child labour:** empirical context - Basu-Van model of multiple equilibria with altruism - distinction between skilled and unskilled labour and wage inequality.

**Unit VIII - Rural Credit Markets** Lender's risk hypothesis; monopolistic markets; implicit interest charges; credit as insurance; micro-finance.

**Unit IX - Interlinkage in Rural Markets** Potential risk; models of interlinked markets; implications for theory and policy; moral hazard and interlinkage.

**Unit X - Poverty and income distribution:** inequality and vulnerability, the role of fertility, health and education in explaining poverty outcomes.

**Unit XI - Poverty and assets - poverty, credit and insurance poverty and the household - poverty and labour markets.**



**Unit XII** - The complex interconnection of growth, inequality and poverty - assessment of policies geared towards poverty reduction.

**Unit XIII** - Theoretical links between trade liberalization and income distribution - Functioning and capabilities: limitations of utilitarianism.

**Unit XIV** - Poverty as capability failure – multidimensional measures of well-being; issues in composite indices – problems of aggregation.

**Textbook:**

Bardhan, Pranab and Christopher Udry. Development Microeconomics. Oxford: Oxford University Press, 1999. ISBN: 9780198773719.

**Reference Book:**

- Ray, Debraj. Development Economics. Princeton University Press, 1998. ISBN: 9780691017068.
- Banerjee, Abhijit and Esther Duflo. Poor Economics. Public Affairs, 2011. ISBN: 9781610390934.
- Angrist, Josh and Stephen Pishke. Mostly Harmless Econometrics. Princeton and Oxford: Princeton University Press, 2009. ISBN: 9780691120355.
- Imbens, Guido and Donald Rubin. Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction. Cambridge University Press, 2015. ISBN: 9780521885881.

<b>Course Code- DEC2104</b>	<b>GAME THEORY</b>
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**Learning objectives:**

- To acquaint learners of the course with introduction to the study of game theory which has found wide applications in economics.
- This course would help introduce to the fundamental tools of game theory, a few equilibrium concepts, apart from numerous exercises and applications.
- To gain knowledge of game theory would help students to understand and Analyse real life situations such as market behaviour.

**Unit I** - Introduction to Game Theory: Meaning, definition, scope, importance and limitations.

**Unit II** - Introduction to Game Theory: Meaning, definition, scope, importance and limitations.

**Unit III** - Static Games of Complete Information part I: Normal form representation of games, Economic applications, Idea of domination: dominance solvable games.



**Unit IV - Static Games of Complete Information part II:** Rationalizable equilibrium, definition and examples, Nash Equilibrium : definition and examples. Existence theorems on Nash equilibria.

**Unit V - Dynamic Games of Complete Information part I:** Extensive form representation of games. Games of perfect information: backward induction outcomes and examples.

**Unit VI - Dynamic Games of Complete Information part II:** Games of imperfect information: Subgame perfect equilibrium and examples. Sequential bargaining: Rubinstein model. Repeated games: Introduction and examples, infinitely and finitely repeated games, collusion, trigger strategies and folk theorem.

**Unit VII - Static Games of Incomplete Information:** Static Bayesian games and Bayesian Nash equilibrium : introduction and examples. Auctions : first price, second price, English and Dutch auctions. The revenue equivalence theorem in auctions. Double auction.

**Unit VIII - Dynamic Games of Incomplete Information:** Introduction to perfect Bayesian equilibrium and sequential equilibrium. Signalling games: job market signalling, limit pricing under asymmetric information. Reputation in a finitely repeated prisoner's dilemma.

**Unit IX - Cooperative Games part I:** Nash Bargaining Solution, Concept of the Core. Shapely Value.

**Unit X - Cooperative Games part II:** Super additivity theorem, transferable utility.

**Unit XI - Game Theory Under Incomplete Information part I:** Static Games of incomplete information – Bayesian Nash Equilibrium.

**Unit XII - Game Theory Under Incomplete Information part II:** Dynamic Game of Incomplete Information – Perfect Bayesian Equilibrium, Trembling Hand Perfection. Economic Applications.

**Unit XIII - Economics of Information part I:** Types of Asymmetric Information - Moral Hazards, Adverse Selection, Signaling, Market for Lemons, Principal Agent Problem, Efficiency of Market Outcomes under Asymmetric Information.

**Unit XIV - Economics of Information part II:** Efficiency of Market Outcomes under Asymmetric Information.

**Textbook:**

Fudenberg, Drew, and Jean Tirole, Game Theory, ANE Books, New Delhi, 2005.

**Reference Book:**

- Gibbons, Robert (1992), a Primer in Game Theory, Harvester Wheatsheaf, Newyork, London.



- Oz Shy (1995), Industrial organization: Theory and Applications, Themit Press, Cambridge, Massachusetts, London, England.
- Church, J., Roger Ware (2000), Industrial organization: a Strategic Approach, Mcgraw-Hill, International Editions.
- inés Macho-Stadler, J. David Pérez-Castrillo, Richard Watt, an Introduction to the Economics of Information: Incentives and Contracts, Second Edition, 2001, Oup
- Jehle & Renne, Advanced Microeconomic Theory, Pearson Education, India.

