DEPARTMENT OF ECONOMICS
Syllabus for M.A. (Economics)

Course Learning Outcomes

- Students will connect with the roots of Economics.
- They will understand the development of different Economicism and their evolution.
- This will boost the sprite of Economics in students and will prepare learned Economics of the future.
- With knowledge of existing trends, students can fruitfully work with new and upcoming trends.

(Prof. S. Nayak) (Prof. M. K. Singh) (Prof. J. K. Jain) (Prof. D. Bose) (Prof. G. M. Dubey) (Dr. V. Thawre) (Dr. U. Anand)

M.A. Economics (Post Graduation)

SEMESTER-I	ECO-DSM-121	MICRO ECONOMIC ANALYSIS- I			
Course Code	**Title of the Course**	**Credits**			**Marks**
		L	**T**	**Total**	
ECO-DSM-121	**MICRO ECONOMIC ANALYSIS- I**	5	1	6	**IA (Mid)-40** **EA (End Sem)-60**

Lectures/Hrs. 75 Each Unit 15 hrs.

Learning Outcomes: Student will be able to

- Recognize the scope and methodology of micro-Economics.
- Classify the concepts of consumer behavior such as cardinal and ordinal utility analysis.
- Interpret the indifference curves, consumer equilibrium and price effect.
- Estimate firm and industries production function.
- Assess different cost curve and revenue curve.

Unit Wise Learning Outcomes

- **UO-1: -**Student will learn about The Demand Analysis and Consumer Surplus.
- **UO-2: -**Student will learn about The Production Function and Cost.
- **UO-3: -**Student will learn about The Market Structure and Perfect Competition Market.
- **UO-4: -**Student will learn about The Monopoly and Imperfect Competition Market.
- **UO-5: -**Student will learn about The Oligopoly Market and Game Theory.

UNIT- 1	Demand Analysis: Elasticity of Demand, Theories of Demand- Utility, Consumer Equilibrium, Indifference Curve and their Applications, (income and substitution effects, Slutsky theorem) Revealed Preference Theory, Revision of demand theory by Hicks; Consumer Surplus- Value Paradox, Evaluating Benefit from Tax. **(15 Hours)**
UNIT- 2	Production Function: Short Run and Long Run, Theory of Production - Law of Variable Proportion and Returns to Scale, Isoquants, Elasticity of Substitution, Technical Progress and Production Function, Cobb-Douglas Production Function and return to scale. Traditional and Modern Theories of Costs- Empirical Evidence, - Numerical Problems. **(15 Hours)**
UNIT- 3	Market Structure and concepts of Revenue, AR, MR and Price elasticity of Demand; Objectives and Equilibrium of the Firm: TR–TC Approach; MR–MC Approach; Second Order Condition. Perfect Competition-Equilibrium of Firm and Industry; Short-run & long run supply curve under perfect competition; Increasing, Constant & Decreasing Cost Industry; Kaldor and Sraffa on Incompatibility of Equilibrium Under Perfect competition; Numerical Problems. **(15 Hours)**

UNIT- 4	Price & output equilibrium under Monopoly; Allocative inefficiency and Dead-weight Loss, Monopoly power, Absence supply curve, Price & output equilibrium under Price Discrimination, Imperfect Competition- Price & output equilibrium under Monopolistic Competition; Selling costs and Advertising; Excess capacity under Monopolistic Competition; Numerical Problems. **(15 Hours)**
UNIT- 5	Oligopoly: Various approaches to Price-output determination under oligopoly-cooperative vs. non-cooperative behavior, Collusive &non-Collusive oligopoly, Cartel, Kinked-Demand Curve theory; Cournot, Bertrand and Chamberlin Models; Game Theory Approach. **(15 Hours)**

Suggested Readings:

- Koutsoyiannis, A. (1979), Modern Microeconomic (2nd Edition), Macmillan press, London
- Henderson. J.M. and R.E. Quandt (1980) Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- H.L. Ahuja, (Latest Edn.) Principals of Micro Economics, S.Chand Publishing, New Delhi
- एच. एल आहूजा व्यष्टिपरक आर्थिक विश्लेषण, एस. चांद पब्लिसिंग नईदिल्ली।
- एच. एल. झिंगन, व्यष्टि अर्थशास्त्र, वृंदा पब्लिकेशन, नईदिल्ली।

