Kurukshetra University, Kurukshetra

(Established by the State Legislature Act-XII of 1956)
("A++" Grade, NAAC Accredited)

Syllabus
for
Post Graduate Programme

M.A. ECONOMICS

as per NEP 2020
Curriculum and Credit Framework for Postgraduate Programme

With Multiple Entry-Exit, Internship and CBCS-LOCF
With effect from the session 2024-25 (in phased manner)

DEPARTMENT OF ECONOMICS
FACULTY OF SOCIAL SCIENCE

KURUKSHETRA UNIVERSITY, KURUKSHETRA -136119
HARYANA, INDIA

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session 2024-2025			
Part-A Introduction			
Name of Programme	M.A. Economics		
Semester	First		
Name of the Course	Micro Economic Analysis-I		
Course Code	M24-ECO-101		
Course Type:	CC-1		
Level of the course	400-499		
Pre-requisite for the course (if any)	-		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1. Know the scope and breadth of Micro Economics along with understanding the core principles of demand and supply so that they are able to apply the understanding of these concepts to comprehend real world problems along with the ability to think critically and analyze economic problems. CLO 2. Understand the core principles of production and costs so that they are able to apply the understanding of these concepts to comprehend real world problems along with the ability to think critically and analyze economic problems. CLO 3. Analyze given situations in a variety of markets on a microeconomic level. Understand the internal structure and assumptions of the different analytical frameworks of market conditions, their explanatory power and limitations. CLO 4. Learn and apply relevant optimization techniques for analysis of microeconomic behaviour of consumer, producer and firm. Simultaneously will be able to understand the implications and ethical as well as value part of it.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part-B Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Theory of Demand and Consumer Behaviour** Indifference curve approach -Price, Income and Substitution effects (Hicks and Slutsky); and its applications (The leisure-income trade-off, Evaluation of alternative government policies, IC and theory of exchange); Revealed Preference Theory; The Consumer's Surplus (Hicks) and its applications; Elasticity of demand (empirical estimation) and Elasticity of Supply; Revision of Demand theory by Hicks; Linear Expenditure System.	15
II	**Theory of Production and Costs** Production function (properties of Cobb Douglas and CES); Laws of production(variable proportions and returns to scale with the help of iso-quants); Technical Progress and production function; Equilibrium of the single product firm; Theories of costs and various cost curves(Short run as well as long run)– traditional and modern. Analysis of economies of scale	15
III	**Markets and Equilibrium** Perfect competition – Short and long term equilibrium of the firm and industry; Dynamic changes and industry equilibrium; Monopoly – short run and long run equilibrium; Price discrimination; Monopolistic competition - Chamberlin's approach to equilibrium of the firm.	15
IV	**Non-Collusive Models** Cournot; Bertrand; Stackelberg; Chamberlin; Kinked-demand curve. **Collusive Models**	15

243

Chairman,
Department of Economics
Kurukshetra University

	Cartels (Joint profit maximization and market sharing); Price leadership models (Low cost firm, Dominant firm and Barometric price leader).	
	Total Contact Hours	60

Suggested Evaluation Methods

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Koutsoyiannis, A. (1979), *Modern Microeconomics (2nd Edition)*, Macmillan Press, London.
- Varian, H. (2003), *Intermediate Microeconomics*, East-West Press.
- Pindyck R. &Rubinfeld, D. (2018), *Microeconomics (9th Edition)*, Pearson.
- Salvatore, D. (2009), *Microeconomics-Theory and Applications,* Oxford University Press.
- Baumol, W.J. (1982), *Economic Theory and Operations Analysis,* Prentice Hall of India, New Delhi.
- Green, H.A.G. (1971), *Consumer Theory,* Penguin, Harmondsworth.
- Henderson & Quandt (1980), *Microeconomic Theory: A Mathematical Approach,* McGraw Hill, New Delhi.
- Da Costa, G.C. (1980), *Production, Prices and Distribution*, Tata McGraw Hill, New Delhi.
- Healthfields and Wibe (1987), *An Introduction to Cost and Production Functions*, Macmillan, London.
- Hirshleifer, J. & Glazer, A. (1997), *Price Theory and Applications*, Prentice Hall of India, New Delhi.
- Archibald, G.C. (Ed.) (1971), *Theory of the Firm*, Penguin, Harmondsworth.

Session: 2024-25			
Part A–Introduction			
Name of Programme	M.A. Economics		
Semester	**First**		
Name of the Course	Macro Economics Analysis-I		
Course Code	M24-ECO-102		
Course Type	CC-2		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand classical & Keynesian theories of output and employment analyse their differences, and assess their role in economic fluctuations. CLO 2: Explaining the behaviour of macroeconomic variables by identifying and understanding the extended model. CLO 3: Analyse output, price, and employment under flexible prices in IS-LM. Explore effects of wages, interest rates, and policy on equilibrium. CLO 4: To understand the theories of consumption and investment and their relevance		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Theory of Output and Employment Determination** Classical Approach – Output and Employment in Classical Theory; The Quantity Theory of Money and the Price Level; Classical Model without saving and investment; Classical Model with saving and investment; Keynesian Approach - Two Sector Model, Three Sector Model and Four Sector Model. **SELF STUDY CONTENTS (not relevant for exams):** Nature and scope of macro Economics, importance of macroeconomics, circular flow of income in two three and four sector of economy.	15
II	**Theory of Output and Employment Determination** The Extended Model under Fixed Price Level – The Goods Market and The Money Market; IS-LM framework and Equilibrium in Goods Market and Money Market; Effect of Changes in Government spending, Taxation and Aggregate Demand on General Equilibrium. **SELF STUDY CONTENTS (not relevant for exams):** Nature and Scope of Good Market and Money Market, Money supply Process, the supply of and demand for money and rate of interest.	15
III	**Theory of Output and Employment Determination** The Extended Model under Variable Price Level – Derivation of Aggregate Demand Curve and Determination of equilibrium price and output levels; Wage-price flexibility and the Full Employment equilibrium; Interest rate effect and Pigou Effect; Monetary – Fiscal policy analysis in IS-LM Model. **SELF STUDY CONTENTS (not relevant for exams)** Rationale of Monetary policy, Fiscal policy. Inflation, interest rate and its effect on economy	15
IV	**Theories of consumption and Investment** The Absolute Income Hypothesis; The Relative Income Hypothesis; The Permanent Income Theory of Consumption; The Life cycle theory of consumption. The Marginal Efficiency of Capital Approach; The accelerator theory; Profits Theory; Jorgenson's Neoclassical Model; Adjustment costs and q theory. **SELF STUDY CONTENTS (not relevant for exams):** consumer behaviour: Macro Analysis, Cyclical and Secular Consumption Behaviour. Basic working of Multiplier.	15
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:• Recommended Books/E-Resources/LMS:

- (https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=NEp/xikgBgNtfA+sgFQAcA==) (investment and consumption theories)
- https://archive.nptel.ac.in/noc/courses/noc15/SEM1/noc15-hs08/ (IS-LM MODEL)
- https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=NEp/xikgBgNtfA+sgFQAcA==
- https://nptel.ac.in/courses/130104114) (consumption theories)
- https://ocw.mit.edu/courses/14-02-principles-of-macroeconomics-spring-2014/resources/mit14_02s14_is-lm_model/
- Langdana, F.K. (2013), Macroeconomic Policy: Demystifying Monetary and Fiscal Policy, Springer.
- Mankiw, Gregory N. (2003), Macroeconomics, Worth Publishers.
- R Dornbusch, S Fischer and R Startz, Macroeconomics, McGraw-Hill.
- Romer, David (2012), Advanced Macroeconomics, McGraw Hill Education.
- Shapiro, E (2006), Macroeconomic Analysis, Galgotia Publication, New Delhi.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**First**		
Name of the Course	Mathematics for Economists		
Course Code	M24-ECO-103		
Course Type	CC-3		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Perform matrix operations, solve simultaneous equations, and apply matrix algebra techniques to input-output analysis. CLO 2: Apply rules of differentiation and optimization techniques to solve economic problems effectively. CLO 3: Compute the consumer's surplus and producer's surplus by utilizing the tool of integral calculus and develop the ability to solve differential equations. CLO 4: Understand and solve difference equations and linear programming problems using graphical method.		
	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Matrix Algebra and Its Applications** Concept of Matrix and Determinant – their types, simple operations on matrices; Matrix inversion and rank of matrix; Solution of simultaneous equations through Cramer's rule and Matrix inverse method; Introduction to input-output analysis.	15
II	**Differential Calculus and Its Applications** Rules of differentiation; Elasticity and their types; Rules of Partial differentiation and interpretation of partial derivatives; Problems of maxima and minima in single and multivariable functions; Unconstrained and constrained optimization in simple economic problems	15
III	**Integral Calculus and Differential Equations** Concept and simple rules of integration; Application to consumer's and producer's surplus. Differential Equations: Solution of Homogeneous, Exact Linear differential equations of First and second order ; application to demand, revenue and market equilibrium models.	15
IV	Difference equations – Solution of first order and second order difference equations; Applications in trade cycle models; Growth models and lagged market equilibrium models. Linear programming – Basic concept, Nature of feasible, basic and optimal solution; Solution of linear programming problem through graphical method	15
	Total Contact Hours	60

Suggested Evaluation Methods

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Internal Assessment: 30		End Term Examination: 70	
➢ **Theory**	**30**	➢ **Theory:**	70
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Adams, R. A., & Essex, C. R. (2012). Calculus: A combined approach (9th ed.). Pearson Education Limited.
- Aggarwal, D. R. (2018). Quantitative Methods. Vrinda Publications.
- Allen, R. G. D. (2017). Difference equations with historical applications. Academic Press.
- Allen, R.G.D. (1974). Mathematical Analysis for Economists. Macmillan Press, London.
- Black, J. & Bradley, J.F. (1973). Essential Mathematics for Economists. John Wiley and Sons.
- Boyce, W. E., & DiPrima, R. C. (2010). Elementary differential equations and boundary value problems (9th ed.). Wiley.
- Chiang, A.C. (2005). Fundamental Methods of Mathematical Economics. McGraw Hill, New York.
- Dantzig, G. B. (2003). Linear programming and its extensions. Princeton University Press.
- Hillier, F. S., & Lieberman, G. J. (2019). Introduction to mathematical programming (5th ed.). McGraw-Hill Education.
- Joshi, R. C. (2008). Basic Mathematics for Economists. New Academic Publishing.
- Leontief, W. (1936). Quantitative input-output relations in the economic systems of the United States. Review of Economics and Statistics, 18, 105-125.
- Mehta, B. C. & Madnani, G. M. K. (2018). Mathematics for Economists. Sultan Chand & Sons, New Delhi.
- Meyer, C. D. (2000). Matrix analysis and applied linear algebra. SIAM
- Miller, R.E. & Blair, P.D. (1985). Input-Output Analysis: Foundations and Extensions. Prentice-Hall, Englewood Cliffs, New Jersey.
- Mouhammed, Adil H. (2004). Quantitative Methods for Business and Economics. PHI, New Delhi.
- Stewart, J. (2018). Calculus: Early transcendentals (8th ed.). Cengage Learning.
- Strang, G. (2019). Introduction to linear algebra (5th ed.). Wellesley-Cambridge Press.
- Taha, Hamdy A. (2001). Operations Research: An Introduction. Pearson Education.
- Tenenbaum, S., & Pollard, C. (2011). Ordinary differential equations (Dover Books on Mathematics). Dover Publications.
- Vohra, N.D. (2008). Quantitative Techniques in Management. Tata McGraw Hill.
- Yamane T. (1973). Mathematics for Economists. PHI

Session: 2024-25	
Part A – Introduction	
Name of Programme	M.A. Economics
Semester	**First**
Name of the Course	Data Analytics for Economists I
Course Code	M24-ECO-104
Course Type	CC-4
Level of the course	400-499
Pre-requisite for the course (if any)	n.a.
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, apply and solve the problems on revenue, profits, utility and linear programming. CLO 2: Understand and compute break even, LP, sensitivity analysis and assignment problems. CLO 3: Understand and solve linear and non linear optimization problems. CLO 4: Understand and solve path analysis and inventory problems - CLO 5: Demonstrate the ability to solve the problems mentioned in

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	CLO 1-4 through software.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**1.** Computation of revenue and profits using excel . Given the quantity, demand function, cost function etc., compute profits or losses. Also generate a data series. **2.** Creation of various charts using economic variables. Solving single and multiple system of equations through excel solver **3.** Profit maximization and Utility maximization using solver **4.** Linear programming problem using solver **SELF STUDY CONTENTS (not relevant for exams):** Excel functions	11
II	**5.** Break even analysis in excel **6.** Sensitivity analysis using solver **7.** LPP applications in marketing and finance **8.** Assignment and shortest path problem in solver **SELF STUDY CONTENTS (not relevant for exams):** Excel functions	11
III	**9.** Generating Frequency Table, Bar Chart, Pie Chart, Histogram, Arithmetic Mean, Median, Standard Deviation and Range, Contingency Table, Chi-square, and Cramer's V, Pearson's *r*, and Spearman's rho, Scatter Diagrams **10.** Construction of Frequency, Calculation of Central Tendencies and Measures of Dispersion **11.** Estimation Correlation Coefficient, Zero Correlation Matrix , Part and Partial Correlation – **12.** Estimation of Simple Regression. **SELF STUDY CONTENTS (not relevant for exams):** Excel functions	12
IV	**13.** Project scheduling- PERT and CPM **14.** Inventory models **15.** Economic production lot size model **16.** Multi-period Order-Quantity, Reorder Point Model with Probabilistic Demand **SELF STUDY CONTENTS (not relevant for exams):** Excel functions	11
V	**Practicals:** 1. Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practical may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Gary Koop: Analysis of economic data, John Wiley & Sons, 2005
- Thomas Cleff: Applied Statistics and Multivariate Data Analysis for Business and Economics: A Modern Approach Using SPSS, Stata, and Excel, Springer
- Kurt Jechlitschka, Dieter Kirschke and Gerald Schwarz: Microeconomics using Excel: Integrating economic theory, policy analysis and spreadsheet modeling, Routlage
- Humberto Barreto: Intermediate Microeconomics with Microsoft Excel, Cambridge University Press
- Vikas Singla: Operations Research Using Excel, Taylor and Francis

Session: 2024-25

Part A – Introduction

Name of Programme	M.A. Economics		
Semester	**First**		
Name of the Course	Public Economics		
Course Code	M24-ECO-105		
Course Type	DEC-1		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Explain the concept of efficiency along with various solutions of market failure and interpret the welfare distribution aspects in context of public goods besides grasping the preference revelation mechanisms. CLO 2: Apply economic perspectives on activities of the government sector to become well-informed and engaged participants (citizens, voters, politicians and/or civil servants) in society. CLO 3: Draw the economic implications of various taxes along with their positive as well as normative analysis, and thus become able to design an efficient and equitable taxation system. CLO 4: Analyze the theories of fiscal federalism, public debt, and pricing in public enterprises, and solve the concerned policy issues.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question

250

Chairman,
Department of Economics
Kurukshetra University,

No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**The Public Economy and Public Goods** Exchange Economy, Production Economy and Efficiency; Asymmetric Information and market Failure; Externalities and their Internalization; Rent Seeking Costs and Political Process; Efficient Provision of Public Goods; Private provision of Pure Public Goods; Samuelson Model; Clarke Mechanism; Lindahl-Wicksell Mechanism; Theory of Club Goods. SELF STUDY CONTENTS (not relevant for exams) Concepts of Demand curve, Supply curve, Indifference curve, Isoquant curve, Proc possibility curve, Budget or price line, Isocost line, and their slopes; Idea of marginal and marginal cost.	15
II	**Public Choice** Rational Voter Hypothesis; Characteristics of Majority Voting Rule; Bowen-Black Model; Buchanan and Tullock Model; Arrow's Impossibility Theorem; Downs Model on Demand And Supply of Government Policy; Models of Bureaucratic Behavior: Niskanen Model, Tullock Model; Voting and the Leviathan Hypothesis. SELF STUDY CONTENTS (not relevant for exams): Basic knowledge of rational consumer behavior.	15
III	**Public Revenue** Incentive Effects of Taxation on Labour Supply, Savings, and Risk Taking; Tax Incidence – Partial and General Equilibrium Analysis; Excess Burden of Tax and its Measurement; Efficiency and Equity Principles of Taxation; Optimal Commodity Tax:The Ramsey Rule, The Corlett and Hague Rule; Optimal Income Tax. SELF STUDY CONTENTS (not relevant for exams): Meaning and types of taxes; Partial equilibrium *vs.* general equilibrium; Idea of consumer surplus.	15
IV	**Fiscal Federalism, Public Debt, and Public Enterprises** Fiscal Federalism: Tiebout Model, Theory of Intergovernmental Grants, Centre-State fiscal relations in India - Theory and Practice; Public Debt: Burden Controversy, Debt Sustainability; Public Enterprises: Ramsey-Boiteux Linear pricing, Marginal cost pricing, Peak load pricing, Theory of Second Best, Social Cost Benefit Analysis. SELF STUDY CONTENTS (not relevant for exams): Concepts and forms of public debt and public enterprises; Idea of federal set-up of government.	15
Total Contact Hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Akerlof, G. (1970). The market for `Lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488-500.
- Bagchi, Amaresh (2005). *Readings in public finance*. Oxford University Press.
- Bergstrom, T., Blume, L., & Varian, H. (1986). On the Private Provision of Public Goods. *Journal of Public Economics*, 29, 25-49.
- Boadway, Robin (1984). *Public sector economics*. Cambridge, Winthrop Publications.
- Bowen, H.R. (1943). The interpretation of voting in the allocation of economic resources. *The Quarterly Journal of Economics*, 58(1), 27-48.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Buchanan, J., &Tullock, G. (1962). *The calculus of consent*. Ann Arbor Paperbacks.
- Clarke, E.H. (1971). Multipart Pricing of Public Goods. *Public Choice*, 11, Rand McNally.
- Coase, R. (1960). The problem of social cost. *Journal of Law and Economics*, 3, 1-44.
- Cullis, J., & Jones, P. (2009). *Public finance and public choice: Analytical Perspectives*. Oxford University Press.
- Den Doel, Hans Van, &Velthoven, Ben Van (1993). *Democracy and welfare economics*. Cambridge University Press.
- Downs, Anthony (1957). *An economic theory of democracy*. Harper & Row Publishers, New York.
- Foley, D.K. (1970). Lindahl's solution and the core of an economy with public goods. *Econometrica*, 38(1), 66-72.
- Hackelman, J.C. (2004). *Readings in public choice economics*. University of Michigan Press.
- Hindricks, J., & Myles, G.D. (2013). *Intermediate public economics*. The MIT Press.
- Ihori, Toshihiro (2016). *Principles of public finance*. Springer.
- Jha, Raghbendra (1998). *Modern public economics*. Routledge.
- Lipsey, R.G., & Lancaster, K. (1956). The general theory of second best. *Review of Economic Studies*, 24, 11-32.
- McNutt, P.A. (2002). *The economics of public choice*. Edward Elgar.
- Mirrlees J. (1971). An Exploration in the Theory of Optimum Income Taxation. *Review of Economic Studies*, 38(2), 175-208.
- Niskanen, W. A. (1971). *Bureaucracy and representative government*. Aldine-Atherton, Chicago.
- Rosen, H. S., & Gayer, T. (2014). *Public finance*. McGraw Hill.
- Samuelson, P. A. (1954). The pure theory of public expenditure. *Review of Economics and Statistics*, 36(4), 387-389.
- Samuelson, P. A. (1955). Diagrammatic exposition of a theory of public expenditure. *Review of Economics and Statistics*, 37(4), 350-356.
- Tiebout, C.M. (1956). A pure theory of local expenditures. *Journal of Public Economics*, 64, 416-424.