<b>Course Code: DEC2105</b>	<b>TERM PAPER</b>
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Every student shall undertake Literature review - comprehensive summary based on research on a topic. The literature review can be article, books / eBooks, and other journal sources relevant to a particular area of study. The review should describe, summarize, objectively evaluate the content. It should give a theoretical base for the research to be carried out later. This term paper is part of 3rd semester course work and needs to be completed in one month at place of work or from library source. The Mini project work is equivalent to 1 credit.

### **ELECTIVES SEMESTER – III**

<b>Course Code- DECE201</b>	<b>HEALTH ECONOMICS</b>
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#### **Learning objectives:**

- To acquaint learners of the course with introduction to the health economics.
- This course will acquaint learners with different theories and models of health economics.
- This course will acquaint students to be an effective decision-maker in the domain of health economics, and its allied functional areas.

**Unit I** - Introduction - Key concepts of health economics, positive vs normative economics analysis.

**Unit II** - Good Health - Importance of good health, utility analysis and determinants of health among children, elderly, non- elderly.

**Unit III** - Health Capital - Demand for health capital, grossman model of demand for health, cost.



**Unit IV - Cost Evaluation Methods - cost - benefit analysis, discounting the value of life, cost effectiveness analysis.**

**Unit V - Health Care System Part I - Different types of health care system, demand for medical care & law of demand.**

**Unit VI - Health Care System Part II - Utility maximizing rule, other economic factors, relationship between medical care and need for health insurance, the moral hazard.**

**Unit VII - Medical Care Production and Cost - short run and long run production and costs of a representative medical firm.**

**Unit VIII - Economic delivery systems - Integrated delivery system, economic and non - economic factors of medical care.**

**Unit IX - Government Interventions - Role of government, economic reasons for government interventions.**

**Unit X - Performance and Market Analysis in Health Care System - Structure, Conduct, health care regulations, universal health care system.**

**Unit XI - Behavioural Economics of Health - Introduction to Behavioral Economics, unhealthy behaviour evidence and policy issue.**

**Unit XII - Health Valuation Part I - mortality risk valuation, static model, life cycle model.**

**Unit XIII - Health Valuation Part II - empirical models (hedonic wages, stated preference).**

**Unit XIV - Valuing Changes In Morbidity - Model of health production, revealed preference and stated preference approaches, quality adjusted life years.**

**Textbook:**

Cuyler A and J Newhouse (ed) (2000), Handbook of Health Economics Elsevier.

**Reference Book:**

- Das Gupta Monica, Lincon Chen and T Srinivasan (1996), Health, Poverty and Development in India.
- Santrerre R and S Neun (2007), Health Economics: Theories, Insights and Industry Studies, Thompson.
- World Health Organisation (2000), Report of Commission on Macroeconomics and Health.
- Zweifel P (1997), Health Economics.



<b>Course Code- DECE203</b>	<b>AGRICULTURE ECONOMICS</b>
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**Learning objectives:**

- To evaluate trends in agricultural production and productivity.
- To explore key theories of agricultural transformation.
- To understand and comprehend the financial aspects of agriculture, including credit flow and financing mechanisms.
- To understand marketing concepts and identify strategies to improve the agricultural marketing system. To
- Understand national agricultural policy and its implications.

**Unit I - Agriculture and Economic Development:** Meaning and scope of agricultural economics, traditional agriculture and its modernization, technical changes in agriculture, sustainable agriculture and organic farming, interdependence between agriculture and industry, Inter-sector Linkages of Agriculture [Backward and Forward Linkages].

**Unit II - Role of Agriculture in Economic Development:** Contribution of Agriculture to Economic Development; Declining Role, of Agriculture and Dilemmas of Development.

**Unit III - Agricultural production and productivity:** trends in agriculture production and productivity, low-level productivity causes & measures to increase production and productivity.

**Unit IV - Nature and scope of agricultural production economics & farm management** in developed and developing countries. The characteristics of agricultural products and production factors affect the demand for and supply of farm products.

**Unit V - Agricultural Transformation:** Schultz Theory of Transformation of Traditional Agriculture Mellor's Model of Agricultural Development. Hayami- Ruttan Induced Innovation Model of Agricultural Development.

**Unit VI - Agricultural Transformation:** Indian Experience.

**Unit VII - Role and Agricultural Finance & marketing:** Financial Institutions and credit flow to rural/priority sector.

**Unit VIII - Agricultural funding - Direct and Indirect Financing - Financing through Co-operatives, NABARD, Commercial Banks, and RRBs.**

**Unit IX - District Credit Plan and lending to agriculture;** its classification and sources of capital in agriculture.



**Unit X** - Principles of finance 3 RS. and 3Cs of credit. Capital rationing.

**Unit XI** - Concepts and definition of Agricultural Marketing and its problems, government measures to improve the agricultural marketing system.

**Unit XII** - Market intermediaries and their role - Need for regulation in the present context.

**Unit XIII** - Agricultural policy: National agricultural policy, agriculture price policy and its evaluation.

**Unit XIV** - WTO, and Indian agriculture: challenges and priorities in global economy; agriculture growth concern.

**Textbook:**

Misra and Puri. (2018). Indian Economy, Himalaya publications, 36th edition.

