National Education Policy-2020

Common Minimum Syllabus

U.P. Higher Education Department

For: Undergraduate Program

Bachelor of Arts (B.A)

SUBJECT: ECONOMICS

Glocal School of Arts & Social Science

Glocal University, Saharanpur, U.P

Session- 2024-25

w.e.f. 2023-24

B.A. in Economics

The Course is designed for the students pursuing graduation with Economics in regular mode. The programme aims to inculcate economic thinking among the students in economic decision making by comprehending economic theory. It aims to develop analytical view point in the students about the economic behaviour of people. The objective is to nurture among student a view point of a socially responsible and ethical aware citizen. The under graduate programme will have 10 courses in 6 Semesters in 3 years. In the Fifth and the Sixth Semester 01 paper is given as optional. In the Fifth Semester it is proposed to have Dissertation/Project keeping in the spirit of the New Education Policy 2020 to introduce research at the graduation level. The structure of syllabus is based on the template of UGC proposed for the CBCS for undergraduates in Economic (Regular).

Programme Specific Outcomes(PSOs)- Student after completing graduation will be able to learn-

PSO 1: The behavioural patterns of different economic agents, advance theoretical issues and their applications.
PSO 2: Understand the basic concept of microeconomics.
PSO 3: Understanding basic concepts of Macroeconomics.
PSO 4: Acquaint with some basic statistical methods to be applied in economics.
PSO 5: Acquaint with some basic mathematical methods to be applied in economics.
PSO 6: Acquaint with some basic theoretical concept of public finance.
PSO 7: Acquaint with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities with Indian perspectives.
PSO 8: Delineate the fiscal policies designed for developed and developing economics.
PSO 9: Facilitate the historical developments in the economic thoughts propounded by different schools. To familiarise students with the contribution of Indian Economic Thinkers andthe relevance of their contribution.
PSO 10: Learn the basic concept of monetary analysis and financial marketing in Indian financial markets.
PSO 11: Learn the development issues of Indian economy.
PSO 12: Acquaint with some basic concept of environmental economics along with the solution of the environmental problems.
PSO 13: Learn the real and monetary sides of International economics.
PSO 14: Familiarise and acquaint with the characteristics of the economy of Uttar Pradesh.
PSO 15: To familiarize the students about issues of ethics in economic thinking and practice.

List of all Papers in all Six semesters.

Semester-wise Titles of the Papers in BA(Economics)

Year	Sem.	Course Code	Paper Title	Theory/Practical	Credits
1	I	A080101T	Principle of Micro Economics	Theory	6
1	II	A080201T	Principles of Macro Economics	Theory	6
2	III	A080301T	History of Economic Thought	Theory	6
2	IV	A080401T	Money, Banking and Public Finance	Theory	6
3	V	A080501T	Economic Growth and Development	Theory	5
3	V	A080502T/ A080503T	**Optional Paper(Any 1)** Environmental Economics Or International Economics	Theory	5
3	V	A080504R	Elementary Statistics based Project	Practical	3
3	VI	A080601T	Indian Economy & Economy of Uttar Pradesh	Theory	5
3	VI	A080602T/ A080603T	**Optional Paper(Any 1)** Agriculture Economics Or Elementary Mathematics	Theory	5
3	VI	A080604R	Dissertation/Project On the Local Issues with Economic Focus plus Presentation on Ppt of the Dissertation	Project	3

BA 1st Year, Sem. I , Course I (Theory)

Programme/Class: Degree/ BA	Year: First	Semester: First
Subject: Economics		
Course Code: A080101T	Course Title: Principle of Micro Economics	

Course Outcome:

- The students are familiarized with basic concepts of microeconomics such as laws of demand and supply and elasticity etc so that he/she can comprehend them & familiarize with day today happenings.
- The students learn and understand the concepts of consumer behaviour like cardinal utility and ordinal utility analysis.
- The students learn and understand application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect.
- The students learn and understand the Theory of production- iso-quants, laws of returns to scale, law of variable proportion.
- The students learn, understand and compare between the Traditional and modern theory of cost.
- Demonstrate an understanding, usage and application of basic economic principles.
- Describe and apply the methods for analyzing consumer behavior through demand and supply, elasticity and marginal utility.
- To analyze the behavioral patterns of different economic agents regarding profit, price, cost etc.
- The decision-making process in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly markets.
- To deal with the advance theoretical issues and their practical applications of distribution theories.
- General equilibrium, economic efficiency and market failure.