Session: 2024-25	
Part A – Introduction	
Name of Programme	M.A. Economics
Semester	**First**
Name of the Course	History of Economic Thought
Course Code	M24-ECO-106
Course Type	DEC-1
Level of the course	400-499
Pre-requisite for the course (if any)	n.a.
Course Learning Outcomes (CLO) After completing this course, the learner will be able	CLO 1: To understand the ancient and classical economic thought. CLO 2: To learn the socialist economic philosophy.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119

to:	CLO 3: To understand the economic philosophy of neo- classical and welfare economists. CLO 4: To learn the economic thought of Keynesian and post Keynesian thinkers.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Overview of The Mercantilists School and the Physiocratic School; **The Classical School:** Adam Smith Theory of Moral Sentiments, Wealth of Nations, The Economic Laws of a Competitive Economy. Thomas Malthus: Historical and Intellectual Setting - Malthus's Population Theory. David Ricardo: The Currency Question, The Theory of Diminishing Returns and Rent, Theory of Exchange Value and Relative Prices, The Distribution of Income. Jeremy Bentham, Jean-Baptiste Say, Nassau William Senior, and John Stuart Mill.	15
II	Overview of Socialism: Henri Comte De Saint-Simon, Charles Fourier, Simonde De Sismondi, Robert Owen, Marxian Socialism: Marx's Theory of History, Assessment of Marx's Economics.	15
III	Alfred Marshall: Utility and Demand, Supply, Equilibrium Price and Quantity Distribution of income, Increasing and Decreasing Cost Industries. The Neo Classical School - Departure from Pure Competition: Piero Sraffa, Chamberlin, Joan Robinson. **Welfare Economics**: Vilfredo Pareto, Arthur Cecil Pigou, Ludwig Von Mises, Oscar Lang, Kenneth Arrow, James M. Buchanan, Brief Discussion on A.K. Sen.	15
IV	Overview of the Keynesian School, The Keynesian School: Developments since Keynes: Alvin H. Hansen, Paul A. Samuelson, The Post-Keynesians, The New-Keynesians. Overview of the Chicago School - Milton Friedman, Robert E Lucas, Jr., Gary S. Becker.	15
	Total Contact hours	60

Suggested Evaluation Methods

Internal Assessment: 30		End Term Examination: 70	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Blaug, M. (1997). Economic theory in retrospect. Cambridge university press.
- Eric Roll, (2002) *History of Economic Thought*, Rupa and Co, New Delhi.
- Gide, C., & Rist, C. (2000). Early Histories of Economic Thought, 1824-1914: History of economic doctrines (Vol. 8). Taylor & Francis US.
- H W Spiegel,(1991) *Development of Economic Thought*, John Wiley and Sons, inc., New York.
- Heilbroner, R. L. (2011). The worldly philosophers: The Lives, Times and Ideas of the Great Economic Thinkers. Simon and Schuster.
- Hunt, E. K., & Lautzenheiser, M. (2015). History of Economic Thought: A Critical Perspective. Routledge.
- Ingrid Hahne Rima, (2009) *Development of Economic Analysis*, Richard D. Irwin, inc. Illinois.
- John Fred Bell, (1953) *A History of Economic Thought,* The Ronald Press Company, New York.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Joseph A Schumpeter, (2003) *Ten Great Economists, from Marx to Keynes,* OUP, New York.
- Kishtainy, N. (2018). A little history of economics. Yale University Press.
- Lewis H. Haney, (2011) *History of Economic Thought,* The Macmillan Company, New York.
- Morgan, M. S. (2012). The world in the model: How economists work and think. Cambridge University Press.
- Overton H. Taylor, (1960) *A History of Economic Thought,* McGraw-Hill Company, Inc. New York.
- Rodrik, D. (2015). Economics rules: Why economics works, when it fails, and how to tell the difference. OUP Oxford.
- Stanley L. Brue, (2013) *The Evolution of Economic Thought,* The Dryden Press, Fort Worth.
- Schumpeter, J. A. (2006). History of Economic Analysis. Routledge.
- Screpanti, E., & Zamagni, S. (2005). An Outline of the History of Economic Thought. Oxford University Press on Demand.

Chairman
Department of Economics
Kurukshetra University
KURUKSHETRA-136119

25 BA

Session: 2024-25			
Part A - Introduction			
Name of Programme	M.A. Economics		
Semester	**First**		
Name of the Course	Methodology of Economics		
Course Code	M24-ECO-107		
Course Type	DEC-1		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: To understand the nature of science and scientific method. CLO 2: To understand the economics discipline as social science and the role of assumptions in economics. CLO 3: To understand the hypothetico-deductive model, Falsificationism and Rational Reconstructions of economics. CLO 4: To understand the normative character of economics and Defense positivism.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Science- Different Branches of Science; Evolution of Scientific Approach in Social Scien Need for Interdisciplinary Approach; Objectivity and Subjectivity in Social Science; Lim Objectivity in Social Science	15
II	Economics as a Social Science; Subject matter and Scope of Economics; Positive and Normative Economics; Economic Theory and Economic Laws; Micro and Macro Economics; Role of Assumptions in Economics; Method and Methodology- Deductive and Inductive; Economic Models	15
III	The hypothetico-deductive model; The symmetry thesis; Falsificationism; Problem of Induction and the Duhem-Quine thesis; Descriptive methodology- Rational Reconstructions of economics: Lakatos, Laudan; Rational-cum-relativist reconstructions: Kuhn, Feyerabend	15
IV	Normative character of economics- J.Robinson, Myrdal, and Streeten; Defense positivism: Robbins, Lipsey, and Friedman ; Marxist critique: Fine, Meeks, and Dobb ; Orthodox and Heterodox Economics	15
	Total Contact hours	60

Suggested Evaluation Methods

Internal Assessment: 30		End Term Examination: 70	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Blaug, M., The Methodology of Economics or How Economists Explain, Cambridge Surveys of Economic Literature
- Backhouse R. (ed.), Explorations in Economic Methodology: From Lakatos to Empirical Philosophy of Science, Routledge
- Backhouse R., Hausman, D., Mäki, U., Salanti, A. (eds.), Economics and Methodology, Crossing Boundaries, Palgrave McMillan
- Backhouse R. (ed.), New Directions in Methodology, Routledge
- Dow, S.C. Economic Methodology: An Inquiry, Oxford University Press, latest edition Journal of Economic Methodology

Chairman,
Department of Economics
Kurukshetra University
KURUKSHETRA-136119

Session: 2024-25	
Name of the Programme	M.A. Economics
Semester	**First**
Name of the Course	Seminar
Course Code	M24-ECO-109
Course Type: (CC/DEC/PC/Seminar/CHM/OEC/EEC)	Seminar
Level of the course	400-499
Course Learning Outcomes(CLO) After completing this course, the learner will be able to:	CLO 1: Prepare and Present the given content to demonstrate the ability of effective communication. CLO 2: To develop confidence to tackle queries and analytical ability.
Credits	Seminar
	2
Teaching Hours per week	2
Max. Marks	50
Internal Assessment Marks	0
End Term Exam Marks	50
Examination Time	1 hour
Instructions for Examiner: Evaluation of the seminar will be done by the internal examiner(s) on the parameters as decided by staff council of the department. There will be no external examination/viva-voce examination.	

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session 2024-2025			
Part-A Introduction			
Name of Programme	M.A. Economics		
Semester	Second		
Name of the Course	Micro Economic Analysis-II		
Course Code	M24-ECO-201		
Course Type:	CC-5		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1.Understand new advances in the theory of firm and think critically analyze economic problems in the context of firm. CLO 2. Adopt different analytical concepts and models in framing development and policy-relevant problems particularly factor pricing and income distribution. CLO 3. Understand the effects of various decisions on welfare of people through general equilibrium analysis. CLO 4. Apply Microeconomic tools to solve real life problems especially under uncertainty and game theory.		
Credits	Theory	Tutorial	Total
	4	0	04
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part-B Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Managerial Theories of Firm** Critical evaluation of marginal analysis; Average Cost Pricing model; Bain's Limit Pricing Theory; Baumol's Sales Revenue Maximization model (all four static models); Marris Model of Managerial Enterprise; Williamson's Model of Managerial Discretion.	15
II	**Factor Pricing** Pricing of factors of production (modern approach under perfect and imperfect market); Elasticity of technical substitution and factor shares; Technical progress and factor shares; Macro theories of distribution – Ricardo, Marx, Kalecki and Kaldor.	15
III	**General Equilibrium and Market Efficiency** The Walrasian approach to general equilibrium; Existence, stability and uniqueness of the partial equilibrium; Pareto Optimality; Maximization of social welfare; Market failure: Externalities, Public goods and asymmetric information; Moral Hazard and Adverse selection; The theory of second best; Economics of information – search costs, market signaling.	15
IV	**Choice Under Uncertainty** Inter-temporal choice in consumption; Economics of Uncertainty: Risk and Uncertainty in Demand Choices, Measuring Risk, Utility Theory and Risk Aversion, Gambling and Insurance, Risk aversion and Indifference curves, Reducing risk and uncertainty, Risk pooling and risk spreading, Mean-variance analysis and portfolio selection. **Theory of Games** Extensive forms and normal forms, dominant strategies and elimination of dominant strategies, Nash equilibrium, cooperative and non-cooperative games, sequential and simultaneous games, applications with oligopoly markets- Cournot, Bertrand and Stackelberg.	15
	Total Contact Hours	60

259

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Koutsoyiannis, A. (1979),*Modern Microeconomics (2nd Edition)*,Macmillan Press, London.
- Pindyck, R. &Rubinfeld, D. (2018),*Microeconomics (9th Edition)*,Pearson Education.
- Varian, H. (2000), *Microeconomic Analysis*, W.W. Norton, New York.
- Bain, J. (1958), *Barriers to New Competition*, Harvard University Press, Harvard
- Hirshleifer, J. & Glazer, A. (1997), *Price Theory and Applications*, Prentice Hall of India, New Delhi.
- Bronfenbrenner, M. (1979), *Income Distribution Theory*,Macmillan, London.
- Da Costa, G.C. (1980), *Production, Prices and Distribution*, Tata McGraw Hill, New Delhi.
- Boadway, R.W. & Bruce, N. (1984), *Welfare Economics*, Basil Blackwell, London.
- Graff, J. De V. (1957),*Theoretical Welfare Economics*, Cambridge University Press,
- Green, H. & Walsh, V. (1975), *Classical and Neo-Classical Theories of General Equilibrium*, Oxford University Press, London.
- Hansen, B. (1970), *A Survey of General Equilibrium Systems*, McGraw Hill, New York.
- Quirk, J. &Saposnik, R. (1968), *Introduction to General Equilibrium Theory and Welfare Economics*, McGraw Hill, New York.
- Weintrub, E.R. (1974), *General Equilibrium Theory*, Macmillan, London.
- Borch, K.H. (1968), *The Economics of Uncertainty*, Princeton University Press, Princeton.
- Diamond, P.A. & Rothschild, M. (Eds.). (1978), *Uncertainty in Economics: readings and exercises*, Academic Press, New York.
- Gravelle, H. &Rees,R. (2008), *Micro Economics*, Dorling Kindersley.
- Jehle, Geoffrey A. & Reny, Philip J. (2008), *Advanced Micro Economic Theory*. Dorling Kindersley.
- Varian, H. (2003),, *Intermediate Microeconomics*, East-West Press
- https://www.edx.org/learn/economics?hs_analytics_source=referrals&utm_source=mooc.org&utm_medium=referral&utm_campaign=mooc.org-topics

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Second		
Name of the Course	Macro Economics analysis-II		
Course Code	M24-ECO-202		
Course Type	CC-6		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1:Understand money choices: Explore the Theory of Demand for Money CLO 2:Able to learn the theories of money supply and interest rates CLO 3:Identify the phases of the business cycle/inflation and the problems caused by cyclical fluctuations in the market economy and to show an ability to reflect on how economic shocks affect aggregate economic performance in the short and long term CLO 4:Explain the components of aggregate economic activity in an open economy framework		
Credits	Theory	Practical	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Theory of Demand for money** Classical Approach to Demand for Money – Quantity Theory Approach; Fisher's equilibrium; Cambridge Quantity theory; Keynes Liquidity Approach – Transaction; Precautionary and Speculative Demand for Money; Post Keynesian approaches to demand for money: Tobin (Portfolio balance approach), Baumol (Inventory theoretic approaches), Friedman (Restatement of quantity theory of money), Patinkin's real balance effect. SELF STUDY CONTENTS (not relevant for exams):	15
II	**Theory of Supply for money and Interest Rates** Measures of money supply and Monetary Aggregates; Determinants of money supply; Money Multiplier Approach; Behavioural model of Money Supply Determination; Instruments of Monetary control. Interest Rates - Theories of Determination of Interest Rate: Classical, Loanable Funds and Keynesian; Theories of Term Structure of Interest Rates.	15
III	**Theory of Inflation** Classical, Keynesian and Monetarist approaches; Structuralist theory of inflation; Philips curve analysis – Short run and long run Philips curve; Natural Rate of Unemployment hypothesis; Modified Philips curve - Tobin, Samuelson-Solow **Theory of Business Cycles** Business Cycle Theories of Kaldor, Samuelson, Hicks, and Kalecki; Control of business cycles – relative efficacy of monetary and fiscal policies.	15
IV	**Open Economy Macroeconomics** Balance of Payment Disequilibrium and Equilibrium; Real and Nominal Exchange Rates; Dornbush Exchange rate Overshooting Model; Mundell- Fleming Model under Fixed and Flexible Exchange Rates. **Recent Developments** Role of Expectations in Economics; Adaptive Expectation hypothesis; New Classical Macroeconomics: Rational Expectation Hypothesis, Policy Ineffectiveness, Lucas Supply Curve.	15
Total Contact Hours		60

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Mankiw, Gregory N. (2003) *Macroeconomics*, Worth Publishers.
- Romer, David (2012) *Advanced Macroeconomics*, McGraw Hill Education.
- Levacic, Rosalind &Rebmann, Alexander (2015) *Macroeconomics,* Macmillan, London.
- Mishkin, F.S. (2016) *The Economics of Money Banking and Financial Market,*.Pearson.
- Bain, K. & Howells, P. (2009) *Monetary Economics: Policy and its Theoretical Basis,* Macmillan International Higher Education.
- Handa, Jagdish (2000). *Monetary Economics*.,Routledge, London
- Gali, J. (2015). *Monetary Policy, inflation and Business Cycles,* Princeton University Press
- Frisch, H. (1983). *Theories of Inflation,* Cambridge University Press
- Romer, D. &Mankiw, N. Gregory (1995). *New Keynesian Economics (Volume-2)*. MIT Press.
- Sheffrin, Steven M. (1996). *Rational Expectations*, Cambridge University Press
- Galbacs, Peter (2015) *The Theory of New Classical Macroeconomics: A Positive Critique*. Springer