M.A. Economics (Post Graduation)

<table>
<tr><td colspan="2">SEMESTER-I</td><td colspan="3">ECO-DSM-122</td><td>QUANTITATIVE METHODS-I</td></tr>
<tr><td rowspan="2">Course Code</td><td rowspan="2">Title of the Course</td><td colspan="3">Credits</td><td rowspan="2">Marks</td></tr>
<tr><td>L</td><td>T</td><td>Total</td></tr>
<tr><td>ECO-DSM-122</td><td>QUANTITATIVE METHODS-I</td><td>5</td><td>1</td><td>6</td><td>IA (Mid)-40
EA (End Sem)-60</td></tr>
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Lectures/Hrs. 75 Each Unit 15 hrs.

Learning Outcomes:- Students will be able to

- Express relationship between economic variables mathematically, analyze, optimize, and interpret them.
- Use appropriate techniques to solve problems with calculus and linear algebra.
- Understand the basics of Game theory to resolve economic issues.

Unit Wise Learning Outcomes

- **UO-1:-**Student will learn about Central Tendency, Dispersion, Mean Deviation, Skewness and Kurtosis.
- **UO-2:-**Student will learn about Correlation and Regression Analysis.
- **UO-3:-**Student will learn about Matrix and Determinants.
- **UO-4:-**Student will learn about Derivatives and Integration.
- **UO-5:-**Student will learn about Probability.

UNIT- 1	Review of Descriptive Statistics I: Central Tendency (Mean, Mode, Median, Geometric Mean and Harmonic Mean), Dispersion (Range, Quartile Deviation, Mean Deviation and Standard Deviation), Skewness (Bowley's and Karl Pearson's) and Kurtosis. **(15 Hours)**
UNIT- 2	Review of Descriptive Statistics II: Correlation Analysis – Karl Pearson 's Correlation, Correlation in Grouped Series, Rank Correlation, Partial Correlation, Probable Error, Regression Analysis – Method of Least Squares, Multiple Correlations and Multiple Regressions, Standard error of estimate and regression (applications only) . **(15 Hours)**
UNIT- 3	Matrix: Types, Simple Operations of Matrix, Some special forms of Square Matrix, transpose & Inverse of Matrix, Matrix to the Solution of Linear Equations, Rank of Matrix. Determinants: Basic Properties, Solution of Simultaneous Equation Through Cramer 's Rule, Application of Determinants and Matrix in Economics. **(15 Hours)**
UNIT- 4	Derivatives: Partial and Total; High Order Derivatives, problems of maxima and minima in single and multivariable functions: it's Use in economics (Elasticity of Demand; Total, Average and Marginal Cost & Revenue); Profit Maximization; Effects on Taxation & Subsidy. Integration: Definite and Indefinite Integration, Measuring Consumer and Producer Surplus. **(15 Hours)**
UNIT- 5	Probability: Basic Terminology, Types of Probability, Probability rules- Addition & Multiplication Rule, Permutation and Combination, Conditional Probability, Baye's Theorem - Inverse probability; Binomial, Poisson and Normal distribution. **(15 Hours)**

Suggested Readings:

- Nagar, A.L. and R.K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
- Monga, G.S. (1972), Mathematical and Statistics for Economists, Vikas Publishing House, New Delhi.
- Gupta, S.C. (1993), Fundamental of Applied Statistics, S. Chand & Sons, New Delhi.

SEMESTER – I		ECO-MDM-121		INTERNATIONAL TRADE AND FINANCE	
Course Code	**Title of the Course**	**Credits**			**Marks**
		L	**T**	**Total**	
ECO-MDM-121	**International Trade and Finance**	5	1	6	**IA (Mid)-40** **EA (End Sem)-60**

Lectures/Hrs. 75 Each Unit 15 hrs.