Credits: 6	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w	

Unit	Topics	No. of Lectures
	Part I	
I	Introduction:. Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.	12
II	Consumer Theory: Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint. Theory of Revealed Preference	12
III	Production and Costs: a. Production: behaviour of profit maximizing firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equlibrium condition. b. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.	11
IV	Market Structures a. Perfect Competition: a. Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries. Welfare: allocative efficiency under perfect competition. b. Imperfect Competition Monopolistic competition: Assumptions, SR& LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.	11
	Part II	
V	Theory of a Monopoly Firm Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.	11
VI	Consumer and Producer Theory a. Consumer and Producer Theory in Action Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency. b. Markets and Market Failure Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.	11
VII	Income Distribution and Factor pricing Input markets: demand for inputs; labour markets, land markets, profit maximisation condition in input markets, input demand curves, distribution of Income.	11

VIII	Welfare Economics: Concept & Definition of Welfare Economics. Normative &Positive Economics. Concepts of Social Welfare. Role of Value Judgment in Welfare Economics, Individual & Social Welfare. Pareto Optimality, Conditions of Pareto Optimality. New Welfare Economics: Kaldor-Hicks Welfare Criterion. Scitovsky Paradox & Scitovsky's Double Criterion. Grand Utility Possibility Frontier. Social Welfare Function. Theories of Social Choice.	11

Suggested Readings:

1. Ahuja ,H.L(2013) : Advanced Economic Theory", S.Chand & Company. Shastri,Rahul.A (1999) : Microeconomics", Orient Blackswan.
2. Ahuja,H.L (2012) :Ucchatar Arthik Siddhant", S.Chand & Company, New Delhi.
3. Dwivedi,D.N (2011) :Microeconomics-Theory & Applications", Pearson.
4. Lal, S.N (2013):Arthshastra Ke Siddhant", Shiva Publishing House, Allahabad. Seth,M.L (2012) : Arthshastra Ke Siddhant",Laxmi Narayan Publications,Agra
5. Lipsey,Richard&Chrystal,Alec (2011) : Economics", Oxford University Press Publications, New Delhi.
6. Pindyck,Robert.S., Rubinfield.Daniel.L., Mehta.Prem.L(2009): Microeconomics", Pear son.
7. Salvatore, Dominic(2010) : Principles of Microeconomics", Oxford University Press Publications, New Delhi.
8. Samuelson,Paul.A& Nordhaus, William.D(2010): Economics", Tata McGraw Hill. Koutsoyiannis, A (2008) (2nded): Modern Microeconomics", Macmillan.
9. Stonier,A.W&Hague.Douglas.C (2003)(5thed) : A Text Book of Economic Theory", Pearson.

Suggested Continuous Evaluation Methods:

Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.

Suggested equivalent online :
Swayam
Coursera

BA 1st Year, Sem. II,
Course I
(Theory)

Program/Class: Degree/BA	Year: First	Semester: Second
Subject: Economics		
Course Code: A080201T	Course Title: Macro Economics	

Course Learning Outcomes

- Students are able to explain national income, comprehend calculation methods of national income, and concepts related to national income.
- Students are able to comprehend classical theory of employment and the Keynesian approach.
- Students are able to comprehend the concept of multiplier and it's working.
- Students are able to understand the relationship between inflation and employment.
- Students are able to relate factors determining national income such as consumption, saving and investment.
- Students are able to analyze different phases of trade cycle, demonstrate various trade cycle theories, understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle.

Credits: 6	Core Compulsory
Max. Marks: -25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
I	Introduction: What is macroeconomics? Macroeconomic issues in an economy. Macro vs. Micro Economics, Limitations of Macroeconomics; Introduction to National Income. Concepts of GDP,	12