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**Second**		
Name of the Course	Statistics for Economists		
Course Code	M24-ECO-203		
Course Type	CC- 7		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Analyze various data types and sampling techniques proficiently. CLO 2: Estimate parameters accurately and construct confidence intervals effectively. CLO 3: Conduct hypothesis tests confidently using parametric methods and understand the Neyman-Pearson Lemma. CLO 4: Choose and apply appropriate nonparametric tests based on data characteristics with confidence. CLO 5: Demonstrate the ability to solve the problems mentioned in CLO 1-4 through software.		
	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 Hours	3 Hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Understanding Data and Sampling Techniques** Types of data and statistical analysis procedures: univariate, bivariate and multivariate (only overview); Census and Sampling, Basic concepts of sampling, Techniques of Sampling: Probability and Non Probability Sampling. Errors Associated with Sampling : Sampling and Non- Sampling Errors ; Types and potential causes. Sample Size, Approaches to Sample size determination : Precision Rate and confidence interval Self Study Contents (not relevant for exams): Measures of central tendency, dispersion, correlation and Regression Analysis.	11
II	**Estimation Methods and Interval Estimation** Estimation: Concept of an estimator and its sampling distribution, Desirable properties of a good point estimator. Point Estimation Methods: Least Squares Estimation (LSE), Maximum Likelihood Estimation (MLE), Method of Moments (MOM). Interval Estimation: Confidence Intervals ; Factors affecting the width of confidence intervals. Self Study Contents (not relevant for exams): Regression Analysis, Probability theory and Probability distributions	11
III	**Hypothesis Testing and Parametric Tests** Introduction to Hypothesis Testing: Basic Concepts, Null and Alternative Hypotheses, Type I and Type II Errors, Significance Level and P-Values, Critical Regions, Steps involved in hypothesis testing, Neyman-Pearson Lemma. Common parametric Tests: Z-test, t-test, F-test and ANOVA	11
IV	**Nonparametric Tests** Introduction to non-parametric tests and their advantages. Common Non-Parametric Tests: Chi Square test, Mann-Whitney U test, Wilcoxon signed-rank test, Kruskal-Wallis test, Friedman Test and Kendall's Tau Test. Choosing between parametric and non-parametric	11

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119

	tests based on data characteristics.	
V	**Practicals:** 1. Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practical may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Anderson, David R., Sweeney, Dennis J. & Williams, Thomas A. (2014).Essentials of Statistics for Business and Economics. South-Western Cengage Learning, USA.
- Barrow, M. (2017). Statistics for Economics, Accounting and Business Studies. Pearson Education.
- Casella, G., & Berger, R. L. (2002). Statistical inference (2nd ed.). Duxbury Press.
- Croxton, F. E., Cowden, D. & Kliein, S. (1951). Applied General Statistics. Prentice Hall, New Delhi.
- Cumming, G. (2009). The new statistics: Why and how. Psychology Press.
- Denis, Daniel J. (2018).SPSS Data Analysis for Univariate, Bivariate, and Multivariate Statistics. John Wiley & Sons Inc., USA.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Pearson Education.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate data analysis (8th ed.). Pearson Education Limited.
- Hamilton, J. D. (1994). Time series analysis. Princeton University Press.
- Karmal, P.H. & Polasek, M. (1978). Applied Statistics for Economists. Pitman, Australia.
- Lehmann, E. L., & Romano, J. P. (2005). Testing statistical hypotheses (3rd ed.). Springer Science & Business Media.
- Levine, D. M., Stephan, D. G., & Krehbiel, T. C. (2014). Statistics for social data analysis (5th ed.). Pearson Education.
- McLachlan, G., & Peel, D. (2000). Finite mixture models. Wiley.
- Mittelhammer, R. C. (2012). Mathematical Statistics for Economics and Business. Springer-Verlag New York, Inc.
- Montgomery, D. C., & Runger, D. C. (2010). Applied statistics and probability for engineers and scientists (5th ed.). Wiley.
- Naghshpour, S. (2012). Statistics for Economics. Business Expert Press.
- Shao, J. (2003). Mathematical statistics (2nd ed.). Springer Science+Business Media.
- Sharma, J.K. (2012). Business Statistics. Dorling Kindersley (India) Pvt. Ltd., New Delhi
- Sharma, J.K. (2012). Business Statistics. Dorling Kindersley (India) Pvt. Ltd., New Delhi.
- Speigal, M. R. (1972). Theory and Problems of Statistics. McGraw Hill Book, London

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	SECOND		
Name of the Course	Data Analytics for Economists II		
Course Code	M24-ECO-204		
Course Type	CC-8		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, apply and solve the problems on univariate and bivariate data besides hypothesis testing in a software. CLO 2: Understand and compute various regressions in a software. CLO 3: Understand and compute the problems of Autocorrelation, Multicollinearilty and heteroskedasticity using a software. CLO 4: Understand and compute future value, present value and financial ratios using a software. - CLO 5: Demonstrate the ability to solve the contents using a software.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**1.** Interval estimation **2.** Hypothesis testing – one sample and two samples t test, Wilcoxon signed- Rank test, Mann – Whitney U test, ANOVA **3.** Construction of Index Numbers - Deflating a Series by Price Indexes **4.** Time Series Analysis and Forecasting. SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
II	**5.** Regression analysis – multiple **6.** Panel data Analysis **7.** Logistic Regression **8.** Economic Forecasting Using Regression SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
III	**9.** The problem of Autocorrelation **10.** The problem of Multicollinearilty **11.** The problem of heteroskedasticity **12.** Economic Forecasting using ARIMA Modelling – Box Jenkins, ACF, PACF SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
IV	**13.** Financial Statement Ratio Analysis	12

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	14. Common Sized Financial Statements and DuPont Analysis **15.** Future Value Lump Sum Calculations, Simple & Compound Interest; Present Value Lump Sum Calculations and PV Function;Future Value For Lender Or Borrower **16.** Asset Valuation Using Discounted Cash Flow Analysis and PV Function SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	
V	**Practicals:** 1. Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practical may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Gary Koop: Analysis of economic data, John Wiley & Sons, 2005
- Thomas Cleff: Applied Statistics and Multivariate Data Analysis for Business and Economics: A Modern Approach Using SPSS, Stata, and Excel, Springer
- Kurt Jechlitschka, Dieter Kirschke and Gerald Schwarz: Microeconomics using Excel: Integrating economic theory, policy analysis and spreadsheet modeling, Routlage
- Shmuel Oluwa: Hands-On Financial Modeling with Excel for Microsoft 365, Packt Publishing
- Abdulkader Aljandali and Motasam Tatahi: Economic and Financial Modelling with EViews-A Guide for Students and Professionals
- Joaquim P. Marques de Sá: Applied statistics using SPSS, STATISTICA, MATLAB and R, Springer
- Robert P. Burns, Richard Burns : Business Research Methods and Statistics Using SPSS, Sage

Session: 2024-25	
Part A – Introduction	
Name of Programme	M.A. Economics
Semester	Second
Name of the Course	Demography
Course Code	M24-ECO-205
Course Type	DEC-2
Level of the course	400-499
Pre-requisite for the course (if any)	n.a.
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Draw on demographic concepts and population theories to explain past and present population characteristics. CLO 2: Analyze the world population growth and trends and distinguish between the populations patterns of developed and less developed countries CLO 3: Understand and analyze various demographic issues in India. CLO 4: Understand how to use empirical evidence to evaluate an economic argument.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119

Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Fundamentals of Demographic Analysis** Definition, Nature and Scope of Demography, Sources of Demographic data, Fundamentals of Demographic Analysis, Population and Economic Development, Human Development of Population , Growth of World Population World population policies and programs.	15
II	**Consequences of Population Size, Growth and Structure** Malthusian theory Population Growth and Demographic Transition, Optimum Population theory, Theory of Demographic transition, Population aging: consequences of age structure, Technological Change and Population Growth ; Population as an engine of technological change, Population and Environment.	15
III	**The Causes of Population Change** Family Units and marriage; fertility causes of fertility change, Measurement of fertility, fertility differentials in India migration causes, and migration consequences, Health and Mortality, Measurement and Mortality differentials in India.	15
IV	**Population and Economic Development** Census in India, Methodology and Characteristics; Nature of information collected with emphasis on 2011 census, National Family Health Survey-objectives and various rounds, Sample surveys in India, Civil Registration system Demographic features of Indian Population, Population Policies of India.	15
Total Contact hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Angus Deaton (2003). Health, Inequality, and Economic Development, Journal of Economic Literature, 61, 113-158. https://www.princeton.edu/~deaton/downloads/Health_Inequality_and_Economic_Development.pdf
- Angus Deaton (2006). The Great Escape: A Review of Robert Fogel's The Escape from Hunger and Premature Death, 1700–2100," Journal of Economic Literature 64: 106-114. https://www.princeton.edu/~deaton/downloads/deaton_great_escape_on_fogel_jel2006.pdf
- Bouge, D.J. (1971). Principles of Demography, John Wiley, New York.
- Claudia Goldin (2006) "The Quiet Revolution That Transformed Women's Employment, Education, and Family" American Economic Review 96(2):1–21. http://www.jstor.org/stable/30034606 (http://www.jstor.org/stable/30034606)
- Claudia Goldin (2014). A Grand Gender Convergence: Its Last Chapter, American Economic Review 104(4): 1091-1119. http://scholar.harvard.edu/files/goldin/files/goldin_aeapress_2014_1.pdf
- David Lam (2011). How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History, Demography 48(4): 1231-1262. (http://link.springer.com/article/10.1007/s13524-011-0070-z)
- Gary Becker, The Evolution of the Family," Chapter 11 of Gary Becker, A Treatise On The Family (Harvard University Press, 1981) pp. 237–256.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Harper, S. (2018). Demography: A Very Short Introduction, Cambridge University Press.
- Majumdar, P.K. (2010). Fundamentals of Demography, Rawat Publication.
- Pathak, K.B. & Ram, F. (2016). Techniques of Demographic Analysis, Himalaya Publishing House.
- Samuel Preston (1975), The Changing Relation between Mortality and Level of Economic Development, Population Studies 29(2): 231–248.http://www.jstor.org/stable/2173509
- Weinstein, J. & Pillai, V.K. (2015). Demography: The Science of Population, Rowman & Littlefield Publications.
- Weinstein, J. & Pillai, V.K. (2015). Demography: The Science of Population, Rowman & Littlefield Publications.

Session: 2024-25

Part A – Introduction

Name of Programme	M.A. Economics		
Semester	**Second**		
Name of the Course	Political Economy of Development		
Course Code	M24-ECO-206		
Course Type	DEC-2		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: To understand the laws of dialectics and modes of production. CLO 2: To understand the basic tenets of Marxian political economy. CLO 3: To understand monopoly capitalism and Imperialism. CLO 4: To understand the role of planning and market mechanism for development.		
Credits	Theory	Practical	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Introduction to Political Economy; Idealism and materialism; Metaphysics and dialectics; Laws of dialectics; Categories of philosophy; Theory of cognition; Dialectical and Historical Materialism; Mode of production; Social super-structure and its elements; Dialectical interaction of base and superstructure; Historical social-economic formations; and Asiatic mode of production.	15
II	Marxian Political Economy; Analysis of capitalism; Development of capitalism in agriculture; Nature and process of planning; Market mechanism; Methods of accumulation; and Primitive socialist and capitalist methods.	15
III	Conceptualization of Imperialism: Emergence of monopoly capitalism and imperialism; Role of banks in monopoly capitalism; Imperialism; Imperialism and the state; Concept of neo-colonialism; Colonialism and Neo-Colonialism; Forces against neo-colonialism and imperialism.	15
IV	Transition to Socialism; Transition period; Problems and policies; Nature of state; Role of Planning; Market mechanism; Distribution of income and wages; and Strategies for third	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	world development.	
Total Contact hours		60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Dobb, M. (2012). Russian Economic Development since the Revolution. London: Routledge Publications.
- Mandel, E. (1999). Late Capitalism. London: Verso Publication.
- Maurice, C. (2015). Diametrical Materialism: An Introduction. Aakar Books Publishers.
- Petras, J. F. and Veltmeyer, H. (2001). Globalization Unmasked: Imperialism in the 21st Century. Canada: Fernwood Publication.
- Preobrazhensky, E. A. (1965). The New Economics. London: Oxford University Press. (Open Online Access)
- Ravenhill, J. (2016). Global Political Economy. Oxford: Oxford University Press.
- Schumpeter, J. A. (2013). Theory of Economic Development of Capitalism, Socialism and Democracy (2nd Ed.). Wilder Publication, Inc.
- Sweezy, P. M. (1991). The Theory of Capitalist Development (1st Ed.). New Delhi: K. P. Bagchi and Co.
- Varoufakis, Y., Theocarakis, N., and Halevi, J. (2012). Modern Political Economics: Making Sense of the Post-2008 World (2nd Ed.). Oxford: Taylor & Francis Publications.
- Wilczynski, J. (1982). The Economics of Socialism (1st Ed.). New Delhi: S. Chand & Co. Ltd.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A - Introduction			
Name of Programme	M.A. Economics		
Semester	**Second**		
Name of the Course	Logical Reasoning in Social Sciences		
Course Code	M24-ECO-207		
Course Type	DEC-2		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basics of logic and square of opposition. CLO 2: Understand principles of logic, immediate inference and syllogism. CLO 3: Learn the system of pure and mixed syllogism. CLO 4: Understand inductive logic and fallacies.		
Credits	Theory	Practical	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	Definition, Nature, and Scope of Logic; Language, Logic, and Concepts; Classification of Logical Propositions; Square of Opposition of Propositions	15
II	Fundamental Principles of Logic (The Laws of Thought); Immediate Inference – Conversion, Obversion and Contraposition; Mediate Inference (Syllogism)- Rules of syllogism, Moods and figures	15
III	Pure and Mixed Syllogism – Categorical, Disjunctive and Hypothetical Syllogism; Predicate Logic; Basic Sets; Basic Set Operations	15
IV	Induction and its types; J. S. Mill's Inductive Methods; Science and Hypothesis- Types , Sources and Verification; Fallacies- Fallacies of Relevance; Fallacies of Defective Induction; Fallacies of Presumption; Fallacies of Ambiguity	15
Total Contact hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Alan Hausman and Howard Kahane, Logic and Philosophy: A Modern Introduction"
- Colin Allen and Michael Hand, Logic Primer (A Bradford Book), MIT Press
- Cooley, John C, A primer of formal logic

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Gary Hardegree, Symbolic Logic: A First Course"
- Graham Priest, Logic: A Very Short Introduction"
- Haughes, George Edward, The elements of formal logic
- Hurley, P., A concise introduction to logic (12th Revised edition),Wadsworth Publishing Co Inc.
- Irving M. Copi, Carl Cohen,Kenneth McMahon, Introduction to Logic, Pearson
- James Mahoney, The Logic of Social Science, Princeton University Press
- Mourant, John Arthur, Formal logic: an introductory text book
- Nidditch, Pitt, Introductory formal logic of mathematics
- Prior, Arthur. N, Formal logic
- R. M. Sainsbury, Paradoxes, Cambridge University Press
- Robert Johnson, A Logic Book: Fundamentals of Reasoning
- Satya Sundar Sethy, Introduction to Logic and Logical Discourse, Springer
- W. Stanley Jevons, M.A., Elementary Lessons In Logic: Deductive And Inductive, Macmillan & Co.
- Wilfrid Hodges, Logic, Penguin Books Ltd

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of the Programme	Common to all PG Programmes		
Semester	2nd		
Name of the Course	Constitutional, Human and Moral Values, and IPR		
Course Code	M24-CHM-201		
Course Type	CHM		
Level of the course	400-499		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO-1: Learn the different Constitutional Values, Fundamental rights and duties enshrined in the India Constitution. CLO-2: Understand humanism, human virtues and values, and ide of International peace. CLO-3: Grasp the basic concepts of Moral Values and Professional Conduct which are required to become a part of the civil society and for developing professionalism. CLO-4: Understand concepts of Intellectual Property Rights, Copyright, Patent, Trademark etc., and about threats of Plagiarism.		
Credits	Theory	Practical	Total
	2	0	2
Teaching Hours per week	2	0	2
Internal Assessment Marks	15	0	15
End Term Exam Marks	35	0	35
Max. Marks	50	0	50
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Constitutional Values:** Historical Perspective of Indian Constitution; Basic Values enshrined in the Preamble of the Indian Constitution; Concept of Constitutional Morality; Patriotic Values and Ingredients Nation Building; Fundamental Rights and Duties ; Directive Principles of the State Policy.	8
II	**Humanistic Values:** Humanism, Human Virtues and Civic Sense; Social Responsibilities of Human Beings; Ethical ways to deal with human aspirations; Harmony with society and nature; Idea of International Peace and Brotherhood (Vasudhaiv Kutumbkam).	7
III	**Moral Values and Professional Conduct** Understanding Morality and Moral Values; Moral Education and Character Building; Ethics of Relations: Personal, Social and Professional; Introduction to Gender Sensitization; Affirmative approach towards Weaker Sections (SCs, STs, OBCs, EWS& DAs); Ethical Conduct in Higher Education Institutions; Professional Ethics.	8
IV	**Intellectual Property Rights:** Meaning, Origins and Nature of Intellectual Property Rights (IPRs);Different Kinds of IPRs – Copyright, Patent, Trademark, Trade Secret/Dress, Design, Traditional Knowledge; Infringement and Offences of IPRs – Remedies and Penalties; Basics of Plagiarism policy of UGC.	7
	Note: Scope of the syllabus shall be restricted to generic and introductory level of mentioned topics.	
	Total Contact Hours	30
Suggested Evaluation Methods		

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Internal Assessment: 15		End Term Examination: 35	
➢ **Theory**	15	➢ **Theory**	35
• Class Participation:	4	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	4		
• Mid-Term Exam:	7		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

Ahuja, V K. (2017). *Law relating to Intellectual Property Rights*, India, IN: Lexis Nexis.