Learning Outcomes: Student will be able to

- The course provides a deep understanding about the broad principles and theories, which tend to govern the free flow of trade in goods, services and capital, both short-term and long-term
- Understand the theoretical framework that deals with international trade behaviour.
- Identify the relationship between economic growth and international trade.
- Evaluate the effectiveness of various barriers to free trade.
- Appraise the role of movement of capital across borders in development of an economy.

Unit Wise Learning Outcomes

- **UO-1:-**Student will learn about The Basics of International Trade.
- **UO-2:-**Student will learn about The Different Theories of International Trade.
- **UO-3:-**Student will learn about The Heckscher-ohlin and Samuelson's Theory.
- **UO-4:-**Student will learn about The Tariffs and Quotas.
- **UO-5:-**Student will learn about The Terms of Trade.

UNIT- 1	International Trade: Meaning, Advantages- Disadvantages and Effects; Interregional vs. International Trade; Theory of Absolute Advantage; Theory of Comparative Advantage. **(15 Hours)**
UNIT- 2	Taussing's Money Cost Interpretation of Comparative Cost Theory; Mill's Theory of Reciprocal Demand and its Explanation with the help of Offer Curves; Haberler's Theory of Opportunity Cost. **(15 Hours)**
UNIT- 3	Modern Theory of Factor Endowments (Heckscher-Ohlin theory), Price Criterion and Physical Criterion; Leontief's Paradox; Samuelson's Factor Price Equalization Theorem, Assumption, Stages and Proves with Edgeworth Box Diagram. **(15 Hours)**
UNIT- 4	Tariffs-Classification, Measurement and Effects under Partial and General Equilibrium Analysis; Optimum Tariffs; Retaliation of tariffs; Quotas-Types and effects. **(15 Hours)**
UNIT- 5	Free Trade vs. Protections; Dumping; Terms of Trade- Concept, Types, Factor Determining and Importance; Causes of Deterioration in Terms of Trade. **(15 Hours)**

Suggested Readings:

- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study, Guide and Work Book, (5th Edition), Routledge Publishers, London.
- Dunn, R.M. and J.H. Mutti (2000), International Economics, Routledge, London.
- Kenen, P.B. (1994), the International Economy, Cambridge, University Press, London.

SEMESTER – I		ECO-SEC-121	FINANCIAL MARKETS & ENVIRONMENT-1		
Course Code	**Title of the Course**	**Credits**			**Marks**
		L	**T**	**Total**	
ECO-SEC-121	**Financial Markets & Environment-1**	4	0	4	**IA (Mid)-40** **EA (End Sem)-60**

Lectures/Hrs. 60 Each Unit 12 hrs.

Learning Outcomes:- Student will be able to

- Understand, at the level of formal analysis, the major models of international trade
- Distinguish between them in terms of their assumptions and economic implications
- Understand the principle of comparative advantage and its formal expression.
- Critically analyse the main arguments for protection and conversely.
- Critically evaluate the relevance and realism of arguments for free trade, taking into account the costs and benefits of trade policy measures.

Unit Wise Learning Outcomes

- **UO-1:-**Student will learn about The Introduction of Indian Financial Market.
- **UO-2:-**Student will learn about The Introduction of Financial Market.
- **UO-3:-**Student will learn about The Money Market.
- **UO-4:-**Student will learn about The Capital Market.
- **UO-5:-**Student will learn about The Investors Protection.

UNIT- 1	**Introduction to Indian Financial System:** Introduction of financial system, Functions of the Financial System, Structure and Characteristics of Financial system, Prerequisites of a Financial System **(12 Hours)**
UNIT- 2	**Introduction of Financial Markets :** Evolution of the Financial Markets, Segments of Financial Markets, Role of Financial markets, Financial market Instruments: Equity & Preference shares, Debentures– meaning and features. **(12 Hours)**
UNIT- 3	**Money Market:** Introduction to Money Market, Evolution of Money Market in India, Need for Money market Components of the Money Markets, Call Money Market, Treasury Bill Market, Commercial Paper Market, Certificate of Deposit Market, REPOS (Repurchase Agreement) Role of Primary Dealers. **(12 Hours)**
UNIT- 4	**Capital Market:** Need for Capital Markets, Segments of Capital Markets, Players in Capital Markets, Major Trends in Capital Market, Regulation of the Capital Markets, Historical Perspective and Evolution of Regulations, SEBI-Role . **(12 Hours)**