II	National Income Accounting: Concepts of GDP GNP, NDP and NNP at market price and factor cost; Personal Income and Disposable Personal Income. Measurement of National Income- Income, expenditure, product or Value added Methods and related aggregates; nominal and real income; limitations of the GDP concept.	12
III	Circular Flow of Income and expenditure in two, three, and four-sector economy. National Income and Economic Welfare; Green Accounting.	11
IV	Classical Theory of Employment. Say's Law of Markets. Keynes' Objection to the Classical Theory; Aggregate Demand and Aggregate Supply Functions; The Principle of Effective Demand; Consumption Function - Average and Marginal Propensity to Consume; Factors influencing Consumption Spending	11
Part II		
V	The Investment Multiplier and its Effectiveness in LDCs; Theory of Investment - Autonomous and Induced Investment; Marginal Efficiency of Capital; Savings and Investment - Ex Post and Ex Ante, Equality and Equilibrium. Principle of Accelerator.	11
VI	Rate of Interest: Classical, Neo-Classical and Keynesian Theories of Interest. Indeterminateness in Liquidity Preference Theory	11
VII	IS-LM Analysis: Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.	11
VIII	Inflation and Unemployment Concept of inflation; determinants of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.	11

Suggested Readings:

1. Ackley.G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York.
2. Ahuja,H.L (2012) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi.
3. Ahuja,H.L (2012) : Samasti Arthshastra , S. Chand &Company, New Delhi. Lal,S.N (2012) : SamastibhaviVisleshan , Shiva Publishing House,Allahabad.
4. Branson,W.A (1989) : Macroeconomics Theory And Policy, Harper & Row.
5. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York.
6. Dornbusch, Rudiger&startz, Richard (2012): Macroeconomics , Tata McGraw Hill Education.
7. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
8. Gupta,R.D.&Rana,A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi &Ludhiana.
9. Hansen,A.H (1953) : A Guide To Keynes, McGraw Hill.
10. Jhingan, M.L (2010): Macroeconomics ,Vrinda Publications, New Delhi.
11. Jhingan, M.L (2012) :SamastiArthshastra , Vrinda Publications, New Delhi.
12. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi.
13. Sikdar,Saumyen (2011) : Principles of Macroeconomics , Oxford University Press, New Delhi.
14. Surrey,M.J.C (1976) : Macroeconomic Themes, Oxford University Press. Romer,

Suggested Continuous Evaluation Methods:

Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.

Suggested equivalent online :

Swayam

Coursera

BA 2nd Year, Sem. III

Course I

(Theory)

Programme/Class: Degree/BA	Year: Second	Semester: Third
Subject: Economics		
Course Code: A080301T	Course Title: History of Economic Thought	

Course outcomes:

- To learn and discuss, at an advanced undergraduate level, how the economic thought has evolved over time.
- Introducing students to the critical comparison of the contributions of the main schools of economics.
- To introduce & highlight before the students about Indian Economic Thinkers and their valuable contribution in the field of Economics.
- The classical, the marginalize revolution and its application to the theories of general and partial equilibrium, the current macroeconomic debate between the neo-classical and the Keynesian school.

Credits: 6	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Part I	
I	Kautilya, Dada Bhai Naoroji, RC Dutt, BR Ambedkar, R M Lohia, Gandhian Economics.	12
II	Pt. DeenDayal Upadhyay, JK Mehta, A K Sen, J. Bhagwati,	12
III	Early Period: Economic thought of Plato and Aristotle - Doctrines of Just Cost and Just price.	11
IV	Mercantilism: Main Characteristics; Thomas Munn - Physiocracy: Natural Order, Primacy of Agriculture, Social Classes, Tableau Economique, Taxation, Turgot - Economic ideas of Petty, Locke and Hume.	11
	Part II	
V	Classical Period: Adam Smith - Division of Labour, Theory of Value, Capital Accumulation, Distribution, Views on Trade, David Ricardo, Distribution, Ideas on International Trade; Thomas R. Malthus, Theory of Gluts.	11
VI	German Romantics and Socialists — Sismondi, Karl Marx — Dynamics of Social Change, Labour Theory of Value, Surplus Value, Profit, And Theory of Capitalist Crisis; Economic Ideas of J.B. Say, J.S. Mill.	11
VII	Marshall as a Great Synthesizer: Role of Time in Price Determination, Economic Methods, Ideas on Consumer's Surplus, Elasticity, Representative Firm, Quasi-Rent, Pigou: Welfare Economics; Schumpeter.	11
VIII	Marginalists: The Precursors of Marginalism ,Cournot , Gossen — The Marginalist Revolution: Jevons, Walras and Menger - Bohm-Bawark, Wicksell and Fisher; Economic Ideas of Wicksteed and Weiser.	11

Suggested Readings:

1. Bhatia,H.L : History of Economic Thought ,Vikash Publishing House.
2. Blackhouse,R (1985) : A History of Modern Economic Analysis, Basil Blackwell, Oxford.
3. Ganguli, B.N(1977) : Indian Economic Thought : A 19th Century Perspective, Tata Mcgraw Hill.
4. Hajela,T.N (2011) : AarthikVicharon Ka Itihas , Ane Books.
5. Hajela,T.N (2011) : History Of Economic Thought , Ane Books.
6. Hunt,E.K&Lautzenheiser,Mark (2011) : History of Economic Thought: A Critical Perspective , Phi Learning.
7. Jhingan, M.L (2008): AarthikVicharon Ka Itihas ,Vrinda Publications, New Delhi.
8. Kautilya (1992), The Arthashastra, Translated And Introduced By L.N.Rangarajan, Penguin Books.
9. Loknathan,V (2009) : History of Economic Thought , S.Chand& Company.
10. Roll,Eric : History of Economic Thaught, Faber.
11. Schumpeter, J.A(1954): Historyof Economic Analysis, Oxford University Press, New York.

12. Sinha,V.C (2011) : AarthikVicharon Ka Itihas , Mayur Pu
13. Staley,Charles.E, "A History of Economic Thought: From Aristole To Arrow", Blackwell Publishing.

Suggested Continuous Evaluation Methods:
Assignment / Test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students.

Suggested equivalent online :
Swayam

BA 2nd Year, Sem. IV
Course I
(Theory)

Program/Class: Degree /BA	Year: Second	Semester: Fourth
Subject: Economics		
Course Code:A080401T	**Course Title: Money, Banking and Public Finance**	

Course outcomes:

- Understand simple concepts related with monetary economics and banking theory.
- Correlate and apply to current events & key models and concepts of monetary economics and banking theory.
- Appreciate the potential importance of monetary phenomenon in the economy.
- Understand the sources of finance both public and private
- Demonstrate the role of government to correct market failures and possible advantage of public financing.
- Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system.

Credits: 6	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Part I	
I	Money and Value of Money: Money - Meaning, Functions and Classification; Gresham's Law; Role of Money in Capitalist, Socialist and Mixed Economies; Monetary Standards -Metallic and Paper Systems of Note Issue. Quantity Theory of Money - Cash Transaction and Cash Balance Approaches; The Keynesian Approach.	12
II	Supply of Money: Definitions—Determinants of Money Supply—High Powered Money and Money Multiplier—Indian Currency system.	12
III	Commercial Banking: Meaning and types; Functions of Commercial Banks; The process of Credit Creation - Purpose and Limitations; Liabilities and Assets of banks; Evolution of Commercial Banking in India after Independence; A Critical Appraisal of the Progress Of Commercial Banking after Nationalization; Recent Reforms in Banking Sector in India.	11
IV	Functions of a Central Bank; Quantitative and Qualitative Methods of Credit Control - Bank Rate Policy, Open Market Operations, Variable Reserve Ratio and Selective Methods; Role and Functions of the Reserve Bank of India; Objectives and Limitations of Monetary Policy with Special Reference to India.	11

Part II		
V	Nature and Scope of Public Finance: Meaning and scope of Public Finance; Distinction between Private and Public Finance; Public Goods Vs. Private Goods; The Principle of Maximum Social Advantage; Market Failure; Role of the Government.	11
VI	Public Expenditure: Meaning, Classification and Principle of Public Expenditure; Canons and Effects of Public Expenditure; Trends in Public Expenditure and Causes of Growth of Public Expenditure in India.	11
VII	Taxation: Sources of Public Revenue; Taxation — Meaning, Canons and Classification of Taxes; Division of Tax Burden — The Benefit and Ability-To-Pay Approaches; Impact and Incidence of Taxes; Taxable Capacity; Effects of Taxation; Characteristics of A Good Tax System.	11
VIII	Fiscal policy: Components, Instruments, Objectives. Role of Fiscal Policy in Developed and Developing Countries, Budget Structure of the Government of India, State Budget- Sources of Revenues and Expenditures. Major Tax Reforms in India. Fiscal Federalism in India: Union-State Fiscal Relations, Federal Fiscal Imbalances and the Role of Finance Commission. Finances of Local Bodies.	11

Suggested Readings:

- Bagchi,Amaresh (2005) : Readings in Public Finance, Oxford University Press.
- Cullis,John& Jones Philip (2009) : Public Finance and Public Choice, Oxford University Press.
- Eyler,Robert (2009) : Money and Banking-An International Text ,Routledge.
- Gupta, Janak Raj (2011): Public Economics in India Theory and Practice, Atlantic.
- Gupta,S.B (2009) : Monetary Economics-Institutions, Theory & Policy , S.Chand & Company, New Delhi.
- Head, J.C (1974): Public Goods and Public Welfare, Durham, NC, Duke University Press.
- Inge Kaul, Pedro Conceicao (2006): The New Public Finance, Oxford University Press.
- Jhingan ,M.L (2012) : Monetary Economics , Vrinda Publications,NewDelhi.
- Jhingan, M.L (2012) : Maudrik Arthshastra , Vrinda Publications, New Delhi.
- Johansen, Life (1965) :Public Economics, Chicago: Rand Mcnally.
- Khanna, Perminder (2005): Advanced Study in Money and Banking: Theory and Policy Relevance in The Indian Economy , Atlantic.
- Lal, S.N (2012): Mudra,Banking, Avam Videshi Vinimay , Shiva Publishing House,Allahabad.
- Margolis,J&Guitton,H : Public Economics (1974), Mcmiillan.
- Musgrave,R.A (1959) , The Theory Of Public Finance, McGraw Hill.
- Musgrave,R.A& P.B. Musgrave (1989) : Public Theory: Theory & Practice, Mcgraw Hill.
- Nadar,E.Narayanan (2013) : Money and Banking , PHI Learning Press.
- Paul, R.R (2011): Money, Banking & Exchange , Kalyani Publishers, Delhi.
- Seth. M.L (2012) : Maudrik Arthshastra , Laxmi Narayan Publications,Agra.
- Shome Parthasarathi (2002): India's Fiscal Matters, Oxford University Press, New Delhi.
- Uppal, R.K (2011): Money, Banking and Finance in India- Evolution & Present Structure New Century Publications.

Suggested Continuous Evaluation Methods:

Assignment / test / Quiz(MCQ) / Seminar/Presentations/ Research orientation of students

Suggested equivalent online :

Swayam

Coursera

BA 3rd Year, Sem. V
Course I
(Theory)

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080501T	Course Title: Economic Growth and Development	

Course outcomes:

- Students should be able to comprehend the concept and meaning of economic growth and economic development.
- Students should be able to distinguish between economic growth and economic development.
- Students should be able to comprehend the issues and challenges in economic growth and development.
- Students should be able to comprehend and explain the concept of poverty and human development & the related concepts.
- Students should be familiar with the approaches to development.
- Students should be able to understand and explain the factors and variable of economic development.
- Students are able to understand how international factors facilitate and impede economic development.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): P- 2/w

Unit	Topics	No. of Lectures
	Part I	
I	Meaning and Measurement of Economic Growth and Development-Measuring Development and Development Gap, GDP, GNP, Per Capita Income, Factors affecting Economic growth and Development.	10
II	Concept of Poverty and Inequality, Vicious cycle of poverty, Lorenz Curve, Gini Coefficient Concept of Human Development, Human Development Index, Physical Quality of Life Index, Quality of Life Indices. Hunger Index, Happiness Index, Development and Sustainability. Concept of Sustainable Development. Millennium Development goals.	10
III	Lewis model of labour surplus economy, Rosentein Rodan's theory of Big Push, Nelson's Level equilibrium trap, balanced vs Un-balanced growth, Rostow's stages of growth, Harrod and Domar Growth models.	10
IV	Theory of Demographic Transition, Population as Limits to Growth. The Concept of Inclusive Growth- with Reference to India. Market Failure and Government Failure, Food Security, Education, Health and Nutrition, Gender and Development.	10
	Part II	
V	Development & Underdevelopment: an Overview; The Characteristics and Explanations Of Underdevelopment- Vicious Circle of Poverty, Circular Causation, Dualism-Social, Technological, Financial, Organizational, Model of Dual Economy, Lewis, Ranis-Fei, Jorgenson, Dependency Theories of Underdevelopment.	10
VI	Models of Technical Progress, Embodied and Disembodied Technical Progress, Neutral Technical Progress- Hicks, Harrod, Solow, Kaldor, Mirrlees Technical Progress Function, Arrow's Learning by Doing Approach to Economic Growth.	10
VII	Accumulation Endogenous growth, Intellectual capital, Role of Learning, Education and Research, Explanations of Cross country Differentials in Economic Growth, Information Paradigm-Stiglitz	8
VIII	International Trade, Aid and Finance in the Development of Developing Countries-with special reference to India. FDI & FII, Role of Technology Transfer and Multinational Corporations in promoting development in development of developing countries-with Special Reference to India.	7