Bajpai, B. L., *Indian Ethos and Modern Management*, New Royal Book Co., Lucknow, 2004.

Basu, D.D., *Introduction to the Constitution of India* (Students Edition) Prentice Hall of India Pvt. Ltd., New Delhi, 20th ed., 2008.

Dhar, P.L. & R.R. Gaur, *Science and Humanism*, Commonwealth Publishers, New Delhi, 1990.

George, Sussan, *How the Other Half Dies*, Penguin Press, 1976.

Govindarajan, M., S. Natarajan, V.S. Sendilkumar (eds.), *Engineering Ethics (Including Human Values)*, Prentice Hall of India Private Ltd, New Delhi, 2004.

Harries, Charles E., Michael S. Pritchard & Michael J. Robins, *Engineering Ethics*, Thompson Asia, New Delhi, 2003.

Illich, Ivan, *Energy & Equity*, Trinity Press, Worcester, 1974.

Meadows, Donella H., Dennis L. Meadows, Jorgen Randers & William W. Behrens, *Limits to Growth: Club of Rome's Report*, Universe Books, 1972.

Myneni, S.R, Law of Intellectual Property, Asian Law House.

Narayanan, P, *IPRs*.

Neeraj, P., &Khusdeep, D. (2014). *Intellectual Property Rights*, India, IN: PHI learning Private Limited.

Nithyananda, K V. (2019). *Intellectual Property Rights: Protectionand Management*. India, IN: Cengage Learning India PrivateLimited.

Palekar, Subhas, *How to practice Natural Farming*, Pracheen (Vaidik) KrishiTantraShodh, Amravati, 2000.

Phaneesh, K.R., *Constitution of India and Professional Ethics*, New Delhi.

Pylee, M.V., *An Introduction to Constitution of India*, Vikas Publishing, New Delhi, 2002.

Raman, B.S., *Constitution of India,* New Delhi, 2002.

Reddy, B., Intellectual Property Rights and the Law, Gogia Law Agency.

Reddy, N.H., SantoshAjmera, *Ethics, Integrity and Aptitude*, McGraw Hill, New Delhi.

Sharma, Brij Kishore, *Introduction to the Constitution of India,* New Delhi,

Schumacher, E.F., *Small is Beautiful: A Study of Economics as if People Mattered*, Blond & Briggs, Britain, 1973.

Singles, Shubham et. al., *Constitution of India and Professional Ethics,* Cengage Learning India Pvt. Ltd., Latest Edition, New Delhi, 2018.

Tripathy, A.N., *Human Values*, New Age International Publishers, New Delhi, 2003.

Wadehra, B.L., Law relating to Intellectual Property, Universal Law Publishing Co.

Relevant Websites, Movies and Documentaries:

Value Education Websites, http://uhv.ac.in, http://www.uptu.ac.in.

Story of Stuff, http://www.storyofstuff.com

Cell for IPR Promotion and Management: http://cipam.gov.in/.

World Intellectual Property Organization: https://www.wipo.int/about-ip/en/

Office of the Controller General of Patents, Designs & Trademarks: http://www.ipindia.nic.in/

Al Gore, *An Inconvenient Truth*, Paramount Classics, USA.

Charlie Chaplin, *Modern Times*, United Artists, USA.

Modern Technology – The Untold Story, IIT, Delhi.

A. Gandhi, *Right Here Right Now*, Cyclewala Productions.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**Third**		
Name of the Course	International Trade		
Course Code	M24-ECO-301		
Course Type	CC-9		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, explain, compare and critically evaluate the classical and neo classical trade theories of International Trade. CLO 2: Learn, compare and critically evaluate the new trade theories and their relevance in today's scenario. CLO 3: Understand the pattern, scope, potential and related issues of trade. CLO 4: Understand the theories of protection and develop the ability to appreciate the economic integration and its impacts.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Fundamentals of International Trade**: Introduction to International Trade and world economy; Current international economic problems and challenges; Trade Theories: Theories of Absolute and Comparative Advantage (Real and opportunity Cost approaches); Reciprocal Demand Theory(Offer Curve Analysis);Heckscher-Ohlin Model; Factor Price Equalization Theorem; Empirical Verification of H.O. theory; Rybczynski Theorem; Gains from Trade. **Self-Study**: Theory of Mercantilism; Concept of Opportunity Cost, Production Possibility Curve, Edgeworth box, Contract Curve.	15
II	**New Trade Theories:** Kravis and Linder Theory of Trade, Posner's Imitation Gap, Vernon's Product Life Cycle Theory, Term of Trade and its Computation; Secular Deterioration of Terms of Trade, Imperfect Competition and International Trade: Monopoly; Monopolistic competition; Welfare implication of Monopolistic competition and trade; Dumping; Economies of Scale and International Trade, Intra-Industry Trade: Causes, emergence and measurement; Balassa Index, Grubel-Lloyd Index. **Self-Study**: Concept and Features of Market: Perfect Competition, Monopoly and Monopolistic competition, Economies of scale, concept of efficiency and market failure.	15
III	**Economic Growth and International Trade**: Technical Progress and the Nation's Production Frontier; Growth and Trade in case of Large Country- Growth and Nation's Terms of Trade and welfare, Immiserising Growth. Political economy of trade policy: Free Trade and Efficiency; National Welfare arguments against free trade; The Domestic Market Failure Argument Against Free Trade. Tariffs, Quotas and Non-Tariff barriers; Effects of tariff-Metzler Paradox; Optimum Tariff; Effective rate of Protection; Quotas and other non-tariff barriers-technical/quality/safety standards (regulations). **Self-study:** Concept of social Welfare, List of trade barriers according to WTO, Case Study of US-China Trade War, WTO regulations regarding trade barriers.	15
IV	**Global Trade Policy:** Economic integration theory of customs union; partial and general equilibrium analysis; Dynamic effects; Integration Experiences-European Union, BRICS, NAFTA,	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	ASEAN, Multilateral trade negotiations-the GATT rounds, UNCTAD and evolution of world trading arrangements; World Trade Organization and fair trade-Development Round; Trade Facilitation; Trade Wars. India's Trade Policy: Concept, Nature and Aims of Trade Policy; Evolution of India's Trade Policy; Recalibrating India's Foreign Trade Policy; Recent Foreign Trade Policy of India. **Self-study:** Basic Tools of Trade Policy, Sequencing and pacing of trade reforms, case study of EU, Trade Policy Review of India by World Trade Organization, Case Study of China-USA trade War.	
Total Contact Hours		60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Salvatore D. (2004). Introduction to International Economics,Published by Wiley India.
- Paul R. Krugman, Maurice Obstfeld & Marc Melitz (2013). International Economics: Theory and Policy, Pearson Publication.
- H. G. Mannur(1999). International Economics, Vikas Publishing House.
- Södersten, Bo (1994). International Economics, Houndmills, Basingstoke, Hampshire: Macmillan.
- Batra, R. N. (1973).Studies in the Pure Theory of International Trade, St. Martin's Press, August.
- Bhagwati, J. N. (1987).International trade: Selected readings, MIT Press, Cambridge.
- Ethier, W. J. (1995).Modern International economics, W.W. Norton & Co.
- Heffernan, S. & Sinclair, P. (1991). Modern International Economics, Wiley-Blackwell
- e-PGPathshala (inflibnet.ac.in)
- Unit-18.pdf (egyankosh.ac.in)

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Third		
Name of the Course	Development Economics		
Course Code	M24-ECO-302		
Course Type	CC-10		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: To appreciate and interpret the nature of Economic Growth & Development with a view to measure and mark its trajectory. CLO 2: Appreciate the methods of measuring economic development. CLO 3: Comprehend various development strategies and their applicability. CLO 4: To deduce the approaches to economic development with a view to apply them Practically.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		
Part B-Contents of the Course			

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Concepts & Measurement of Economic Development** Evolution of concept of Economic growth, Economic development, Capability Approach; Goulet's core values of development Historical perspective of Economic Growth and its relevance; Structural diversity and common characteristics of developing nations, Global North and Global South divide, Measuring Development: Income Measures, Basic Needs Approach, PQLI, HDI, Sustainable development and Climate Change, Sustainable Development Goals.	15
II	**Problems of Underdevelopment**: Poverty, Inequality and Development: Measurement, Impact and Policy options, Dualism, Centre-Periphery Model and Process of Cumulative Causation, Lewis model of economic development, Ranis and Fei model, Jorgenson's model, Balanced and Unbalanced growth, Linkage effect Hirschman and Nurkse.	15
III	**Sectoral Aspects of Development** Role of Agriculture in Economic Development; Heterogeneity in Agriculture; Agricultural Transformation: Designing Strategy for Agriculture Transformation. Rationale and Pattern of Industrialization in developing Countries; Choice of Techniques, Appropriate technology and employment; Terms of Trade between Agriculture and Industry. Services Sector in Developing Economies: Role, growth and sustainability, Infrastructure and its importance.	15
IV	**International Trade Theory and Development Strategy** Contemporary Issues in International Trade; Critique of Traditional Tree Trade Theory; Trade Policy Debate: Export Promotion, Import Substitution and Economic Integration; Globalization and Development: View of Stiglitz. Role of financial Institutions in economic development: Theory (Acemoglu and Zilibotti Model) and Evidence, New Institutional Economics: Role of Market, State and Civil Society.	15
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Adelman, I. (1961). Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Barro, R. J. & Sala-i-Martin, X. (2004). Economic Growth, MIT Press.
- Behrman, S. & Srinivasan, T.N (Eds.), (1995). Handbook of Development Economics, Vol. 3. Elsevier, Amsterdam.
- Bhagwati, J. & Desai, P. (1970). India: Planning for Industrialization. Oxford University Press, London.
- Brown, M. (1966). On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Chenery, H. & Srinivasan, T.N. (Eds.) (1989). Handbook of Development Economics, Vol. 1 & 2. Elsevier, Amsterdam.
- Ghatak, S. (1986). An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., Perkins, D.H., Romer, M. & Snodgrass, D.R. (1992). Economics of Development, W.W. Norton, New York.
- Grossman, G. and E. Helpman (1991). Innovation and Growth in the Global Economy, MIT Press, Cambridge, Mass.
- Higgins, B. (1959). Economic Development, W.W. Norton, New York.
- Jones, H.G. (1975). An introduction to modern theories of economic growth, London: Thomas Nelson Ltd.
- Kindleberger, C.P. (1977).Economic Development, McGraw Hill, New York.
- Meier, G.M. & Rauch, J.E. (2005).Leading Issues in Economic Development, Oxford University Press, New Delhi.
- Menard, C. & Shirley, M.M. (2008). Handbook of New Institutional Economics, Springer Science & Business Media.
- Schultz, Paul T. & Strauss, J. (Eds.). (2008). Handbook of Development Economics, Vol. 3. Elsevier, Amsterdam.
- Sen, A.K. (Ed.). (1990). Growth Economics, Penguin, Harmondsworth.
- Thirlwall, A.P. (1999). Growth and Development, Macmillan, U.K.
- Todaro, M.P. & Smith, S.C. (2003). Economic Development, Pearson Education
- https://youtube.com/playlist?list=PLwdnzlV3ogoXxAT0AGHAQ3iMswK39C6gS&si=faFLJLVTRKQCdL87

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- https://youtube.com/playlist?list=PLUl4u3cNGP61kvh3caDts2R6LmkYbmzaG&si=JpHs-HHu-tkpyXX9
- https://youtu.be/UVAT8-ShzIc?si=-QxZAaYZsSyfBaLN

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	THIRD		
Name of the Course	Introductory Financial Economics		
Course Code	M24-ECO-303		
Course Type	DEC-3		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, apply and solve the time value of money problems and its applications in investment evaluation criteria. CLO 2: Understand and compute various costs of capital and design an optimal capital structure. CLO 3: Understand theoretically how dividend decisions are taken in corporate sector and design a dividend policy for a firm. CLO 4: Understand the management of working capital and its components, and solve problems in relation thereto.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Capital Budgeting** Time Value of Money; Goals of Finance; Economics of capital Budgeting - Investment Criteria, Estimation of project Cash Flows, Risk Analysis in Capital Budgeting, Computation of Cost of Capital.	15
II	**Capital Structure and Firm Value** Economics of Capital Structure and Firm Value - Net Income Approach, Net Operating income Approach, Modigliani and Miller Approach; Analysis of Optimal Capital structure – EBIT & EPS Analysis, ROI & ROE Analysis, Operating and Financial Leverage.	15
III	**Dividends and Working Capital** Economics of Dividends- Walter Model, Gordon Model, Modigliani and Miller Model; Economics of Working Capital- Estimation of Working Capital, Financing of working Capital. Cost-Volume-Profit Analysis.	15
IV	**Cash, Receivables and Inventory** Economics of Cash – Cash Budgeting and its Simulation, Optimal Cash balance, Baumol Model, Miller and Orr Model; Economics of Receivables; Economics of Inventory – EOQ Model, Pricing of Raw materials, Monitoring and Control of Inventories.	15
Total Contact hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

• Seminar/presentation/assignment/quiz/class test etc.:	10	
• Mid-Term Exam:	15	

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Berk, Jonathan, and DeMarzo, Peter (2007), Corporate Finance, Pearson International.
- Brealey, R.A., Myers, S.C. and Allen, F. (2003), Principles of Corporate Finance, 7th Ed, McGrowHill.
- Brittain, J.A. (1978). Corporate Dividend Policy. Brookings Institution, USA.
- Chandra, Prasanna (2011). Financial Management: Theory and Practice. Tata McGraw Hill.
- Copeland, T., Weston, F., and Shastri, K. (2004), Financial Theory and Corporate Policy, 4th Ed., New York: Addison-Wesley.
- Harold Bierman, Jr. & Smidt, Seymour (2007). The Capital Budgeting Decision: Economic Analysis of Investment Projects. Routledge.
- Kent Baker, H. & and Martin, Gerald S. (2011). Capital Structure and Corporate Financing Decisions. Wiley Publishers.
- Mehta, D. R. (1974). Working Capital Management. Prentice- Hall.
- Ross, Stephen, Westerfield, Randolph, Jaffe, Jaffrey (February 2002), Corporate Finance, 6th Ed., McGraw-Hill Companies.
- Van Horne, J.C. (2002). Financial Management and Policy. Pearson Education.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A - Introduction			
Name of Programme	M.A. Economics		
Semester	Third		
Name of the Course	Agricultural Economics		
Course Code	M24-ECO-304		
Course Type	DEC-3		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand how farmers allocate resources, manage risk, and respond to market forces. CLO 2: Explore how different approaches can improve farming practices, create jobs, and boost food production. CLO 3: Understand, analyze the present concepts of agricultural production functions and factor - product relationships using the tools of micro economics and diversification in agriculture, CLO 4: To learn various issue in Indian Agriculture.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction To Agriculture Economics** Agricultural Economics – Definition, Nature and Scope; Role of agriculture in Economic development, Resource Management in Agriculture, input output relationship, farm organization, Risk and Uncertainty in Agriculture, Instability in agriculture, Supply and Demand Behavior in Agriculture SELF STUDY CONTENTS (not relevant for exams):land Reforms,	15
II	**Theories of Agricultural Development** Schultz's Transformation of Traditional, Agriculture; Mellor's Model of Agricultural Development; Boserup Model of Agriculture Development; Ranis – Fei Model of Agriculture Development; Todaro's model of rural urban migration and unemployment; Hayami - Ruttan Induced Innovation Hypothesis SELF STUDY CONTENTS (not relevant for exams): Lewis theory of unlimited supply of labour	15
III	**Agricultural Production and Its Diversification** Agricultural Production- Stock and Flow Resources, Production Relationships, Resource use and efficiency; Production Functions analyses in agriculture; Factor Relationships – Iso-quant and Iso-cost Line, Optimum Combination; Product Relationships – Joint Products, Competitive Products, Supplementary Products and Antagonistic Products; Diversification of Agricultural Production – Horticulture and Floriculture, Mushroom Cultivation and Processing of Agricultural Products.	15
IV	**Issues in Indian Agriculture** Indian Agriculture: Features, Problems and Trends; Agricultural Productivity in India – Causes of low productivity and Suggestions to increase productivity in India; Agricultural	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	finance; Rural credit; Energy use in agriculture Agricultural Price Policy: origin, objectives, need, instruments, shortcomings and suggestions for Re-orientation of Agricultural Price Policy in India; Agriculture Marketing in India; Agricultural Development and Five Year Plans	
Total Contact Hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Bhalla, G.S. (2007), *Indian Agricultural Since Independence*, National Book Trust, India.
- Datt, G. &Mahajan, A (2020) *Datt&Sundharam's Indian Economy*, S.Chand Publishers, New Delhi.
- Ezaz Anwar, Md (2019), *Agriculture and Economic Development in India*, New Century Publications
- Gardener, Bruce L., &Rausser, Gordon C. (Eds.) (2002), *Handbook of Agricultural Economics, Vol.2A- Agriculture and Its External Linkages*, Amsterdam, Elsevier Science B.V
- Goswami, B, Bezbaruah, M. P. &Mandal, R. (Eds.), (2017) *Indian Agriculture after the Green Revolution: Changes and Challenges*, Routledge, New York
- Goswami, B, Bezbaruah, M. P. &Mandal, R. (Eds.) (2017) *Indian Agriculture after the Green Revolution: Changes and Challenges*, Routledge, New York
- **https://archive.nptel.ac.in/courses/109/104/109104184/**
- **https://youtu.be/dBCVnh4hdWI**
- Lekhi,R.k&singh J, (2019) ,Agricultural Economics An Indian Perspective ,Kalyani publication
- Moss, C.B. (2010), *Risk, Uncertainty and the Agricultural Firm*, World Scientific Publishing Co. Pte. Ltd. Singapore.
- Paroda, R. S. (2018), *Reorienting Indian Agriculture: Challenges and Opportunities*, CABI, Oxfordshire, UK.
- Ray, P.K. (2013), *Agricultural Insurance: Theory and Practice and Application to Developing Countries*, Pergamon Press, Great Britain.
- Singh, Kuldeep (2010) Agricultural Trajectories and Environment Dilemma: Some Evidence from Haryana.*Agricultural Situation in India*, 67(3).
- Westley, J. R. (2019), *Agriculture and Equitable Growth: The Case of Punjab-Haryana*, Routledge, New York.