**Reference Book:**

- Reddy. S. S. (2008). Agriculture Economics Oxford Publication second edition.
- Aggarwal. N.L. and Acharya. S. S. (2020). Agricultural marketing in India. CBS publishers, 7th edition.
- Rao. V.S. and Raju. V. T. (2017). Economic of farm production and management. Oxford & IBH Publishing Co Pvt. Ltd 1st edition.

<b>Course Code- DEC2201</b>	<b>INTERNATIONAL ECONOMICS</b>
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**Learning objectives:**

- This course will provide the insights about the cause of trade, sources of the gains from trade and the domestic and international distribution of those gains and examine the instruments and consequences of trade policy measures—including tariffs and quantitative restrictions.
- To acquire the analytical methods needed and understanding of how and when to apply different models and approaches to events in the world economy and develop critical thinking about the nature of global events shaping up international economic scenario all across the world.

**Unit I** - Theory of International Trade: Classical theory, comparative advantages, constant costs, complete specialization.

**Unit II** - Neo- classical trade, Opportunity cost, incomplete specialization. general equilibrium in two-country, two goods open economy model, gains from trade.



**Unit III** - The Standard theory of International Trade: Heckscher Ohlin model, factor price equalization theorem, Stolper - Samuelson theorem, Leontief paradox, factor intensity reversals.

**Unit IV** - Terms of trade: Growth and terms of trade effects, Rybczynski theorem, Immiserating growth, growth and factor mobility – immigration and capital mobility.

**Unit V** - Offer curves; International Trade policy: trade policy and theory of trade interventions.

**Unit VI** - Trade Restrictions: Tariff, general equilibrium effects of tariffs on welfare, offer curves and tariffs.

**Unit VII** - Nontariff Trade Barriers: Quotas, comparison of tariffs and quotas, export subsidies, effective rate of protection.

**Unit VIII** - International Trade and Economic Integration; Theory of customs union –trade creation and trade diversion, stages of integration, regional trade major group.

**Unit IX** - Foreign Exchange Market: Determination of foreign exchange rate.

**Unit X** - Balance of Payment-Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments, expenditure reducing and expenditure switching policies.

**Unit XI** - India and the World Economy: Patterns (Structure) of India's Foreign Trade, Export Performance and Export Competitiveness; India's Trade Policy: Review of Pre- and Post-Liberalization.

**Unit XII** - India's Trade Policy: Review of Pre- and Post-Liberalization.

**Unit XIII** - India and WTO: Uruguay Round.

**Unit XIV** - Effects of Trade: on Poverty, Inequality, Environment, Gender, Labour Standards, Technological Transfers Etc.

**Textbook:**

Pugel, T.A (2008), International Economics, 13th Edition, Tata McGraw Hill Publishing Co.

**Reference Book:**

- Dominick Salvatore (2008), International Economics, John Wiley & Sons Inc.
- J N Bhagwati, A. Panagariya and T.N. Srinivasan (1998), Lectures on International Trade, Oxford University Press.





- Krugman, P.A. and M Obstfeld (2003), International Economics: Theory and Policy, 6th Edition.

Course Code- DEC2202	MONETARY ECONOMICS
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**Learning objectives:**

- To understand the concept of money.
- To be able to elaborate the financial system of India and its components.
- To Elaborate the demand and supply of money.
- To discuss the theories and recent reforms related to financial events.

**Unit I** - Introduction to Money and Institution: Meaning, History features of Money, circular flow of Money.

**Unit II** - Financial System of India: Central Bank nature and functions, Financial Market.

**Unit III** - Commercial Banks: Functions, Role of commercial bank in economic development, Structure of Commercial banks.

**Unit IV** - Supply of Money: Determinants of Money supply, Money Supply Functions, Supply of Money in India.

**Unit V** - The demand for Money: Transaction approach to demand for Money, Theories of demand of Money, Real balance effect.

**Unit VI** - The Monetary Standards: Types , Metallic Standards, Gold Standards, Bimetallic, Paper Currency.

**Unit VII** - Theories of Money and Price: Fisher's Transaction Approach to quantitative theory of money, Modern quantitative theory of money, Cambridge Cash balance approach.

**Unit VIII** - Interest and Income: Meaning of interest, Keynes's Monetary theory, Keynes's theory of rate of Interest.

**Unit IX** - Inflation - Market Theories of Inflation and Non-Market Theories of Inflation - Monetary Policy, Different types and Tools of Monetary Controls - Monetary Reforms in India (since 1991).

**Unit X** - Non-Banking Financial Intermediaries - The Classical System and the Neutrality of Money.

**Unit XI** - Indian Monetary Systems: RBI - NABARD - RRB - Co-operative Banks.



**Unit XII** - International Monetary Systems: IMF - World Bank - ADB.

**Unit XIII** - Recent Reforms in monetary system: Financial Committee: Narasimhan Committee Report and Raguram Rajan's Committee Report on Monetary Reforms.

**Unit XIV** - Demonetisation of Higher order Money in 2016 and its implications.

**Textbook:**

Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007.