UNIT- 5	**Investors Protection:** Need for Investor's Protection, Factors affecting investor's Interest, Investor's protection Measures 6. Bond Market: Evolution of the Bond Market – Fixed Rate and Floating Rate Bonds – Convertible Bonds – Innovative Bond Issuance Structures – Secondary Market for Bonds. **(12 Hours)**

Suggested Readings:

- . Financial Markets & Institutions By Jeff Madura, Indian Edition 2008
- "Indian Financial System" By Bharati.V.Pathak , 3rd edition, , Published By Pearson education India
- "Indian Financial System", H.R. Machiraju, Vikas Publishing House.

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M.A. Economics (Post Graduation)

SEMESTER-II		ECO-DSM-221 MICRO ECONOMIC ANALYSIS- II			
Course Code	Title of the Course	Credits			Marks
		L	T	Total	
ECO-DSM-221	MICRO ECONOMIC ANALYSIS- II	5	1	6	IA (Mid)-40 EA (End Sem)-60

Lectures/Hrs. 75 Each Unit 15 hrs

Learning Outcomes: Student will be able to

- Analyze the behavioral patterns of different economic agents under different forms of market
- Understand that decision-making process in different market situations such as perfect
- Internalize the concept of general equilibrium, economic efficiency, and market failure.
- Assess advance theoretical issues and practical applications of distribution theories.

Unit Wise Learning Outcomes

- **UO-1:-**Students will learn about the Marginal Productivity Theory of Distribution and About The Competitive Market.
- **UO-2:-**Students will learn about The Theories of Rent, Interest and Profit.
- **UO-3:-**Students will learn about The General Equilibrium and Welfare Economics.
- **UO-4:-**Students will learn about The Market Failure and Information Problems.
- **UO-5:-**Students will learn about The Compensation Principle and Social Welfare.

UNIT- 1	**Theory of Distribution:** Marginal Productivity theory of Distribution; Neo-classical theory of distribution; Determination of factor prices in competitive Market - Wage determination under perfect competition; Determination of factor prices in imperfectly competitive Markets. **(15 Hours)**
UNIT- 2	**Theory of Rent:** Ricardian theory; Quasi rent; Keynsian & Modern theory of Interest; Theory of Profit: JB Clark 's, Knight, Schumpeter; Monopoly and Profits. **(15 Hours)**
UNIT- 3	General Equilibrium Analysis of Production & Exchange, Exchange & Consumption; General Equilibrium & Perfect Competition; **Welfare Economics**: Concepts of social welfare; Pigovian welfare economics; Pareto criterion and Edgeworth box, Pareto criterion of social welfare – conditions of Pareto optimality. **(15 Hours)**
UNIT- 4	**Market Failure:** Monopoly as a cause of market failure; External economies and diseconomies; Externalities and Pareto optimality; **Information Problem:** The market for Lemons and adverse selection - Asymmetric information and market failure; The insurance market and adverse selection; The problem of moral Hazard. **(15 Hours)**
UNIT - 5	Compensation principle- Kaldor-Hick's welfare criterion; Scitovsky's Paradox; Social welfare function and social choice theory - Social welfare function and value judgments; Theory of Second Best - Arrow's impossibility theorem. **(15 Hours)**

Suggested Readings:

- H.L. Ahuja, (Latest Edn) Business Economics: S.Chand Publishing, New Delhi.
- K.K. Dewett, (2005), Modern Economic Theory (22^{nd} Rev. Edn), S.Chand Publishing, New Delhi.
- Henderson. J.M. and R.E. Quandt (1980) Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.