Session: 2025-26	
Part A – Introduction	
Name of Programme	M.A. Economics
Semester	**Third**
Name of the Course	Micro Mathematical Economics
Course Code	M24-ECO-305
Course Type	DEC-3
Level of the course	500-599
Pre-requisite for the course (if any)	n.a.
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, explain, solve and design different forms of utility functions and demand functions and thereby attain in-depth knowledge of optimization and related concepts in consumer behaviour using mathematical derivations. CLO 2 : Understand, illustrate and design various forms of production functions and appreciate the concepts of optimization, duality, product exhaustion, productivity and efficiency using mathematical equations. CLO 3 : Understand, estimate, interpret and forecasts the time path of any economic variable and comprehend the behavior of the firm as well as factors of production under perfect and imperfect competition by utilizing mathematical tools. CLO 4 : Compute and interpret equilibrium price, output and profits of

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	firms under Oligopoly using mathematical tools and explain the managerial theories of the firm.		
	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Topics in Consumer Behavior** Types of utility functions; Ordinal utility maximization; Demand functions — ordinary and compensated; Slutsky equation — income, substitution, and price effects; Consumer surplus; Elasticity of demand; Linear expenditure systems; Indirect utility function. SELF STUDY CONTENTS (not relevant for exams) Meaning and determinants of utility and demand; Indifference curve and its slope; Concept of budget line; Basic rules of differential calculus and maxima-minima, integral calculus, and matrix algebra.	15
II	**Production Function Analysis** Production functions and their properties (CD, CES, Translog); Elasticity of factor substitution and curvature of iso-quants; Producer's equilibrium; Duality in cost and production functions; Product exhaustion theorems; Growth Accounting Equation; Methods for measuring productivity and efficiency. SELF STUDY CONTENTS (not relevant for exams): Microeconomic concepts from producer behavior including isoquant; Basic rules of differential calculus and maxima-minima.	15
III	**Market Equilibrium** Product and factor market equilibrium; Existence, uniqueness and stability of equilibrium; Static stability; Dynamic stability-lagged adjustment and continuous adjustment; Dynamic equilibrium with lagged adjustment; Monopoly, monopsony and monopolistic competition; Pricing of factors of production. SELF STUDY CONTENTS (not relevant for exams): Markets and its various forms; Rules of differential calculus and maxima-minima; Knowledge of difference and differential equations.	15
IV	**Classical Oligopoly and Managerial Theories of Firm** Duopoly and oligopoly: Cournot's Model; Stackelberg's model; Kinked demand curve; Joint profit maximization; Price leadership model; Bilateral monopoly; Baumol's, Willamson's, and Marris's models of firm. SELF STUDY CONTENTS (not relevant for exams): Collusive and Non-collusive oligopoly; Objectives of the firm.	15
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30		End Term Examination: 70	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Allen, R.G.D. (1972). *Mathematical economics*. Macmillan, London.
- Allen R.G.D. (2002). *Mathematical analysis for economists*. Macmillan Press and ELBS, London.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

- Alhabeeb, M.J., & Joe Moffitt, L. (2014). *Managerial economics: A mathematical approach*. John Wiley &
- Arrow, K. J. & Intrilligator, M. (Eds.). (1987). *Handbook of mathematical economics* (Volumes I, II and III). North Holland, Amsterdam.
- Chiang, A.C. (1999). *Elements of dynamic optimization*. Waveland Press Inc., Long Grove, Illinois.
- Chiang, A.C. (2006). *Fundamental methods of mathematical economics*. McGraw Hill, New York.
- Chung, J.W. (1994). *Utility and production: Theory and applications*. Basil Blackwell, London.
- Henderson, J. M. & Quandt, R.E. (2003). *Microeconomic theory: A mathematical approach*. McGraw Hill,
- Koutsoyiannis, A. (1979). *Modern microeconomics*. Macmillan Press, London.
- Lancaster, K. (2012). *Mathematical economics*. Dover Publications Inc., New York.
- Madnani, G.M.K. (2001). *Mathematical economics: A mathematical approach to microeconomic theory*. Oxford & IBH Publishers.
- Mehta, B. C. & Madnani, G. M. K. (2018). *Mathematics for economists*. Sultan Chand & Sons.
- Sen, A. (1999). *Microeconomics: Theory and applications*. Oxford University Press.
- Varian, H. (2006). *Microeconomic analysis*. W.W. Norton, New York.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session 2025-2026			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Third		
Name of the Course	Financial Institutions and Markets		
Course Code	M24-ECO-307		
Course Type	DEC-4		
Level of the course	500-599		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Explain the components and significance of the financial system, and analyze commercial banks' roles. CLO 2:Describe the characteristics and segments of the money market, explain the meaning, objectives, and functions of the capital market CLO 3:Explain the functions and types of investment banking and merchant banking services, mutual funds, the role of depositories and custodians, and understand risk management, trading, FDI, and FII in the foreign exchange market. CLO 4: Describe the types and functions of various NBFCs, venture capital funds,and understand the roles and functions of SEBI, PFRDA, IRDA, and RBI.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Financial System** Introduction to Financial System; Indicators of Financial Development; Concepts Related to Financial Markets and Institutions - Concept of Risk, Concept and types of return and yield, Theories of Structure of Interest Rates. **Commercial Banking System** Commercial Banking - Role of Banks; Process of Credit Creation; Banks' Financial Statement, International Banking, NPA, Risk Management in Banking	15
II	**Money Market** Introduction, Meaning and main characteristics of Money Market segments- Call Money Market, Treasury bill market, Commercial Papers Market, Certificate of Deposit Market, Gilt- edged Securities Market, Repo Market, Collateralised Borrowing and Lending Obligation (CBLO); ***Capital Market*** Meaning, Objectives, Importance and Functions of Capital Market; New financial instruments in primary capital Market. Stock Market and Securities(basic only) - IPO, Stock Exchanges, Stock Market Indices. Derivatives Market - Types of Derivatives, Important Concepts used in Derivatives Market, Pricing of Futures, Options and Swaps.	15
III	**Financial Services**	15

Chairman,
Department of Economics
Kurukshetra University,
KURUK[illegible]

	Investment Banking - Introduction, Functions, Types; Changing Scenario of Investment Banking;Merchant Banking Services; Pre-Issue Obligations; Post-Issue Obligations; Depositories and Custodians; Functions and Types of Mutual Funds **Foreign Exchange Market** Risk Management in Foreign Exchange Market; Trading in foreign Exchange Markets; Foreign Capital – FDI & FII;	
IV	**Financial Institutions** Meaning, types and Functions of NBFC's; Credit Unions, Savings and Loan Associations, Pension Funds, Finance Company, Investment Trusts, Common Trusts Fund,Housing Finance, Leasing and Hire Purchase.; Venture capital funds. **Regulatory Framework of Financial Institutions in India** Role, Main Features and Functions of – Securities and Exchange Board of India (SEBI), Pension Fund Regulatory and Development Authority (PFRDA), Insurance Regulatory and Development Authority (IRDA), Reserve Bank of India (RBI).	15
	Total Contact hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Bhole, L.M. &Mahakud, J. (2017),Financial Institutions and Markets: Structure, Growth and Innovations, McGraw Hill Education (India) Pvt. Limited.
- Fabozzi, Frank J., Modigliani, Franco P. & Jones, Frank J. (2013),**Foundations of Financial Markets and Institutions, Pearson Education Limited.**
- Mishkin, Frederic S. (2016),*The Economics of Money, Banking and Financial Markets*, Pearson.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Third		
Name of the Course	Industrial Economics		
Course Code	M24-ECO-308		
Course Type	DEC-4		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Learn the scope and breadth of industrial economics and able to use the tools of economic analysis and the classical theory of markets in the analysis of organizations CLO 2: Comprehend, compare and present the theories of industrialization and location along with their technical applications. CLO 3: Understand market structure-conduct-performance and appreciate the concept of sellers' concentration along with its measurement using adequate techniques. CLO 4: Understand, compare and analyse various product pricing methods along with their merits and limitations.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Industrial Organization and Theories of the Firm;** Meaning and scope of industrial economics; Industrial organization and ownership structure – public, private, joint and co-operative sectors; Objectives of the firm; Theories of the firm: Managerial Theories, Coasian firm and transaction cost approach, Strategic and knowledge based theories SELF STUDY CONTENTS (not relevant for exams):	15
II	**Theories of Industrialization and Industrial Location** Theories of Industrialization – Hoffman, Chenery and Gershenkron; Theories of industrial location – Weber, Sargent and August Losch theories, Hotelling's location model, Salop's location model; Factors affecting location; Balanced regional development of industries. SELF STUDY CONTENTS (not relevant for exams):	15
III	**Structure-Conduct-Performance Paradigm** The structural conduct performance approach; Relationships between structure, conduct & performance; Neo-classical developments of the SCP approach; Sellers concentration and its measurement: the concentration ratio, the Lorenz curve; Product differentiations – its sources and its implications, Entry conditions; Economies of Scale; Market structure and profitability; Market structure and innovation – Process and measurement. SELF STUDY CONTENTS (not relevant for exams):	15
IV	**Methods of Product Pricing :** Cost-oriented methods: Mark-up, cost-plus, Break-even, target return pricing; Market-oriented Methods: Going-rate pricing, Premium pricing, Discount pricing, Sealed-bid Pricing; Peak-Load Pricing; Multi-Product Pricing; Predatory pricing; Pricing of a new product: Skimming and Penetration pricings; Non-Linear Pricing Practices: Price Discrimination.	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

SELF STUDY CONTENTS (not relevant for exams):				
Total Contact Hours				60
Suggested Evaluation Methods				
Internal Assessment: 30			**End Term Examination: 70**	
➢ **Theory**	**30**		➢ **Theory:**	**70**
• Class Participation:	5		Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10			
• Mid-Term Exam:	15			

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- George J.Borjas,"Labour Economics" McGraw-Hill
- Lester, R.A (1964). *Economics of Labour*, (2nd Edition), Macmillan, New York.
- McConnell, Campbell R, Brue, Stanley L, Macpherson, David A, (2013), Contemporary Labor Economics, Eleventh Edition, McGraw-Hill Education, 2 Penn Plaza, New York, NY 10121.
- Rees, A. (1973) *Economics of Work and Pay*, Harper and Row, New York.
- Sen, A.K. (1975), *Employment, Technology, and Development,* Oxford University Press, New Delhi.
- Singh, Chandra Kant (2019), Labour Economics, Deshraj& Sons, India.
- Solow, R.M. (1990) *Labour Market as an Institution*, Blackwell, London.
- Paroda, R. S. (2018), *Reorienting Indian Agriculture: Challenges and Opportunities*, CABI, Oxfordshire, UK.
- Ray, P.K. (2013), *Agricultural Insurance: Theory and Practice and Application to Developing Countries*, Pergamon Press, Great Britain.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**Third**		
Name of the Course	Basic Econometrics		
Course Code	M24-ECO-309		
Course Type	DEC-4		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: understand econometrics basics, including data types, probability distributions, simple linear regression with OLS estimates, and functional forms of regression models, facilitating analysis of economic data. CLO 2: Grasp multiple regression analysis, general linear regression model, maximum likelihood estimates and their properties, as well as R^2, adjusted R^2 for model fit. CLO 3: identify and address common econometric problems such as heteroscedasticity, multicollinearity, autocorrelation, and specification errors. CLO 4: to analyze distributed lag models and apply master causality tests to effectively assess causal relationships in econometric models.		
	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction to Econometrics** Definition, Scope and Methodology of Econometrics, Types of Data; Time Series data, Cross Section Data and Panel Data. Probability distributions - normal and t-distribution; Simple Linear Regression Model; OLS Estimates and Their Properties. Functional forms of Regression Models, Growth Rates.	12
II	**Multiple Regression Analysis** General Linear regression Model, Maximum Likelihood Estimates and their properties. R^2 and adjusted R^2; Significance Testing of Parameters in Multiple Regression Analysis.	11
III	**Econometric Problems** Nature, Test, Consequences and remedial steps of problem of Heteroscedasticity, Multicollinearity, and Autocorrelation, Types of Specification Errors, Errors of Measurement.	11
IV	**Distributed Lag Models and Causality Tests** Auto Regressive and Distributed lag Models- Koyak Model, Partial Adjust Model, Adaptive Expectations; Almon Approach to distributed-lag model; Causality tests; Granger and Sim's Test.	11
V*	**List of Practicals** 1. Estimation of equation by OLS method 2. Computation of Growth Rates by OLS 3. Testing of Significance of OLS Parameters-1 4. Testing of Significance of OLS Parameters-2 5. Testing of Significance of overall equation 6. Detection & Removal of Heteroscedasticity-1 7. Detection & Removal of Heteroscedasticity-2 8. Detection & Removal of Multicollinearity-1 9. Detection & Removal of Multicollinearity-2 10. Detection & Removal of Autocorrelation-1 11. Detection & Removal of Autocorrelation-2 12. Estimation of ARDL Models-1 13. Estimation of ARDL Models-2 14. Estimation of ARDL Models-3 15. Estimation of ARDL Models-4	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Amemiya, T. (1985).Advanced Econometrics. Harvard University Press, Cambridge, Mass.
- Baltagi, B.H. (1988).Econometrics. Springer, New York.
- Goldberger, A.S. (1998).Introductory Econometrics. Oxford University Press, New York.

Chairman,
Department of Economics
Kurukshetra University

- Gujarati, D.N. (1995).Basic Econometrics. McGraw Hill, New Delhi.
- Intrilligator, M.D. (1978).Econometric Methods, Techniques and Applications. Prentice Hall Englewood Cliffs, New Jersey.
- Johnston J. (1991). Econometric Methods. McGraw Hall Book Co. London.
- Kmenta J. (1998). Elements of Econometrics. University of Michigan Press, New York.
- Koutsoyiannis, A. (1977).Theory of Econometrics. The Macmillan Press Ltd. London.
- Maddala G.S. (Ed.) (1993).Econometric Methods and application. Aldershot U.K.
- Madnani, G.M.K. (2004). Introduction to Econometrics: Principles and Applications. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.
- Pindyck R.S. & Rubinfield, D.L. (1976). Econometric Models and Economic Forecasts. McGraw Hill Kogakusha Tokyo.
- Theil H. (1981).Introduction to Econometrics. Prentice Hall of India, New Delhi.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	THIRD		
Name of the Course	Economic Modelling-I		
Course Code	M24-ECO-311		
Course Type	DEC-5		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, apply and solve cluster, discriminant and factor analysis besides computing the basics of time series data using software. CLO 2: Understand and compute various tools used in time series econometrics using software. CLO 3: Understand and compute yields, stock values from historical data using a software. CLO 4: Understand and apply various capital budgeting criteria and decision making using a software. - CLO 5: Demonstrate the ability to solve the problems mentioned in contents with the help of a software.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	
Part B-Contents of the Course			

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	**Topics**	**Contact Hours**
I	1. Cluster analysis 2. Factor analysis 3. Discriminant analysis 4. Time series analysis- the property of stationarity, stochastic and deterministic trend, unit root tests SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	12
II	5. Cointegration Analysis 6. Vector Error Correction Model (VECM)	11

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	7. Auto Regressive Distributed Lag (ARDL) Model 8. Vector Autoregression (VAR) Model SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	
III	9. Interest Rates: Real, Nominal, Inflation and the Fisher Effect 10. Calculate YTM and Effective Annual Yield From Bond Cash Flows; Bonds & Interest Rate Risk,Tax Implications For Zero Coupon Bonds 11. Stock Value Based on Present Value of Future Dividend Cash Flows. 12. Stock Valuation with Dividend Growth Model SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
IV	13. Investment criteria 14. IRR and Non-conventional Cash Flows, Plot Chart To See Multiple IRR; Investment Criteria: MIRR - Modified Internal Rate of Return 15.Scenario Analysis For Cash Flow & NPV Calculations 16. Sensitivity Analysis For Cash Flow & NPV Calculations SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
V*	**Practicals** 1.Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
	Total Contact Hours	75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Gary Koop: Analysis of economic data, John Wiley & Sons, 2005
- Thomas Cleff: Applied Statistics and Multivariate Data Analysis for Business and Economics: A Modern Approach Using SPSS, Stata, and Excel, Springer
- Kurt Jechlitschka, Dieter Kirschke and Gerald Schwarz: Microeconomics using Excel: Integrating economic theory, policy analysis and spreadsheet modeling, Routlage
- Shmuel Oluwa: Hands-On Financial Modeling with Excel for Microsoft 365, Packt Publishing
- Abdulkader Aljandali and Motasam Tatahi: Economic and Financial Modelling with EViews-A Guide for Students and Professionals
- Joaquim P. Marques de Sá: Applied statistics using SPSS, STATISTICA, MATLAB and R, Springer
- Robert P. Burns, Richard Burns : Business Research Methods and Statistics Using SPSS, Sage