**Reference Book:**

- N. Gregory Mankiw, Economics: Principles and Applications, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

<b>Course Code- DEC2203</b>	<b>OPERATION RESEARCH IN ECONOMICS</b>
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**Learning objectives:**

- To be familiar with the relationship of operations research with other key functional areas of the firm.
- To provide an in-depth understanding of the methodology of OR and its applications in diverse fields in making effective decision making.

**Unit I** - Fundamentals of L P models – definition, Component, Characteristics.

**Unit II** - Feasible solutions- infeasible solutions- unbounded solutions- in graphical method.

**Unit III**- Maximization of Objective Functions, Minimization of Objective Functions in liner programming.

**Unit IV**- Simplex Method of Linear Programming with two variables.

**Unit V** - Formulation , application and uses of Simplex Method.

**Unit VI** - Transportation algorithm- Concept, definiton and basic feasible solution of TP.

**Unit VII** - North West Corner Rule- Least Cost method- Vogel's Approximation Method – Optimality test, Stepping Stone method/.



**Unit VIII-** Concept, application and advantage of modified distribution method(MODI Method) of transportation.

**Unit IX -** Introduction of assignment problem, Steps involved in solving assignment problem.

**Unit X -** Structure and solution and Maximization in assignment problem, crew assignment problem.

**Unit XI -** Introduction to PERT and CPM, PERT/ CPM Determination of Earliest Expected and Latest Allowable.

**Unit XII -** Times - Determination of Critical path – PERT Cost- Scheduling of a project- Application of PERT, Critical Path Method- Problems, Decision Tree.

**Unit XIII -** Basic Features of inventory decisions, EOQ- Quantity discounts- EPQ models- ABC Analysis.

**Unit XIV -** Time series models of forecasting - Concept, definition and methods and uses of time series models of forecasting.

**Textbook:**

N.D Vohra, Quantitative Techniques, Mc-Graw Hill, New Delhi.

**Reference Book:**

- C. R. Kothari, Quantitative Techniques, Vikas Publications, New Delhi.
- W.J. Baumol, Economic Theory and Operation Analysis, Englewood Cliff, Prentice Hall, NJ.
- Ackoff R L and Saienni M W, Fundamentals of Operation Research, Wiley, New York
- Srivastava U.K, Shenoy G. V, and Sharma S C, Quantitative Techniques for Management Decisions, Wiley Eastern, New Delhi.
- Hira D.S (2019), Problems in Operation research, S Chand Publishing, New Delhi.

**ELECTIVES SEMESTER – IV**

<b>Course Code- DECE204</b>	<b>LABOUR ECONOMICS</b>
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**Learning objectives:**

- Labour Economics helps the students of Economics to understand the nature of the Labour market.
- Issues related to employment, wage determination, Industrial relations, the role of trade unions.
- Understand the role of the state Government in improving the standards of Labour.



- Facts about employment and earnings; the supply and demand framework.

**Unit I - Labor Supply:** The labour force participation decision, households and participation decisions, effect of changes in non-labour income, Effect of changes in market earnings, the individual's work-leisure Choice.

**Unit II - Home production:** Indifference curves- the budget constraint, utility maximisation, the individual's labour supply Curve, income and substitution effects, the backward-bending labour supply curve; Some applications of the model home production and the decision to work.

**Unit III - The Economics of the Family:** Introduction, Empirical methods: instrumental variables, Application: children and their parents' labor supply.

**Unit IV - The demand for labor:** The individual firm's demand for labour in the short run and long run, Industry demand for labour, elasticity of derived demand: Marshall's rules.

**Unit V - Wage Determination:** Theory and Practice: Classical, Neo classical and bargaining theories of wage determination, Concepts of wages - fair, living- minimum problems of implementation of minimum wages, Wage determination by sectors - Urban and Rural Organised and Unorganised sectors, Wage and non - wage components of Labour recommendation Wage and productivity and wage and inflation relationship - productivity and profit sharing schemes case studies - wage policy in India.

**Unit VI - Wage and employment determination:** Wages and employment determination at the level of the firm: the perfectly competitive labour market, Monopsony, and imperfect labour markets.

**Unit VII - Discriminating Policy:** The imposition of a minimum wage, discriminating monopsony, disequilibrium models of the labour market, gender discrimination, alternative policy implications.

**Unit VIII - Human capital, education, and training:** The market for educated labour, estimating formally the profitability of education: earning functions, econometric problem of earning functions, Theoretical criticism of the human capital theory, social policy on education and manpower planning in India".

**Unit IX - Employment:** Importance of employment in the context of poverty in developing countries Concept and measurement of unemployment Causes – Issues relating to employment, rationalization, technological, change and modernization. Rural Unemployment and educated Unemployment, Employment policy under the five-year plans - Evaluation of employment policy in India.

**Unit X - International Labour Organization:** Meaning, Importance, Government policy towards Labour and trade unions, Agricultural Labour – Child Labour – Labour in Unorganised sectors.



**Unit XI - Trade Unions:** Theories of Labour movement - Growth structure and pattern of trade union in India , Achievements and failures of trade union movements.