M.A. Economics (Post Graduation)

SEMESTER-II		ECO-DSM-222		QUANTITATIVE METHODS-II	
Course Code	**Title of the Course**	**Credits**			**Marks**
		L	**T**	**Total**	
ECO-DSM-222	**QUANTITATIVE METHODS-II**	5	1	6	**IA (Mid)-40** **EA (End Sem)-60**

Lectures/Hrs. 75 Each Unit 15 hrs

Learning Outcomes: Student will be able to

- Use the techniques of mathematical and statistical analysis.
- Demonstrate the role of quantitative techniques in the field of business/industry.
- Classify data based on its source and nature.

Unit Wise Learning Outcomes

- **UO-1:-**Students will learn about The Sampling and Estimations.
- **UO-2:-**Students will learn about The Hypothesis Testing and Their Significances.
- **UO-3:-**Students will learn about The Input-Output Analysis and Game Theory.
- **UO-4:-**Students will learn about The Linear Programming.
- **UO-5:-**Students will learn about The Two Variable Regression Model.

UNIT- 1	**Theory of Sampling and Estimation:** Sampling Distribution and Estimation - Census and Sample Survey, Reason to Sample, Sampling Methods- Probability and Non-Probability Sampling, -; Determinants of Sample Size, Sampling Error, Point and Interval Estimation, Properties of Good Estimator. Standard Error. **(15 Hours)**
UNIT- 2	**Test of Hypothesis and Significance:** Testing of hypothesis: Type I and Type II errors; Level of significance, Interpretation of P-value Goodness of fit, Confidence intervals and level of significance; One tailed and two tailed tests; Hypothesis testing of means and variance based on Z and t tests Chi-square and F tests; Analysis of variance. **(15 Hours)**
UNIT- 3	**Input-Output Analysis:** Leontief's Static & Dynamic Models; Simon-Hawkins conditions. **Games Theory:** Basic concepts; Two person's constant sum of zero-sum games; Pay-off matrix and strategies; saddle point. **(15 Hours)**
UNIT- 4	**Linear Programming:** Meaning and definition, importance and characteristic, problem LP model, Solution of Minimizations & Maximizations Problem by Graphical and Simplex Method, Linear Programming and Basic Economic Problems. **(15 Hours)**
UNIT- 5	**Two Variable Regression Model:** Regression vs. Causation and correlation, Meaning - Population and sample regression function, Problem of Estimations – The Method of Ordinary Least Square – The Underlying Assumptions and their Rationality, Properties of Least square estimators. **(15 Hours)**

Suggested Readings:

- Nagar, A.L. and R.K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
- Monga, G.S. (1972),Mathematical and Statistics for Economists, Vikas Publishing House, New Delhi.
- Gupta, S.C. (1993), Fundamental of Applied Stat istics , S. Chand & Sons, New Delhi .

M.A. Economics (Post Graduation)

SEMESTER-II	ECO-MDM-221	INDIAN ECONOMY			
Course Code	Title of the Course	Credits			Marks
		L	T	Total	
ECO-MDM-221	INDIAN ECONOMY	5	1	6	IA (Mid)-40 EA (End Sem)-60

Lectures/Hrs. 75 Each Unit 15 hrs

Learning Outcomes: Student will be able to

- Get acquainted with basic features of Indian Economy.
- Develop ideas of the basic demographic characteristics of Indian economy.
- Understand the importance, causes and impact of population growth and its distribution.

Unit Wise Learning Outcomes

- **UO-1:-**Student will learn about The Basics of Indian Economy.
- **UO-2:-**Student will learn about The Concepts of Unemployment and Poverty.
- **UO-3:-**Student will learn about The Agriculture in India.
- **UO-4:-**Student will learn about The Industrial Development in India
- **UO-5:-**Student will learn about The Foreign Trade in India and Different Government Institutions.