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Third		
Name of the Course	Securities and Portfolio Analysis		
Course Code	M24-ECO-312		
Course Type	DEC-5		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the risk and return relationship and compute yields of bond portfolio CLO 2: Understand and apply the portfolio construction, and asset pricing. CLO 3: Understand and apply the fundamental and technical analysis, and efficiency tests of stock markets. CLO 4: Understand and apply the portfolio performance evaluation through various methods. - CLO 5: Demonstrate the ability to apply the contents with the help of a software.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Investment Analysis** The Investment Alternatives; Securities Market; Risk- Return Analysis; Risk Aversion and Capital Allocation to Risky Assets; Term Structure of interest Rates, Bond Prices and Yields; Managing Bond Portfolio. SELF STUDY CONTENTS (not relevant for exams): Time Value of Money	11
II	**Portfolio Optimization** Equity valuation Models; Portfolio Analysis; Markowitz Model, Sharpe Index Model, Capital asset pricing Model, Arbitrage Pricing Theory.	11
III	**Security Analysis and Theory of Options** Macroeconomic, Industry and Company Analysis; Technical Security Analysis; Efficient market Theory; Introduction to Options and Futures Market.	12
IV	Portfolio performance Evaluation; Economics of Mutual Funds - Sharpe, Treynor and Jensen Performance Index; Active Portfolio Management- Treynor-Black Model; Black-Litterman Model.	11
V	**Practicals** 1.Students will prepare a Practical file containing 2 Practicals from each unit. 2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
	Total Contact Hours	75

Suggested Evaluation Methods

290

Chairman,
Department of Economics
Kurukshetra University
KURUKSHETRA

Internal Assessment: 30		End Term Examination: 70	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Reilly, Frank K. and Brown, Keith C. (RB) (2002), Investment Analysis and Portfolio Management, 7th Ed. Dryden.
- Bodie, Z., Kane, A. & Marcus, A.J. (2017). *Investments*. McGraw Hill Education.
- Das, Satyajit (2003), Swaps/Financial Derivatives, 3rd Ed., Vol. 1-4, Wiley Finance.
- Frank, Fabozzi (2011), Markowitz, Harry, Equity Valuation and Portfolio Management, Wiley.
- Frank, Fabozzi, (Ed.) (1989), Portfolio Investment Management, Probus Publishing.
- Grinold, R.C. & Kahn, R.N. (1999). *Active portfolio Management*. McGraw Hill.
- Haugen, Robert (1987), Modern Investment Theory, Prentice-Hall of India.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**Third**		
Name of the Course	Economic Policy Analysis		
Course Code	M24-ECO-313		
Course Type	DEC-5		
Level of the course	500-599		
Pre-requisite for the course (if any)			
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: To understand the basics and theoretical constructs of policy analysis. CLO 2: To learn to analyse Agriculture and Industrial Sector Policies in India CLO 3: To learn to analyse social Sector Policies in India CLO 4: To learn to analyse macroeconomic and financial Sector Policies in India		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction to Policy Analysis** Policy Analysis: Meaning and Definition; Public Policy - Basic Concepts and Theoretical Background for Policy Analysis; Ethical and Political Dimensions of Policy Analysis; Steps in Policy Analysis; Methods in Policy Analysis	15
II	**Agriculture and Industrial Sector Policies in India** Agricultural Policy: National Policies on Agriculture, Agriculture Policy Vision 2020,Subsidies, Minimum Support Prices, Public Distribution System, Impact of Agricultural Policy on Agricultural Sector. Industrial Policy: Industrial Policy in India since Independence, Industrial Licensing Policy, New Economic Policy, Impact of Policy Changes on Industrial Production, Structural Changes, Corporate Social Responsibility (CSR)	15
III	**Social Sector Policies in India** Population Policies - Demographic Dividend, Population Policy 2000; Poverty and Unemployment Policies – MGNREGA, Unorganised Sector Labour Policies; Health Policies; Education Policies & Right to Education (RTE); Right to Employment; Right to Information; MDGs and SDGs	15
IV	**Macroeconomic and Financial Policies Issues in India** Social and Political Landscape in India; New Economic Policy 1995; Structural Adjustments - Liberalization, Privatization (EXIT Policy) and Globalization; Impact of WTO: TRIPs, TRIMs, & GATS. Financial Sector: Banking Sector Policies, Mergers & Amalgamation, NBFIs, Insurance Sector, Financial Sector Reforms, Inflation Targeting Policy, Monetary Policy.	15

Chairman,
Department of Economic
Kurukshetra University,
KURUKSHETRA-136119.

V	Practicals	
Total Contact Hours		60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		
➢ **Practical**			
• Class Participation:			
• Seminar/Demonstration/Viva-voce/Lab records etc.:			
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Acharya Shankar, (2003) India's Economy: Some Issues and Answers, Academic Foundation, New Delhi.
- Anthony E. Boardman, David H. Greenberg, Aidan R. Vining, and David L. Weimer, (2001) Cost- Benefit Analysis: Concepts and Practice, Englewood Cliffs, New Jersey, Prentice-Hall.
- Bardach, Eugene,(2011) A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving, Washington D.C.
- David L. Weimer and Aidan R. Vining, (2010) Policy Analysis: Concepts and Practice, Englewood Cliffs, New Jersey: Prentice-Hall.
- Dhar P. N, (2003) The Evolution of Economic Policy in India-Selected Essays, OUP, New Delhi
- Dhar P.K., (2016) Indian Economy: Its Growing Dimensions, Kalyani Publications, Ludhiana.
- Dunn, William N, (2011) Public Policy Analysis: An Introduction, Prentice Hall.
- Dutt Ruddar, and K.P.M. (2004) Sundaram, Indian Economy, S. Chand and Company, New Delhi.
- Dye, T. (2013) Understanding Public Policy, Englewood Cliffs, NJ, Prentice Hall.
- Hanson James A., and Sanjay Kathuria (Ed) (2001) India-A Financial Sector for the Twenty-First Century, World Bank, Oxford University Press, New York.
- Hanumantha Rao C. H. (2006) Agriculture, Food Security, Poverty Environment - Essays on Post Reform India, OUP
- Kapila Uma, (2015) Indian Economy since Independence, Academic Foundation, New Delhi.
- Kapila Uma, (2005) Understanding the Problem of Indian Economy, Academic Foundation, New Delhi.
- Misra S.K. & V.K. Puri, (2011) Indian Economy-Its Development Experience, Himalaya Pub.,House, Mumbai.
- NCAER, Economic and Policy Reforms in India, NCAER, New Delhi.
- Patton & Sawicki, Monitoring & Evaluating Implemented Policies, Prentice Hall
- Patton, Carl V. and David S. Sawicki,(2015) Basic Methods of Policy Analysis and Planning, Englewood Cliffs, New Jersey, Prentice Hall.
- Vaidyanathan A, (2003) India's Economic Reforms and Development, Academic Foundation, New Delhi.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	**Third**		
Name of the Course	Introductory Economics		
Course Code	M24-OEC-309		
Course Type	OEC		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Explain the meaning and nature of economics along with the important concepts of its Microeconomics branch. CLO 2: Analyze and apply some basic concepts from closed and open Macroeconomics. CLO 3: Elucidate the concepts of taxation, fiscal policy, budget deficits, and construction of various indices as the measures of economic development and thus enter into the field of policy making. CLO 4: Make positive as well as normative analysis of Indian economic policy.		
Credits	Theory	Tutorial	Total
	2	0	2
Teaching Hours per week	2	0	2
Internal Assessment Marks	15	0	15
End Term Exam Marks	35	0	35
Max. Marks	50	0	50
Examination Time	3 hours		

Part B - Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Micro Economics** Meaning, Nature, and Branches of Economics; Central Economic Problems; Concepts of Demand and Supply; Factors of Production; Concepts of Cost and Revenue; Market Forms and their Features.	7.5
II	**Macro Economics** Basic Concepts in National Income; Concepts of Saving and Investment; Money and its Functions; Current Account and Capital Account; Balance of Payment and Balance of Trade; Concept of Exchange Rate.	7.5
III	**Public Finance and Development Economics** Direct Taxes and Indirect Taxes: Types, Merits and Demerits; Fiscal Policy and its Instruments; Budget and Fiscal Deficits; Concept of Economic Growth and Economic Development; Human Development Index; Gender Development Index.	7.5
IV	**Indian Economy Policy** Basic Features of Indian Economy in Present Times; Poverty Alleviation Programmes; Causes of Inflation; RBI and its Monetary Policy; Role of Agricultural, Industrial, and Service Sectors; Liberalization, Privatization and Globalization (Concepts only).	7.5
	Total Contact Hours	30

Suggested Evaluation Methods

Internal Assessment: 15		**End Term Examination: 35**	
➢ **Theory**	**15**	➢ **Theory:**	**35**
• Class Participation:	4	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	4		

293

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

• Mid-Term Exam:	7	

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Anderton, A. (2008). *Economics*. Dorling Kindersley (India) Pvt. Ltd., New Delhi.
- Datt, G., & Mahajan, A. (2020). *Datt & Sundharam's Indian economy*. S.Chand Publishing.
- Dhar, P.K. (2020). *Indian economy: Its growing dimensions*. Kalyani Publishers, New Delhi.
- Dwivedi, D.N. (2010). *Macroeconomics: Theory and policy*. Tata McGraw Hill, New Delhi.
- Gupta, J.R. (2005). *Public economics in India – Theory and practice*. Atlantic Publishers.
- Kapila, U. (2015). *Indian economy - Performance and policies*. Academic Foundation.
- Kapila, U. (2018). *Indian economy since independence*. Academic Foundation.
- Mankiw, G. N. (2018). *Principles of economics*. South-Western Cengage Learning, USA.
- Ministry of Finance (2024). *Economic Survey*. Government of India.
- Mishra, S.K., & Puri, V.K. (2024). *Indian Economy*. Himalaya Publications, New Delhi.
- Paul, R. R. (2010). *Monetary Economics*. Kalyani Publishers, New Delhi.
- Samuelson, P.A., & Nordhaus, W.D. (2010). *Economics*. Tata McGraw-Hill.
- Sowell, T. (2011). *Basic economics: A common sense guide to the economy*. Basic Books, New York.

Session: 2025-26

Part A – Introduction

Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Indian Economic Policy		
Course Code	M24-ECO-401		
Course Type	CC-11		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the performance of the Indian economy since independence. CLO 2: To comprehend the performance and policies for different sectors of the Indian economy. CLO 3: Explore the composition of Indian financial system, including the central bank, commercial banks, money and capital markets, fiscal policy, and public debt. CLO 4: Grasp India's international economic engagements through trade, investment, and foreign exchange management.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	4	0	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Characteristics of the Indian Economy** Characteristics of Indian Economy on the eve of independence, Development Strategies in India: Planning in India: Objectives Strategies and Evaluation, Trend and Structure of National Income since 1951, New Economic Policy 1991, Performance of Indian Economy in post reform era, Behaviour of saving and investment in recent years, Infrastructure bottlenecks in Indian economy, Impact of institutional factors on development of Indian Economy.	15
II	**Structure of the Indian Economy** Agriculture: Growth, Productivity Trends and Crop Patterns, Green Revolution, Recent Issues in Indian Agriculture Trends in its diversification, Rural Credit & Marketing, Industrial	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119

	Development during post-independence Period, Small Scale and cottage industries, Industrial Policy, Public sector in India, Disinvestment Programme in India, Labour relation and Social security, Growth and Contribution of Services sector in India, Service led Growth.	
III	**Money, Banking and Finance** Price trends and Inflation, Indian Financial System: Reserve Bank of India, Commercial banking in India, Money Market , Capital Market in India, Institutional Financing, Center State finance relations; recent finance commission, Tax revenue of central and state government; evaluation of Indian tax structure; goods and service tax in India, Public Expenditure in India ;trends and issue, Public Debt in India.	15
IV	**Foreign Trade And Foreign Capital** India's Foreign Trade; Value, Composition and Direction, India's Balance of Payments, Exim policy, Foreign Capital and Aid, India's Exchange Rate Policy, Management of Foreign Exchange Reserve, Multinational corporation, FERA and FEMA, World Trade Organization and India.	15
Total Contact Hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Banerjee, A. & Singh, S.K. (2001). Banking and Financial Sector Reforms in India, Deep & Deep Publications, New Delhi.
- Bhagwati, Jagdish (2004).In Defense of Globalization. Oxford University Press, New Delhi.
- Bhandari, Surendra (1998). WTO and Developing Countries, Deep & Deep Publications, New Delhi.
- Biswas, P.K. & Das, P. (Eds.). (2019). Indian Economy: Reforms and Development, Springer.
- Datt, G. & Mahajan, A. (2020). Datt & Sundharam's Indian Economy, S. Chand Publishing House.
- Desai, Vasant (2005).Indian Financial System and Financial Market Operations, Himalaya Publishing House, New Delhi.
- Dhar, P.K. (2020).Indian Economy: Its Growing Dimensions. Kalyani Publishers, New Delhi
- Dwivedi, Rishi Muni (2011).Energy Sources and Policies in India. New Century Publication, New Delhi.
- Hanumantha Rao, C.H., Bhattacharya, B.B. and Siddharthan, N.(Eds.). (2005). Indian Economy and Society in Era of Globalization and Liberalization, Academic Foundation, New Delhi.
- Kapila, Uma (2014-2015). Indian Economy since independence, Academic Foundation, New Delhi.
- Mahajan, Madhur M. (2019).Indian economy. Pearson Education, New Delhi.
- Mathur, Vibha (2005).WTO and India (Development Agenda for the 21st century), New Century Publications, New Delhi.
- Meier, Gerald M. (1987). Pioneers in Development. Oxford University Press, New Delhi.
- Ministry of Finance (2024). Economic Survey. Government of India.
  Mishra, S. K. & Puri, V.K. (2020). Indian Economy. Himalaya Publishing House, New Delhi
- Rameshan P. (2008).WTO, India and Emerging area of Trade: Challenges and Strategies, Excel Books, New Delhi.
- Shergill, H.S. (2006). Diversification of cropping pattern: A Re-Examination, Institute for Development and Communication, Chandigarh.
- Sinha, Yashwant & Srivastava, Vinay K. (2017). The Future of Indian Economy: Past Reforms and Challenges ahead, Rupa Publications, New Delhi.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Environmental Economics and Sustainable Development		
Course Code	M24-ECO-402		
Course Type	CC-12		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes(CLO) After completing this course, the learner will be able to:	CLO 1: Understand the dynamics of economy-Environment interaction. CLO 2: Analyze environmental challenges and solutions. CLO 3: Examine Policy instruments for environmental Management. CLO 4: Understand the limits to growth and sustainability.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction**: The natural environment and the human economy - The neoclassical economic perspective and the ecological perspective, the Material Balance Model, Trade-offs - Economic versus environmental quality, The Economic Process and the Assimilative Capacity of the Natural Environment, The Optimal Level of Pollution.	15
II	**Limits to Growth and Sustainability Debate:** Economic growth and the environment - the environmental Kuznets curve; Economics of sustainability, concept of sustainable development; indicators of sustainability; Various approaches to environmental accounting, The neoclassical and ecological economics approach to sustainability; Green accounting and alternative indicators of sustainability.	15
III	**Policy Instruments**: The economic theory of pollution control - The optimal level of pollution; Economic solutions to environmental problems - Pollution taxes, Environmental subsidies, Deposit and Refund systems, Pollution permit trading systems; Conventional solutions to environmental problems-Command-and-Control approach; Economic appraisal of environmental projects - Cost-Benefit Analysis	15
IV	**Fundamentals of Environmental Resources and Environmental Problems:** Climate change - ecological impacts, Stern Review, The economics of global warming and policy implications; The economics rationale for biodiversity conservation, Biophysical limits to growth - Malthusian and the Neoclassical perspective; Externalities in consumption and production, Public goods, The anatomy of market failure, Institutional arrangements addressing market failure, The absence of property rights and the Coase Theorem.	15
Total Contact Hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

• Mid-Term Exam:	15	

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Baumol, W. J. & Wallace, E.O., The Theory of Environmental Policy, Prentice Hall, New Jersey.
- Bhattacharya, Rabindra N (ed.), Environmental Economics -An Indian Perspective, Oxford University Press, New Delhi.
- Eugene, T, Environmental Economics, Vrinda Publishers, New Delhi.
- Hanley, Nick; Shorgen, Jason F. & White, Ben: Environmental Economics- In Theory & Policy, Macmillan, New Delhi.
- Hussen, Ahmad M, Principles of Environmental Economics, Routledge, London
- Jhingan, M L. & Sharma, C.K., Environmental Economics -Theory, Management & Policy, Vrinda Publishers, New Delhi.
- Karpagam, M, Environmental Economics, Sterling Publishers, New Delhi Kolstad, Charles D., Environmental Economics, Oxford University Press, New Delhi.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	International Finance		
Course Code	M24-ECO-403		
Course Type	DEC-6		
Level of the course	500-599		
Pre-requisite for the course (if any)	N.A.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, explain and present various approaches of foreign exchange rate determination especially in a forward market. CLO 2: Comprehend various models of balance of payment adjustment. CLO 3: Learn and explain macro adjustment policies in an open economy framework. CLO 4: Understand and analyze the working of International Financial Management and Institutions.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Foreign Exchange Market** Evolution of foreign exchange rate determination mechanism, Speculation and arbitrage, role of expectations, currency swaps, future and options, PPP Approach, Portfolio balance approach, Monetary Approach Foreign exchange rate policy; Fixed and pegged exchange rate system, versus Flexible exchange rate system, Managed flexibility, Optimum currency Area, Exchange controls, FOREX management strategy in India.	15
II	**Balance of Payment** Concepts, structure and disequilibrium in Balance of payments; Monetary model of BOP under fixed and flexible exchange rates, Devaluation and BOP crisis- Effects of Devaluation; elasticity and Absorption Approach- Marshall- Lerner Condition, J-Curve; Foreign trade multiplier; Recent trends in BOP in India.	15
III	**Open Economy Adjustment Policies** Internal and external balance; Swan Diagram, Assignment Problem; Expenditure Switching and changing policies; Mundell-Fleming Model-Combining monetary and fiscal policies under fixed and flexible exchange rate system, Implications of Impossible Trinity in the Indian Context. International Debt Problem; India and External Debt-trends features and strategy.	15
IV	**International Financial Management and Institutions** International Capital Movements: FDI and Portfolio Investment; Euro currency market and International Bond Market; Funding and Risk Management; Global Economic Crisis: East Asian Financial Crisis, Sub-Prime lending Crisis, Greece Crisis, Euro Crisis and Brexit. Evolutionary and Operational developments in International Institutions: International Monetary Fund and International Liquidity, World Trade Organization.	15
Total Contact Hours		60