**Unit XII - Industrial Relations:** Growth of Industrialization and emergence of Unionism, Determinants of Industrial disputes – Steps to achieve peace – Methods of settling , industrial disputes – Collective bargaining, conciliation, arbitration, adjudication Grievance settlements , Labour participation in management.

**Unit XIII - Wage determination under trade unionism:** the bilateral monopoly model, the wage preference path and the wage bargain interminacy and the bargaining process, monopoly-union and efficient-bargain models, basic theories of collective bargaining process.

**Unit XIV - Trade Unions and collective bargaining:** Trade union objectives & structure, the determinants of trade union growth, economic or political institutions.

**Textbook:**

Praveen Jha B.R. Agricultural labour in India, Vikas publication, 2001.

**Reference Book:**

- R.A. Lester, Economics of Labour, Macmillan, 1964
- C.R. Mc Connell and S.L. Brue, Contemporary Labour Economics, McGraw Hill, 1986
- O.Ashenfelter and R. Layard. The Handbook of Labor Economics. Vol. 1. NorthHolland, 1987.
- P. Cahuch, Stéphane Carcillo, and André Zylberberg. Labor Economics, Second Edition. MIT Press, 2014.
- J. Angrist and Jörn-Steffen Pischke. Mastering 'Metrics: The Path from Cause to Effect.
- Princeton University, 2014.

<b>Course Code- DECE206</b>	<b>INTERNATIONAL FINANCIAL SYSTEM</b>
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**Learning objectives:**

- Gain knowledge about exchange rates, including different exchange rate regimes (fixed, floating, managed float), factors influencing exchange rate movements, and the mechanisms through which exchange rates are determined.
- Comprehend the balance of payments framework, including its components (current account, capital account, financial account), and the significance of balance of payments imbalances for countries' external positions.
- Analyse the functioning of foreign exchange markets, including the participants, instruments (spot, forward, options), and the impact of market dynamics on exchange rates.



**Unit I** - Introduction: Growing importance of international finance, costs of international investment, crisis & contagion.

**Unit II** - Balance of Payments-current account, capital account, official reserve account, the J curve, forex reserves-costs and benefits.

**Unit III** - BOP trends in major countries, persistent current account deficits & surpluses among nations (Global Imbalances) & their repercussions.

**Unit IV** - Shifting global dominance of the U.S.A., growing importance of a unified Europe and emerging Asia.

**Unit V** - International Monetary System I: Evolution of the international monetary system, bimetalism, Gresham's Law, classical gold standard, its strengths and weaknesses.

**Unit VI** - International Monetary System II: Inter war period, Bretton woods system, Triffin's Paradox, special drawing rights, flexible exchange rate regime, present arrangements including dollarization.

**Unit VII** - The European Monetary Union & its costs & benefits. Fixed versus floating exchange rate systems.

**Unit VIII** - Exchange Rate Determination & Forecasting: Measuring exchange rate movements & volatility, factors influencing exchange rates, Government intervention-direct & indirect intervention and sterilized & non-sterilized intervention.

**Unit IX** - Interest Rate Parity covered and uncovered interest arbitrage, Purchasing Power Parity-absolute & relative, Fisher Effect & International Fisher Effect.

**Unit X** - Forecasting Exchange Rates- Technical Approach, Fundamental Approach & Efficient Market Approach.

**Unit XI** - International Financial Markets: Forex Markets; spot market, direct & indirect exchange quotations, bid ask spread, cross exchange rates, forwards, futures & options market.

**Unit XII** - International money markets, international credit markets, international bond markets & international stock markets.

**Unit XIII** - Regulatory asymmetry & its implications. International Banking: Offshore banking & offshore currency trading, factors contributing to the growth of international banking & Eurocurrency trading, regulatory asymmetry, shadow banks.



**Unit XIV** - Bank failure & safety nets, the problem of moral hazard & systematically important financial institutions. Problems in regulating international banking, regulatory arbitrage. BIS & Basel Committee-issues & challenges.

**Textbook:**

Krugman, Paul R., Obstfeld, Maurice and Melitz, Marc, International Economics, Pearson Education.

**Reference Book:**

- "International Finance" by Maurice D. Levi, Routledge.
- Madura, Jeff, International Corporate Finance, South-Western/Cengage learning.
- Eun, Cheol S. and Resnick, Bruce G., International Financial Management, Tata McGraw-Hill.

<b>Course Code: DECE2204</b>	<b>DISSERTATION</b>
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Every student shall undertake Dissertation work in the IV semester and culminating with the project report in the IV semester. Students are encouraged to choose a project, of six months' duration either at place of work or any other location, in the chosen area of specialization to complete the Programme. The project work is equivalent to six credits.

**5.3. Duration of the programme**

<b>Programme</b>	<b>Level</b>	<b>Duration</b>	<b>Maximum duration for completion</b>	<b>Credits</b>
MA Economics	Master's Degree	2 years	(2+ 2) years (As per UGC Notification on Specification of Degree, 2014)	83 Credits

**5.4. Faculty and support staff requirement**

<b>Academic Staff</b>	<b>Number available to meet the required delivery norms</b>
Programme Coordinator	1 member
Course Coordinator	1 member
Course Mentor	1 member per batch of 250 students

**5.5. Instructional delivery mechanisms**

The Centre for Distance & Online Education of MUJ comprises of faculty members and staff who are well versed in Distance Education and Online delivery.