UNIT-1	**Indian Economy**: Structure and Characteristics; Natural Resources and Economic Development, Issues, challenges, and policies for Rural &Urban Development; Indicators of Development- National Income, Per Capita Income, Health, Education, Human Development Index (HDI), and Physical Quality of Life Index (PQLI), India's Population, Causes and Problems of Increase Population. **(15 Hours)**
UNIT- 2	**Unemployment:** Concept, Types, Causes and Estimates; Rural/Urban Migration; Urbanization and civic amenities; **Poverty:** Concept and measurements— Head count Index, Poverty Gap Index, Squared Poverty Gap Index and Human Poverty Index (HPI); Effects of Poverty and Unemployment. **(15 Hours)**
UNIT- 3	**Agricultural in India:** Cropping Pattern; Causes and Measures to Increase of Low Production and Productivity; Technological Changes and Mechanization in Agriculture; Major challenges of Agriculture sector in India, **Agricultural Finance:** Institutional and Non-Institutional Sources, Difficulties and Suggestion, WTO, and Indian Agriculture. **(15 Hours)**
UNIT- 4	**Industrial Development in India:** Problem of sick units in India; Micro, Small and medium Enterprises (MSMEs): Functions, Characteristics, Performance and Challenges, New Industrial Policy; Issues in labor market reforms, Role and Contribution of Financial Services, Insurance, Tourism and Healthcare Services; Reasons for Rapid Growth of Service sector in India; FDI in service sector. **(15 Hours)**
UNIT- 5	**Foreign Trade of India**: Foreign Direct Investment (FDI); Multinational Corporation (MNCs), NITI Aayog; National Development Council (NDC); Non-Government Organizations (NGOs); SHG's, Social Security: Concept and Schemes of social security in India. **(15 Hours)**

Suggested Readings:

- World Bank (2000), India: Reducing Poverty, Accelerating Economic Development, Oxford University Press, New Delhi.
- Ramesh Singh (14th Edition), Indian Economy, Mc Graw Hill.
- Brahmananda, P.R. and V.R.Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, New Delhi.

M.A. Economics (Post Graduation)

SEMESTER – II		ECO-SEC-221 FINANCIAL MARKETS & ENVIRONMENT-II			
Course Code	**Title of the Course**	**Credits**			**Marks**
		L	**T**	**Total**	
ECO-SEC-221	**FINANCIAL MARKETS & ENVIRONMENT-II**	4	0	4	**IA (Mid)-40** **EA (End Sem)-60**

Lectures/Hrs. 60 Each Unit 12 hrs

Learning Outcomes: Student will be able to

- Get acquainted with basic features of Financial Economy.
- Develop ideas of the basic demographic characteristics of financial economy.
- Understand the importance and impact of Corporate Finance.

Unit Wise Learning Outcomes

- **UO-1:-**Student will learn about The Introduction to Corporate Finance.
- **UO-2:-**Student will learn about The Non-Banking Finance Companies.
- **UO-3:-**Student will learn about The Technology and the Market.
- **UO-4:-**Student will learn about The Foreign Exchange Market.
- **UO-5:-**Student will learn about The Bond Market.

UNIT-1	**Introduction to corporate finance** – Meaning and evolution, significance and goals, Functions of a finance manager. **(12 Hours)**
UNIT- 2	**Non –Banking Finance Companies:** Introduction, Registration and Classification &Prudential Norms to be NBFC, Types of Non – Banking Financial Companies, Services Provided by NBFCs, Regulation of NBFC companies, Growth of NBFC in India. **(12 Hours)**
UNIT- 3	**Technology and the Markets:** Technological developments in financial markets; both money and capital markets specially after post reform period, Impact of Technology on the Market, On-Line Trading, Clearing & Settlement system, Technology and payment System, Technology, and global market. Role of E- Commerce in the development of Financial Markets. **(12 Hours)**
UNIT- 4	**Foreign Exchange Markets:** Introduction to Foreign Exchange Markets, Structure of Foreign Exchange Markets, Types of transactions and settlement. **(12 Hours)**
UNIT- 5	**Bond Market: Evolution of the Bond Market** – Fixed Rate and Floating Rate Bonds – Convertible Bonds – Innovative Bond Issuance Structures – Secondary Market for Bonds. **(12 Hours)**

Suggested Readings:

- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
- Machiraju, M.R. (1999), Indian Financial Systems, Vikas Publishing House, New Delhi.

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