Suggested Evaluation Methods	
Internal Assessment: 30	**End Term Examination: 70**

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Batra, R. N. (1973).Studies in the Pure Theory of International Trade, St. Martin's Press, August.
- Bhagwati, J. N. (1987).International trade: Selected readings, MIT Press, Cambridge.
- Caves, R.E. & Johnson, H.G. (Eds.). (1968).Readings in International Trade. Homewood, Allen & Unwin, London.
- Ethier, W. J. (1995).Modern International economics, W.W. Norton & Co.
- Frankel, J.A. (1993). Monetary & Portfolio Balance Models of Exchange Rate Determination. MIT Press, Cambridge.
- H. G. Mannur(1999). International Economics, Vikas Publishing House.
- Heffernan, S. & Sinclair, P. (1991).Modern International Economics. Wiley-Blackwell
- Heller, H.R. (1974). International Monetary Economics. Prentice- Hall, Englewood Cliffs, N.J.
- Kindleberger, C.P. (1996). A History of Financial Crisis: Manias, Panics and Crashes. John Wiley
- Paul R. Krugman, Maurice Obstfeld & Marc Melitz (2013). International Economics: Theory and Policy, Pearson Publication.
- Salvatore D. (2004). Introduction to International Economics, Published by Wiley India.
- Södersten, Bo (1994). International Economics, Houndmills, Basingstoke, Hampshire: Macmillan.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26

Part A – Introduction

Name of Programme	M.A. Economics
Semester	Fourth
Name of the Course	Behavioural Economics
Course Code	M24-ECO-404
Course Type	DEC-6
Level of the course	500-599
Pre-requisite for the course (if any)	n.a.
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, communicate and solve applications of the behavioural decision theory and the theory of rational choice under certainty and uncertainty. CLO 2: Critically evaluate the preference models and understand the human behaviour under ambiguous situations. CLO 3: Demonstrate an understanding of time factor in behavioural models and explain/solve applications of biased preferences. CLO 4: Consider the role of emotions and cognition in Decision making.

Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction to Behavioural Economics** What is Behavioural Economics, and where does it come from? Theoretical approaches to behavioural Economics, What does it mean to be rational? Preferences, choices, and utility, Menu dependence: choice overload, the decoy effect, and the compromise effect, Reference point phenomena: status quo bias, loss aversion, and the endowment effect.	15
II	**Behavioural Economics of Risk and Uncertainty** Risk vs. uncertainty, The standard models: objective and subjective expected utility theory, Challenges to EUT and SEU: Rabin's calibration argument, the Allais paradox, a Problem of SEU; the Ellsberg paradox, Prospect theory; Regret theory; Neoclassical and Behavioural models of Ambiguity.	15
III	**Social Preference and Fairness** Ultimatum and Dictator games, gift exchange and trust games, Public goods games, The Fehr-Schmidt model, The ERC model, Behavioural Political Economy, Fairness General Equilibrium and welfare, Human Virtues and Social identity, Emotions, Cognition and human behaviour.	15
IV	**Decisions over Time** The standard model: exponentially discounted utility, Challenges to EDU: self-control, procrastination and preproperation, and demand for commitment, Sign and magnitude effects, attribute based models, The reference time theory, Optimal Sin taxes, Neuroeconomics: introduction and techniques.	15
	Total Contact Hours	60

Suggested Evaluation Methods

Internal Assessment: 30	**End Term Examination: 70**

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Angner, Erik (2016). A Course in Behavioral Economics, Palgrave Macmillan.
- Dhami, Sanjit (2016). The Foundations of Behavioral Economic Analysis, Oxford University Press.
- Fehr and Schmidt (2003). Theories of fairness and reciprocity: evidence and economic applications,Advances in Economics and Econometrics.
- Barberis (2013). Thirty years of prospect theory in economics: a review and assessment, Journal of Economic Perspectives.
- Camerer and Loewenstein (2004). Behavioural economics: past, present, future, Chapter 1 of [6].
- Dellavigna (2009). Psychology and Economics: evidence from the field, Journal of Economic Literature.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Macro Mathematical Economics		
Course Code	M24-ECO-405		
Course Type	DEC- 6		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand and formulate the equilibrium in multi-market system and derive the conditions for the existence, stability and uniqueness of such equilibrium and thereby solve various policy issues in context of multi-market system. CLO 2 : Explain and derive mathematically the conditions of optimality, social welfare function and design policies for welfare maximization. CLO 3 : Analyze and present the choices made by consumers, investors and firms under uncertainty and understand the role of time element in project selection and risk–return analysis. CLO 4 : Illustrate and formulate various macroeconomic models with regard to input-output analysis, national income, inflation–unemployment relationship, multiplier–accelerator interactions, and economic growth and thereby design effective policies in macroeconomic framework.		
	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Multi-market Equilibrium** Pure exchange; Two commodity exchange; Production and exchange; The numeraire and money; Existence of equilibrium: Theory and Proof; Static and dynamic conditions for stable equilibrium; Uniqueness of equilibrium. Market Imperfections information asymmetry and Market failures. SELF STUDY CONTENTS (not relevant for exams) Relationship between various economic agents; Basic rules of differential calculus and maxima-minima and matrix algebra.	15
II	**Welfare Economics** Pareto Optimality; The efficiency of perfect and imperfect competition; The external effects in consumption and production; Social welfare functions – The Arrow impossibility theorem; The Theory of Second Best. SELF STUDY CONTENTS (not relevant for exams): Market efficiency and market failure; Indifference curve and isoquant curve and their slopes; Basics of public choice; Basic rules of differential calculus and maxima-minima.	15
III	**Choice Under Uncertainty and Optimization Over Time** Problem of choice in situations of uncertainty and risk; Production under uncertainty; Futures market and hedging; Multi-period consumption; Time value of money and project selection criterion. Risk–return trade off. SELF STUDY CONTENTS (not relevant for exams):	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119

	Rules of differential calculus and maxima-minima. Concept of discounting and compounding;	
IV	**Macroeconomic Models** Input-output model; National Income models (open & closed); Expected Inflation Augmented Phillips relation; Multiplier-Acceleration interaction model; Growth models – Domar, Harrod, John Robinson's Golden Age Model, Duesenberry's Optimum Growth Model, Solow, Meade, Kaldor. SELF STUDY CONTENTS (not relevant for exams): Matrix Algebra; Concept and components of national income; Forms of investment; Phillips curve; Economic growth and its determinants.	15
	Total Contact Hours	60

Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		
• Mid-Term Exam:	15		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Allen, R.G.D. (1972). *Mathematical economics*. Macmillan, London.
- Allen R.G.D. (2002). *Mathematical analysis for economists*. Macmillan Press and ELBS, London.
- Alhabeeb, M.J., & Joe Moffitt, L. (2014). *Managerial economics: A mathematical approach*. John Wiley & Sons.
- Arrow, K. J. & Intrilligator, M. (Eds.). (1987). *Handbook of mathematical economics* (Volumes I, II and III). North Holland, Amsterdam.
- Chiang, A.C. (1999). *Elements of dynamic optimization*. Waveland Press Inc., Long Grove, Illinois.
- Chiang, A.C. (2006). *Fundamental methods of mathematical economics*. McGraw Hill, New York.
- Chung, J.W. (1994). *Utility and production: Theory and applications*. Basil Blackwell, London.
- Dernburg, T. F., & Dernburg, J. D. (1984). *Macroeconomic analysis: An introduction to comparative statics and dynamics*. Addison-Wesley Publishing Company, Philippines.
- Ghatak, A. (1994). *Macroeconomics: A mathematical approach*. Concept Publishing Company, New Delhi.
- Henderson, J. M. & Quandt, R.E. (2003). *Microeconomic theory: A mathematical approach*. McGraw Hill, New Delhi.
- Jha, R. (2008). *Contemporary macroeconomics theory and policy*. Willey Eastern Ltd., New Delhi.
- Jones, Hywel G. (1978). *An introduction to the modern theory of economic growth*. McGraw Hill-Kogakusha, Tokyo.
- Koutsoyiannis, A. (1979). *Modern microeconomics*. Macmillan Press, London.
- Lancaster, K. (2012). *Mathematical economics*. Dover Publications Inc., New York.
- Mehta, B. C. & Madnani, G. M. K. (2018). *Mathematics for economists*. Sultan Chand & Sons.
- Varian, H. (2006). *Microeconomic analysis*. W.W. Norton, New York.
- Vohra, N.D. (2008). Quantitative Techniques in Management. Tata McGraw Hill.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Economic Growth Models		
Course Code	M24-ECO-407		
Course Type	DEC-7		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basic concepts and tools used in growth models. CLO 2: To understand the classical growth models, role of innovations and stages of growth with their historical origins. CLO 3: To comprehend the neo-classical and Cambridge growth models with mathematical treatment. CLO 4: To be aware of the new growth theory with focus on human resource development, knowledge, technical progress.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Fundamentals of Growth Models** Positive and Normative Theories; Theories and Models; Concepts of Growth Rate, and Steady Growth; Purposes of Growth Models; Types of Growth theory; Role of assumptions. Introduction to Economic Growth and Development: Concepts and Indicators; Importance of Economic Growth, World Income Distribution, and History of Modern Growth Theory: Simon Kuznets's six characteristics; Trends in Development thinking.	15
II	**General Approaches to Economic Growth** Classical Theories: Theory of Economic Development by Adam Smith and David Ricardo; Marxian Theory of Capitalistic Development; Rostow Doctrine: stages of Economic Development, Chenery's Pattern of Structural Change; The Schumpeterian theory of Economic Development.	15
III	**Growth Models** Instability of Equilibrium: Harrod-Domar Model of Economic Growth; Convergence hypothesis, Solow's Neo-Classical Growth Model; Duesenberry's Optimum Growth Model, Structural Change Models (Lewis), Cambridge Models: Joan Robinson model and Kaldor model.	15
IV	**New Growth Theory** Production Function Approaches: Learning by Doing; Total Factor Productivity; Growth Accounting, Ramsay's rule and optimal saving; Technical Progress: Hicks and Harrod; Endogenous Growth Models (Romer model, Uzawa-Lucas model and AK model), Role of Health and Education in Economic Development.	15
Total Contact Hours		60

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**30**	➢ **Theory:**	**70**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	10		

305

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

• Mid-Term Exam:	15	

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Jones, H.G. (1975). An introduction to modern theories of economic growth, London: Thomas Nelson Ltd.
- Puri, V.K. & Mishra, S.K. (2020). Economics of development and planning: Theory and practice, New Delhi: Himalaya Publishing House
- Adelman, I. (1961). Theories of economic growth and development, California: Stanford University Press.
- Jones, C.I. & Vollrath, D. (2013). Introduction to Economic growth, USA: W. W. Norton & Company.
- Puri, V.K. & Mishra, S.K. (2020). Economics of development and planning: Theory and practice, New Delhi: Himalaya Publishing House.
- Meier, G.M. & Rauch, J.E. (2010). Leading issues in economic development, New Delhi: Oxford University Press.
- Todaro, M.P. & Smith, S.C. (2020). Economic development, London: Pearson Education.
- Wayne Nafziger, E. (2006). Economic development, New York: Cambridge University Press.
- Barro R.J. & Sala-i-Martin (2004). Economic Growth, New Delhi; Prentice –Hall of India private limited.
- https://www.youtube.com/watch?v=s842kckI6Ak

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2025-26			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Economics of Health and Education		
Course Code	M24-ECO-408		
Course Type	DEC-7		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes(CLO) After completing this course, the learner will be able to:	CLO 1: Understand microeconomic foundations of education and health. CLO 2: Examine issues related to market failure and public intervention's rationale in education and health. CLO 3: Evaluate the equity and efficiency of education and healthcare systems. CLO 4: Examine issues related to market failure. Public intervention's rationale, and equity and inequality in healthcare.		
Credits	Theory	Tutorial	Total
	4	0	4
Teaching Hours per week	3	1	4
Internal Assessment Marks	30	0	30
End Term Exam Marks	70	0	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Introduction to Health Economics** -The state and scope of health econ Human capital and health; Health as a Social Indicator; Health and Ecc Development: Inter-linkage, Determinants of health: Poverty, Malnutritic Environmental quality; Change of health status over time; Components of ecc appraisal of health programmes.	15
II	**Microeconomic Foundations and Market Dynamics in Health Economics-** Microeconomic Foundations of Health Economics: Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality. Supply of health and healthcare services. Relevance of production function, Issues and Challenges of healthcare production; Factors affecting the supply of healthcare services; Public-Private Dichotomy in Providing Healthcare Services.	15
III	**Economics of Education:** Introduction to Economics of Education; The basic economic perspective on education; Rate of return to education: private and social; quality of education; Concepts of the production function in economics - inputs, outputs, input substitution, diminishing marginal returns, approaches to allocation of scarce resources in the production of education.	15
IV	**Human Capital:** Human capital theory and the demand for education, the signaling model of schooling and wages, economists' measure of private returns to schooling and difficulties in measurement. Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.	15

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Total Contact hours		60
Suggested Evaluation Methods		
Internal Assessment: 30		**End Term Examination: 70**
➢ **Theory**	**30**	➢ **Theory:** **70**
• Class Participation:	5	Written Examination
• Seminar/presentation/assignment/quiz/class test etc.:	10	
• Mid-Term Exam:	15	

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Anthony J. Cuyler and Joseph P.(ed), Handbook of Health Economics, Newhouse, 2000, NorthHolland, Elsevier Science.
- Clewar, Ann, and David Perkins, Economics for Health Care Management, 1998, London: Prentice Hall.
- Folland, Sherman, Allen Goodman, and Miron Stano, The Economics of Health and Health Care, 2001, New York: Macmillan, Third Edition.
- Rice, Thomas, The Economics of Health Reconsidered, ,1998, Chicago: Health Administration Press.
- Sherman Folland, Allen C. Goodman, and Miron Stano, The Economics of Health and Health Care, 2004, 4th Edition, Prentice Hall.
- Santerre and Neun,Health Economics: Theories, Insights, and Industry Studies, 2004, Thomson/South Western.
- Feldstein, P. J.,Health Care Economics, 1979, John Wiley & Sons, New York.
- Folland, Goodman & Stano, The Economic of Health and Health Care, 1997, Prentice Hall, New Jersey.
- Musgrove P, Public and Private Roles in Health: Theory and Financing Patterns, Discussion Paper No. 319, 1996, World Bank, Washington DC.
- Becker G.S., Human Capital: A theoretical and empirical analysis with special reference to education, 1964, Columbia University Press, NY.
- Belfield, C. R.,Economic Principles for Education: Theory and Evidence, 2000, Edward Elgar Publishing Inc.
- Brewer, D. J. and Patrick J. McEwan, Economics of Education, 2010, Elsevier.
- Johnes, G. and J. Johnes, International Handbook on the Economics of Education, 2004, Edward Elgar Publishing Ltd, Cheltenham, UK.
- Ladd, Helen F. and Margaret Goertz (eds.), Handbook of Research in Education Finance and Policy, 2nd edition, 2015, New York: Taylor & Francis.
- William, Jack, Principles of Health Economics for Developing Countries, 1999, World Bank Institute Development Studies.
- World Development Report, Investing in Health, 1993, The World Bank.
- Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics: Theory and Public Policy, 2005, Addison Wesley.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Time Series Econometrics		
Course Code	M24-ECO-409		
Course Type	DEC- 7		
Level of the course	500-599		
Pre-requisite for the course (if any)	Basic knowledge of econometrics, statistics, and calculus.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1 : Understand time series data characteristics, components like trend and seasonality, and basic analysis methods CLO 2: Learn the importance of stationarity, conduct Dickey-Fuller and KPSS tests. CLO 3: Master AR, MA, ARMA, and ARIMA models, including seasonal variations. CLO 4: Gain proficiency in VAR models, cointegration, error correction models, and panel data methods. CLO 5: Demonstrate the ability to solve the problems mentioned in CLO 1-4 through software.		
	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	30	0	30
End Term Exam Marks	50	20	70
Max. Marks	100	0	100
Examination Time	3 hours		