An Academic calendar depicting dates for all major events during each semester will be prepared by faculty members and shared with students through LMS, at the beginning of each academic session.

Apart from providing content in the form of Self Learning Material, enough e-learning resources in the form of Audio and Video content will be provided to students. Regular engagement of students will be ensured through the following means:

- Conduct of Webinars/live lectures/online lectures/Virtual Class
- By encouraging them to participate in mandatory Discussion Forums to stimulate their thinking, and to be able to fearlessly express their views in forums. These discussion forums will be moderated by faculty to provide equal opportunity for everyone to participate, as well as to ensure maintenance of decorum of the forum.
- Through periodic formative assessments

Regular evaluation of content learnt will be provided for, through Self-Assessment Questions within the SLM, as well as quizzes on the LMS. The quizzes can be taken any number of times, so that they reach a stage of being able to answer questions without errors, which is a reflection of their understanding of the concept.

Effort will be made to provide case studies to enhance their analytical ability and make right decisions.

Link to National Portals (SWAYAM/NPTEL) will be provided, as also link to University's digital library portal.

All links to additional reading will be provided in the LMS. Interested students can study beyond the confines of the syllabus.

#### 5.6. Identification of media—print, audio or video, online, computer aided

LMS provides for all audio video content (e-learning material, e-pubs, faculty-led video sessions, virtual classrooms and discussion boards), dashboard of their progress in learning, comparison with their peers in terms of learning, regular notifications regarding upcoming Webinars/virtual classes, Assignments, Discussion Forum participations and Examinations. It also provides an opportunity for raising queries if any, and seek answers to the same, by chat bot or course mentors.





### 5.7. Student Support Services

The Student Support services will be facilitated by the Centre for Distance & Online Education, Manipal University Jaipur, Rajasthan which includes the pre-admission student support services like counselling about the programme including curriculum design, mode of delivery, fee structure and evaluation methods. Post-admission student support services include guiding students towards accessing e-identity card, LMS portal, Academic calendar and academic delivery. Examinations support staff shall answer queries pertaining to conduct of end-semester examinations, evaluation and issue of certificates.

## **6. Procedure for Admission, Curriculum Transaction and Evaluation**

The purpose of Online education by Manipal University, Jaipur is to provide flexible learning opportunities to students to attain qualification, wherever learners are not able to attend the regular classroom teaching. Academic programmes offered for such candidates under Online Learning mode will be conducted by Centre for Distance & Online Education-Manipal University Jaipur with support of the various University schools. The programmes/courses may be termed Online mode for award of Degree. Eligibility criteria, programme/course structure, curriculum, evaluation criteria and duration of programme shall be approved by Board of Studies and Academic Council which are based on UGC guidelines.

Candidates seeking admissions in any programme offered by Centre for Distance & Online Education-Manipal University, Jaipur shall fill up online application form available on CDOE-MUJ website. Before applying, candidates must check eligibility criteria for programme that they are interested in. Details about Eligibility criteria, programme structure, curriculum, duration, and fee structure are available on the website.

### 6.1. Procedure for Admission

#### 6.1.1 Minimum Eligibility Criteria for admission

- Candidate must have a 10 + 2 + 3 years bachelor degree or equivalent qualification as recognized by Association of Indian Universities (AIU) or other competent body in any discipline from a recognized University/Institution.

#### **Important Instructions:**

- All admissions shall be provisional until and unless candidates meet the eligibility criteria.



- Admission will stand cancelled if a candidate CDOEs not meet eligibility criteria, or there is failure to pay programme/course fees.
- Admission will stand cancelled, if candidate CDOEs not submit proof of eligibility within stipulated time given by Centre for Distance & Online Education-Manipal University, Jaipur.
- Centre for Distance & Online Education-Manipal University, Jaipur has the right to make necessary changes from time to time as deemed fit in Eligibility criteria, programme/course structure, curriculum, duration, fee structure and programme announcement dates. All changes will be notified on website.
- Candidates should carefully read all instructions given in Programme prospectus before start of application form.

#### 6.1.2. Fee Structure and Financial assistance policy

Suggested Fee for MA Economics programme is INR 80,000/- (Eighty Thousand only).

A scholarship of upto 25% on tuition fees will be provided to Divyang students and students from Public Sector Undertaking / Defence background.

#### 6.2. Curriculum Transactions

##### 6.2.1. Programme Delivery

Manipal University, Jaipur has state-of-the-art mechanism for online mode of Academic delivery to ensure quality education. Faculty members at MUJ offer expert guidance and support for holistic development of the students. Faculty members are not mere facilitators of knowledge but they also mentor students to make learning more engaging and maintain high retention level. The programme will be delivered with an aim to provide expertise and ensure that students excel in their domains. The features of programme delivery are:

- Online Mode of Academic Delivery
- Periodic review of Curriculum and Study material
- Live Interactive lectures from faculty / Course coordinators
- Continuous Academic and Technical support
- Guidance from Course Co-ordinators
- Learning and delivery support from Course Mentors



#### 6.2.2. Norms for Delivery of Courses in Online Mode

S. No.	Credit value of the course	No. of Weeks	No. of Sessions		Interactive		Hours of Study Material		Self-Study hours including Assessment etc.	Total Hours of Study (based on 30 hours per credit)
			Synchronous Online Counselling/ Webinars/ Interactive Live Lectures (1 hour per week)	Discussions Forum/ asynchronous Mentoring (2 hours per week)	e-Tutorial in hours	e-Content hours				
1.	2 Credits	6 weeks	6 hours	12 hours	10	10	22	60		
2.	4 Credits	12 weeks	12 hours	24 hours	20	20	44	120		

#### 6.2.3. Learning Management System to support Online mode of Course delivery

LMS Platform has been built to help learners reach their potential in their chosen programme. It is a secure, reliable learning experience tool that works consistently on Web and Mobile devices. Its simple interface makes it easy for instructors to design courses, create content and grade assignments. It provides a great mobile experience due to the responsive design which is paired with purpose-built native apps. It provides seamless accessibility to ensure all tools are standards-compliant and easy for students to navigate using assistive technologies. It provides 24 X 7 learning experience to facilitate learning as per the pace chosen by learners. Digital portfolio functionality allows students to document and share their learning journey as it happens, on both web and mobile platforms.

#### 6.2.4. Course Design

The Course content is designed as per the SWAYAM guidelines using 4-quadrant approach as detailed below to facilitate seamless delivery and learning experience

(a) Quadrant-I i.e. e-Tutorial, that contains – Faculty led Video and Audio Contents, Simulations, video demonstrations, Virtual Labs

(b) Quadrant-II i.e. e-Content that contains - Portable Document Format or e-Books or Illustration, video demonstrations, documents as required.



(c) Quadrant-III i.e. Discussion forums to raise and clarify doubts on real time basis by the Course Coordinator and his team.

(d) Quadrant-IV i.e. Self-Assessment, that contains MCQs, Problems, Quizzes, Assignments with solutions and Discussion forum topics.

#### 6.2.5. Academic Calendar

Sl No.	Event	Batch	Last Date (Tentative)
1	Commencement of semester	January	1 <sup>st</sup> January
		July	1 <sup>st</sup> July
2	Enrol student to Learning Management system	January	Within 2 working days of fee confirmation
		July	
3	Assignment Submission	January	March end and April end
		July	September end and October end
4	Submission of Synopsis (Applicable during Pre final semester)	January	30 <sup>th</sup> April
		July	30 <sup>th</sup> October
5	Project Report Submission (Applicable during Final semester)	January	30 <sup>th</sup> April
		July	30 <sup>th</sup> October
6	Webinars / Interactive Live Lectures and Discussion Forum for query resolution	January	Mar to May
		July	September to November
7	Admit Card Generation	January	3 <sup>rd</sup> week of May
		July	3 <sup>rd</sup> week of Nov
8	Term End Examination	January	2 <sup>nd</sup> week of June (TEE June)
		July	2 <sup>nd</sup> Week of December (TEE December)
9	Result Declaration of End Term Examination	January	Last week of August
		July	Last week of February

#### 6.3. Evaluation

The students' learning in a course would be evaluated based on Internal assignments, students' response sheets, and semester end examinations. University adopts rigorous process in development of question papers, question banks, assignments and their moderation, conduct of examinations, evaluation of answer scripts by qualified teachers,



and result declaration. The Directorate shall frame the question papers so as to ensure that no part of the syllabus is left out of study by a learner.

The evaluation shall include two types of assessments-continuous or formative assessment in the form of assignments, and summative assessment in the form of end semester examination or term end examination which will be held with technology supported remote proctored examination tool.

However, we shall be considering the guidelines issued by the Regulatory bodies from time-to-time about conduct of examinations.

The examinations shall be conducted to assess the knowledge acquired during the study. There shall be two systems of examinations viz., internal and external examinations. In the case of theory courses, the internal evaluation shall be conducted as Continuous Internal Assessment via Student assignments preparation, quizzes. The internal assessment shall comprise of maximum of 30 marks for each course. The end semester examination shall be of three hours duration for each course at the end of each semester.

#### 6.3.1. Question Paper Pattern

Time: 3 Hours

Max. Marks: 70

Part A - (Multiple Choice Questions) - 10 x 2 Marks = 20 Marks

Part B - (Short Answers) - Answer any 4 (out of 6) 4 x 5 Marks = 20 Marks

Part C – (Long Answers) – Any 3 (out of 4) x 10 Marks = 30 Marks

#### 6.3.2. Distribution of Marks in Continuous Internal Assessments

The following procedure shall be followed for awarding internal marks for theory courses. Student must submit two assignments each carrying 30 marks and average of both will be considered as internal assessment marks.

#### 6.3.3. Passing Minimum

The students are considered as passed in a course if they score 40% marks in the Continuous Evaluation (IA) and Term-End Examinations (TEE) individually. If a student fails in any one



component (failure to get 40% marks either in IA or TEE), then he/she will be required to re-appear for that component only (IA or TEE as the case may be).