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Time Series Basics and Components** Introduction to time series data: characteristics, types, and examples. Time Series Components: Trend, seasonality, cyclical variations, and irregular fluctuations. Time series plots and visualizations. Basic Concepts in Time Series Analysis: Stationarity, autocorrelation, and white noise. Time Series Decomposition Methods: Moving averages, exponential smoothing, and trend estimation techniques. Self Study Contents (not relevant for exams): Descriptive Statistics for Time Series: Measures of central tendency, dispersion, and visualization techniques.	12
II	**Stationarity and Testing** Stationarity and its importance in time series analysis. trend vs difference stationery process , Random Walk Model, Dickey-Fuller and augmented Dickey-Fuller tests, KPSS Test, Phillips-Perron (PP) Test, Elliot, Rothenberg, and Stock (ERS) Test – spurious regression and co-integration of timeseries, Engle-Granger test ,CRDW test, error correction mechanism (ECM)	11
III	**Univariate Time Series Models** Autoregressive (AR) Models: Definition, properties, and estimation methods. Moving Average (MA) Models: Characteristics, invertibility, and estimation techniques. Autoregressive Moving Average (ARMA) Models: Combination of AR and MA models, stationarity conditions, and model identification. Autoregressive Integrated Moving Average (ARIMA) Models: Integration of differencing, AR, and MA components, Box-Jenkins methodology for model identification, estimation, and diagnostics. Seasonal ARIMA (SARIMA) Models: Extension of ARIMA models to	11

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	include seasonal components. Self-Study Contents: (not relevant for exams): Basic statistical inference techniques such as hypothesis testing and confidence intervals, Lag structures in regression models.	
IV	**Advanced Time Series Models** Vector Autoregressive (VAR) models: VAR model specification, estimation, impulse response analysis, and forecasting. Cointegration and Error Correction Models (ECM), Testing for cointegration, Granger causality, Conditional Heteroscedastic Models (ARCH, GARCH) Introduction to Panel data method: problems with panel data, Pooled OLS, Random effects and fixed effects methods	11
V	**Practicals** 1.Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Brockwell, P. J., & Davis, R. A. (2016). Introduction to time series and forecasting (3rd ed.). Springer Science & Business Media.
- Gujarati, D.N. (1995).Basic Econometrics. McGraw Hill, New Delhi.
- Hamilton, J. D. (1994). Time series analysis. Princeton University Press.
- Hyndman, R. J., & Athanasopoulos, G. (2018). Forecasting: principles and practice (2nd ed.).
- Lutkepohl, H. (2005). Handbook of econometrics (Vol. 6, pp. 3560-3828). Elsevier.
- Stock, J. H., & Watson, M. W. (2018). Introduction to econometrics (4th ed.). Pearson Education Limited.
- Wei, W. W. S. (2006). Introductory time series analysis with R. Springer Science & Business Media.
- Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data (2nd ed.). MIT press.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Financial Derivatives		
Course Code	M24-ECO-411		
Course Type	DEC-8		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the meaning and types of financial derivatives along with pricing of forward and futures. CLO 2: Understand how the hedging is done using futures? CLO 3: Understand options mechanism along with their pricing. CLO 4: Understand Greeks and various options trading strategies. - CLO 5: Demonstrate the ability to solve the problems mentioned in contents with the help of a software.		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Forwards and Futures** Meaning , Types, Profit & Pay-offs from Financial derivatives; Mechanics of Futures Market: Transactions on a Futures Exchange; Specifications of a Futures Contracts; Operation of Margins; Convergence of Futures price to Spot Price; Determination of Forward/Futures prices: Investment vs. Consumption assets; Short selling; Determination of Forward prices - Cash-and Carry & Reverse Cash & Carry Arbitrage; Value of Forward Contracts	11
II	**Hedging using Futures** Hedging Strategies using Futures: Uses of Futures contracts; Hedging – Long and Short Hedge, Choice of Futures contract, No. of Futures contracts – Hedge Ratio; Hedge effectiveness; Basis Risk; Cross hedging; Hedging with Index Futures; Changing the portfolio beta using Futures; Rolling the hedge forward.	11
III	**Options** Mechanics of Options: Specifications of Options Contracts; Moneyness of Options; Types of options; Trading & Settlement; Factors affecting Option prices; Put-Call parity & its uses; Valuing Options: Binomial Option Pricing Model, one-step, two step binomial trees for Call & Put options; Black-Scholes-Merton Option Pricing Model (BSMOPM)	12
IV	**Greeks and Strategies** The Greeks: Delta, Gamma, Theta, Vega, and Rho - Meaning, Properties and Uses. 9. Trading Strategies using Options: Strategies involving option & stock – Covered Call & Protective put; Spreads – Bullish, Bearish, Butterfly; Combinations – Straddles, Strangles, Strips & Straps; Other Strategies – Collars, Box Spread, Ratio Spread, Condors; Synthetic Stocks.	11
V	**Practicals:** 1.Students will prepare a Practical file containing 2 Practicals from each unit.	30

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	

Total Contact Hours			75
Suggested Evaluation Methods			
Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Hull, J. (2006). *Options, Futures and Other Derivative Securities*. Prentice Hall.
- Kolb, Robert W. (1996). *Financial Derivatives*. Blackwell Publishing.
- Kolb, Robert W. & Overdahl, James (2006). *Understanding Futures Markets*. Blackwell Publishing.
- McDonald, R. (2002). *Derivatives Markets*. Addison-Wesley Publishing, Boston.
- Reilly, F.K. & Brown, K.C. (2012). *Investment Analysis and portfolio management*. South-Western Cengage Learning.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Economic Modelling - II		
Course Code	M24-ECO-412		
Course Type	DEC-8		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand, apply and solve the volatility, efficiency and asset pricing using selected software. CLO 2: Understand and compute various problems in predictive analysis. CLO 3: Understand and compute the value of financial assets besides designing hedging strategies. CLO 4: Understand and compute the futures price along with dummy variable problem. -------------------------------------- CLO 5: Demonstrate the ability to solve the problems mentioned in contents with the help of a software		
Credits	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 hours	3 hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**1.** Modelling Volatility in Finance and Economics: ARCH, GARCH and EGARCH Models **2.** Fundamental and Technical Analysis **3.** Risk and Return of Portfolio **4.** Capital Asset Pricing Model (CAPM) SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
II	**5.** Logistic Regression using Maximum Likelihood in Predictive Analytics **6.** Logistic Regression using Trend in Predictive Analytics **7.** Exponential Smoothening in Predictive Analytics **8.** Working with Moving Averages in Predictive Analytics SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11
III	**9.** Multiple Linear Regression in Predictive Analytics **10.** The Black Scholes Merton Model **11.** Binomial Trees **12.** Trading Strategies involving Options SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	11

Chairman,
Department of Economics
Kurukshetra
KURUKSHETRA-1

IV	**13.** Determination of Forward and Future Prices **14.** Hedging using Futures **15.** Relevant Costs For Discounted Cash Flow Analysis: Incremental Cash Flows **16.** Dummy variables analysis SELF STUDY CONTENTS (not relevant for exams): Excel functions, SPSS, E-VIEWS, STATA	12
V	**Practicals** 1.Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Gary Koop: Analysis of economic data, John Wiley & Sons, 2005
- Thomas Cleff: Applied Statistics and Multivariate Data Analysis for Business and Economics: A Modern Approach Using SPSS, Stata, and Excel, Springer
- Kurt Jechlitschka, Dieter Kirschke and Gerald Schwarz: Microeconomics using Excel: Integrating economic theory, policy analysis and spreadsheet modeling, Routlage
- Shmuel Oluwa: Hands-On Financial Modeling with Excel for Microsoft 365, Packt Publishing
- Abdulkader Aljandali and Motasam Tatahi: Economic and Financial Modelling with EViews-A Guide for Students and Professionals
- Joaquim P. Marques de Sá: Applied statistics using SPSS, STATISTICA, MATLAB and R, Springer
- Robert P. Burns, Richard Burns : Business Research Methods and Statistics Using SPSS, Sage

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Advanced Econometrics		
Course Code	M24-ECO-413		
Course Type	DEC- 8		
Level of the course	500-599		
Pre-requisite for the course (if any)	Basic knowledge of econometrics, statistics, and calculus.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1 : Address biases and consistency issues in OLS estimators, apply identification rules, and utilize estimation methods such as ILS, IV, 2SLS, and 3SLS. CLO 2 : Detect outliers, implement robust regression methods (M-estimators, Huber's method, LAD), and apply advanced techniques like LASSO and Quantile Regression in economic analysis. CLO 3 : Evaluate model fit using R-squared, choose models with AIC, BIC, and cross-validation, and handle overfitting/underfitting issues in regression analysis. CLO 4 : Construct and interpret dummy variables, estimate fixed effects models, and utilize models like LPM, Logit, and Probit for categorical outcomes in economics. - CLO 5: : Demonstrate the ability to solve the problems mentioned in contents with the help of a software		
	Theory	Practical	Total
	3	1	4
Teaching Hours per week	3	2	5
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Max. Marks	70	30	100
Examination Time	3 Hours	3 Hours	

Part B-Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions; selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Simultaneous Equation Methods** The Simultaneous Equation bias and Consistency of OLS Estimators; The Identification Problem; Rules of Identification- Order and Rank Conditions. Methods of Estimating Simultaneous Equation System: Indirect Least Squares (ILS), Instrumental Variables (IV), 2SLS and 3SLS Methods	15
II	**Robust Regression Models** Review of Least Squares Regression (OLS) assumptions and limitations, Detecting outliers and influential points (Cook's distance, leverage), Introduction to Robust Regression, Types of robust regression methods: M-estimators, Huber's method, Least Absolute Deviations (LAD), LASSO regression for variable selection and shrinkage, Quantile Regression for analyzing conditional median or other quantiles, Applications of robust regression in economics and business.	15
III	**Model Selection and Diagnostics** Review of goodness-of-fit measures (R-squared, adjusted R-squared), Techniques for Model selection : AIC (Akaike Information Criterion), BIC (Bayesian Information Criterion), Cross-validation, Stepwise regression, non-linearity transformations, polynomials, and splines. Overfitting and underfitting: consequences and diagnostics, importance of model selection and diagnostics in regression analysis	15
IV	**Dummy Variables and Fixed Effects Models:** Definition and construction of dummy	

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	variables Use of dummy variables to represent categorical variables, reference category and its interpretation, Applications of dummy variables in Economics, Dummy Variable Trap, Uses of Dummy variable for testing structural change, seasonal analysis and interaction effect. LPM, Logit and Probit Models. Fixed effects model estimation by LSDV method.	15
V	**Practicals** 1.Students will prepare a Practical file containing 4 Practicals from each unit. 2. Practicals may be done using the software chosen by the teacher. 3. The external examiner shall take the written exam followed by viva voce. 4. Syllabus contains all the contents mentioned in the four units.	30
Total Contact Hours		75

Suggested Evaluation Methods

Internal Assessment: 30		**End Term Examination: 70**	
➢ **Theory**	**20**	➢ **Theory:**	**50**
• Class Participation:	5	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	5		
• Mid-Term Exam:	10		
➢ **Practical**	**10**	➢ **Practical**	**20**
• Class Participation:	5	Lab record, Viva-Voce, write-up and execution of the Practical	
• Seminar/Demonstration/Viva-voce/Lab records etc.:	5		
• Mid-Term Exam:	-		

Part C-Learning Resources

Recommended Books/E-Resources/LMS:

- Amemiya, T. (1985).Advanced Econometrics. Harvard University Press, Cambridge, Mass.
- Andersen, R. W. (2008). Modern Methods for Robust Regression. Sage Publications
- Burnham, K. P., & Anderson, D. R. (2002). Model Selection and Multimodel Inference: A Practical Information-Theoretic Approach (2nd ed.). Springer-Verlag. (Chapter 10)
- Cantoni, E., & Ronchetti, E. (2001). Robust Inference for Parametric Statistics. Chapman and Hall/CRC
- Fox, J. (2015). Regression Diagnostics (2nd ed.). Sage Publications.(Chapter 12,13 &19)
- Gujarati, D.N. (1995).Basic Econometrics. McGraw Hill, New Delhi.
- Harrell, F. E. Jr. (2015). Regression Modeling Strategies with Applications in Linear Models, Logistic Regression, and Survival Analysis (2nd ed.). Springer International Publishing (Chapter 2, 3 & 11)
- Hastie, T., Tibshirani, R., & Friedman, J. (2009). The Elements of Statistical Learning (2nd ed.). Springer New York Inc (Chapter 7)
- Intrilligator, M.D. (1978).Econometric Methods, Techniques and Applications. Prentice Hall Englewood Cliffs, New Jersey.
- Kmenta J. (1998). Elements of Econometrics. University of Michigan Press, New York.
- Koenker, R., & Bassett Jr., G. (1978). Regression Quantiles. Econometrica, 46(1), 33-50.
- Koutsoyiannis, A. (1977).Theory of Econometrics. The Macmillan Press Ltd. London.
- Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2004). Applied Linear Regression Models (5th ed.). McGraw-Hill. (Chapter 3)
- McCloskey, D. N., & Trevista, N. S. (2016). All Economists Should Learn About Robust Regression. The American Economic Review, 106(5), 1429-1460.
- Menard, S. (2020). Learning Statistics with R (2nd ed.). Sage Publications
- Montgomery, D. C., & Myers, R. H. (2021). An Introduction to Linear Regression Analysis (7th ed.). John Wiley & Sons.
- Rousseeuw, P. J., & Leroy, A. M. (2005). Robust Regression and Outlier Detection. John Wiley & Sons. (Chapters 1 & 2)
- Tibshirani, R. (1996). Regression Shrinkage and Selection via the Lasso. Journal of the Royal Statistical Society: Series B (Statistical Methodology), 58(1), 267-288.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

Session: 2024-25			
Part A – Introduction			
Name of Programme	M.A. Economics		
Semester	Fourth		
Name of the Course	Introduction to GST		
Course Code	M24-ECO-415		
Course Type	EEC		
Level of the course	500-599		
Pre-requisite for the course (if any)	n.a.		
Course Learning Outcomes (CLO) After completing this course, the learner will be able to:	CLO 1: Understand the basics of GST (goods and services tax) along with its forms, significance, and machinery. CLO 2: Elucidate and analyze the fundamental concepts involved in the levy and collection of GST and compute GST. CLO 3: Appreciate the mechanism of Input Tax Credit (ITC) as a tool for preventing cascading of taxes. CLO 4: Explain the procedures and special provisions under GST and become well-informed taxpayer in the society.		
Credits	Theory	Tutorial	Total
	2	0	2
Teaching Hours per week	2	0	2
Internal Assessment Marks	15	0	15
End Term Exam Marks	35	0	35
Max. Marks	50	0	50
Examination Time	3 hours		

Part B - Contents of the Course

Instructions for Paper- Setter: The examiner will set 9 questions asking two questions from each unit and one compulsory question by taking course learning outcomes (CLOs) into consideration. The compulsory question (Question No. 1) will consist at least 4 parts covering entire syllabus. The examinee will be required to attempt 5 questions, selecting one question from each unit and the compulsory question. All questions will carry equal marks.

Unit	Topics	Contact Hours
I	**Preliminary Topics in GST** Concept, Rationale, and Historical background of GST; Forms of GST in India: SGST, CGST, UTGST, and IGST; Machinery under GST: GST Council, GST Network, State Compensation Mechanism, Registration, and GST Suvidha Providers (GSP). SELF STUDY CONTENTS (not relevant for exams) Basic knowledge of direct and indirect taxes.	7.5
II	**Levy and Collection of GST** Rates of GST; Taxable event - Supply of Goods and Services; Place and Time of Supply; Valuation rules for GST; Exemption from GST: Small Supplies and Composition Scheme; Classification of Goods and Services: Composite and Mixed Supplies. SELF STUDY CONTENTS (not relevant for exams): Division of powers among various levels of government regarding tax imposition; Tax revenue collection and revenue sharing among various levels of government in India.	7.5
III	**Theory of Input Tax Credit (ITC)** Eligible and Ineligible ITC; Apportionments of Credit and Blocked Credits; Tax Credit in respect of Capital Goods; Recovery of Excess Tax Credit; Transfer of Input Credit; Doctrine of Unjust Enrichment; TDS and TCS; Reverse Charge Mechanism; Job work. SELF STUDY CONTENTS (not relevant for exams): Nil	7.5
IV	**Procedures, and Special Provisions Under GST** Procedures: Tax Invoice, Credit and Debit Notes, Returns, Audit in GST; Assessment:	7.5

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.

	Self-Assessment, Summary and Scrutiny. Special Provisions: Taxability of E-Commerce, Anti-Profiteering, Avoidance of dual control, E-way bills, Zero-rated supply, Offences and Penalties. SELF STUDY CONTENTS (not relevant for exams) Nil	
Total Contact Hours		30

Suggested Evaluation Methods			
Internal Assessment: 15		**End Term Examination: 35**	
➢ **Theory**	**15**	➢ **Theory:**	**35**
• Class Participation:	4	Written Examination	
• Seminar/presentation/assignment/quiz/class test etc.:	4		
• Mid-Term Exam:	7		

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Garg, R., & Garg, S. (2021). *Handbook of GST: Procedure, commentary and rates*. Bloomsbury Publishing, New Delhi.
- Gupta, S.S. (2017). *GST: How to meet your obligations*. Taxmann Publications.
- Mehrotra, H.C, & Agarwal, V.P. (2020). *Goods and Services tax*. Sahitya Bhawan Publications, Agra.
- Mishra, S.K. (2018). *Simplified approach to GST*. Educreation Publishing, New Delhi.
- Singhania, A. (2023). *GST practice manual*. Taxmann Publications.

Chairman,
Department of Economics
Kurukshetra University,
KURUKSHETRA-136119.