#### 6.3.4. Marks and Grades

Based on the total marks obtained for each course in Internal Assessment and Term End examinations, student will be awarded grade for that course. The following table gives the marks, grade points, letter, grades and classification to indicate the performance of the candidate.

Range Marks	of	Grade Points	Letter Grade	Description
≥90 to ≤100		10	A+	Outstanding
≥80 to <90		9	A	Excellent
≥75 to <80		8	B+	Distinction
≥70 to <75		7	B	Very Good
≥60 to <70		6	C+	Good
≥50 to <60		5	C	Average
≥40 to <50		4	D+	Below Average
<40		0	F	Re-appear
ABSENT		0	AAA	ABSENT

#### For a semester:

$$\text{Grade Point Average [GPA]} = \sum_i C_i G_i / \sum_i C_i$$

Grade Point Average =

$$\frac{\text{Sum of the multiplication of grade points by the credits of the courses}}{\text{Sum of the credits of the courses in a semester}}$$

$C_i$  = Credits earned for the course  $i$  in any semester

$G_i$  = Grade Point obtained for course  $i$  in any semester.

$n$  refers to the semester in which such courses were credited

#### For the entire programme:



$$\text{Cumulative Grade Point Average [CGPA]} = \frac{\sum_n \sum_i C_{ni} G_{ni}}{\sum_n \sum_i C_{ni}}$$

$$\text{CGPA} = \frac{\text{Sum of the multiplication of grade points by the credits of the entire programme}}{\text{Sum of the credits of the courses for the entire programme}}$$

## 7. Requirement of the Laboratory Support and Library Resources

### 7.1. Laboratory Support

No lab based courses are offered in this program.

### 7.2. Library Resources

Centre for Distance & Online Education, Manipal University Jaipur, Rajasthan has excellent Library facility with adequate number of copies of books in relevant titles for MA Economics programme. The Central Library of Manipal University Jaipur is also having good source of reference books. The books available at both the libraries are only for reference purpose and lending services. In addition, reference books as prescribed will be procured. The Digital library access will also be made available to students who are enrolled into online mode of education. In addition, the university membership on Swayam/ NPTEL/ Knimbus will also be made available to students. Complete e-Learning resources to course would be made available on Learning Management System for learning along with e-tutorial lectures. Further, expert lectures/workshops/ webinars by industry experts would also be conducted for the students.

## 8. Cost Estimate of the Programme and the Provisions

The cost estimate of the Programme and provisions for the fund to meet out the expenditure to be incurred in connection with MA Economics Programme as follows:

Sl. No.	Expenditure Heads	Approx. Amount
1	Programme Development (Single Time Investment)	82,00,000 INR
2	Programme Delivery (Per Year)	9,00,000 INR
3	Programme Maintenance (Per Year)	42,00,000 INR

## 9. Quality assurance mechanism and expected programme outcomes

The quality of the programme depends on scientific construction of the curriculum, strong-enough syllabus, sincere efforts leading to skilful execution of the course of the study. The ultimate achievement of MA Economics programme of study may reflect the gaining of knowledge and skill in area of economics. Gaining of knowledge and skills in economics may help the students to get new job opportunities, upgrading their position not only in employment, but also in the society.

The benchmark qualities of the programme may be reviewed based on the performance of students in their end semester examinations. Also, the feedback from the alumni, students, parents and employers will be received and analysed for further improvement of the quality of the programme.

Manipal University Jaipur has constituted Centre for Internal Quality Assurance (CIQA), which will assist Director, Centre for Distance & Online Education to conduct periodic review and assessments and assist the Directorate to implement necessary quality measures and effectiveness in programme delivery. CIQA is constantly involved in reviewing all materials prepared by CDOE, including syllabus, SLMs and e-learning content. CIQA will be involved in conducting studies to measure effectiveness of methods adopted for learning. As we proceed further, CIQA will involve in benchmarking quality of academic delivery, and perform various analyses, and guide all stakeholders towards upgrading quality constantly.

Centre for Internal Quality Assurance Committee (CIQAC) chaired by the Vice Chancellor consisting of internal and external experts oversees the functioning of Centre for Internal Quality Assurance and approve the reports generated by Centre for Internal Quality Assurance on the effectiveness of quality assurance systems and processes.

In addition to CIQA, as per the guidelines of National Assessment and Accreditation Council (NAAC), Manipal University, Jaipur has constituted Internal Quality Assurance Cell (IQAC), in which academicians, industry representatives and other stakeholders are nominated as members. The IQAC is a part of the institution's system and work towards realisation of the goals of quality enhancement and sustenance, as quality enhancement is a continuous process. The prime task of the IQAC is to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institutions. The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. IQAC's elementary motive is to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.



The guidelines on quality monitoring mechanism prescribed by the UGC have been adopted by the Centre for Internal Quality Assurance for conducting institutional quality audits, to promote quality assurance and enhance as well as spread best-in-class practices of quality assurance. University has setup an effective system for collecting feedback from the stakeholders regularly to improve its programmes. The University will conduct self-assessments regularly and use the results to improve its systems, processes etc. and finally quality of programmes.