Suggested Readings:

- Barro, Robert J and Xavier Sala-i- Martin, Economic Growth, The MIT Press,

Cambridge, Latest Edition.
- Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.
- Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007
- Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.
- Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)
- Hayami, Yujiro&Godo,Yoshihisa (2005) : Development Economics: From the Poverty to the Wealth of Nations, Oxford University Press.
- Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005
- Jhingan ,M.L (2013): Economics of Development and Planning, Vrinda Publications, NewDelhi.
- Jhingan ,M.L (2013): Vikas Ka ArthshastraAwamNiyojan, Vrinda Publications, NewDelhi.
- Lal ,S.N (2012):Vikas, Niyojan Awam Paryavaran, Shiva Publishing House,Allahabad.
- Lekhi, R.K (2013): Economics of Development and Planning, Kalyani Publishers, New Delhi.
- Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.
- Mishra,S.K&Puri,V.K (2012): Economics of Development and Planning, Himalaya Publishers, Mumbai.
- Ray Debraj, Development Economics, Oxford University Press, Latest Edition.
- Singh, Kartar&Shishodia (2007): Environmental Economics: Theory andApplications, SageIndia.
- Singh,S.R(2012):EnvironmentalEconomics,APHPublishingCorporation,Delhi.
- Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
- Taneja,M.L&Myer,R.M (2011): Arthshastra Ki YojnayeAwamVistaar, Visha PublishingCompany,Jalandhar (New Delhi).
- Thirlwall, A.P., Growth and Development with Special Reference to Developing Economies, Macmillan, UK, 1999.
- Todaro,Michael.P&Smith,Stephen.C (2011) : Economic Development, Pearson.

BA 3rd Year, Sem. V
Course II (Optional)
(Theory)

Programme/Class: Degree/BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080502T	Course Title: Environmental Economics	

Course outcomes:

- Students should be familiar with the basic concepts of ecology environment and economy.
- Students to understand the solution to environmental problems- the command and control approach, market based methods, tax tradable pollution permit, etc, carbon trading
- Students should be familiar with the concept of Sustainable development, environmental impact assessment CO 5: Global and local environmental concerns.
- Students should be comprehend the Local Issues of Economic Bearing related to environment & development.
- Students should realize the importance and influence of environment on the economy including the quality of manpower.
- Students should realize the importance to make cleaner environment so as to achieve harmonious development.
- Students should comprehend that environmental problem is not the problem of a single country or region but

a global problem/issue.

- Demonstrate an awareness of economic growth problems, issues in globalisation,and provide grounding in major growth strategies and development.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Part I	
I	Introduction: Key environmental issues and problems, economic way of thinking about these problems, basic concepts from economics; Pareto optimality and market failure in the presence of externalities; property rights and other approaches.	10
II	The Design and Implementation of Environmental Policy: Overview, Pigouvian taxes and effluent fees, tradable permits, implementation of environmental policies in India and international experience; trans-boundary environmental problems; economics of climate change	10
III	Environmental Valuation Methods and Applications: Valuation of non-market goods and services--theory and practice; measurement methods; cost-benefit analysis of environmental policies and regulations.	10
IV	Sustainable Development: Concepts; measurement; perspectives from Indian experience.	7
	Part II	
V	The Theory of Externality- Positive & Negative Externality; Public Goods; Private Goods; Public Bads; Market Failure and Pigouvian Solution- Pigouvian Tax.; Coase's Theorem And Property Rights; Eco-Labelling; Eco-Efficiency.	8
VI	Social Limits to Growth Model; Green Accounting; Environmental Valuation- Meaning, Need for Environmental Valuation, Methods of Environmental Valuation; Difficulty in Measuring Environmental Values, Environmental Damages and Its Valuation.	10
VII	Indian Constitution and the Environment; Environmental Management-Meaning and Concept, Objectives and Goals, Obstacles; Environmental Impact Assessment; Environmental Education and Awareness-Dilemma of Environmental Ethics and Practical Problems, Environmental Education in India.	10
VIII	Population and Environment; Trade and Environment in the WTO Regime; Climate Change- Meaning and Concept, Ozone Depletion, Acid Rain, Global Warming and Greenhouse Effect; Indian Environmental Issues and Legislations; Role of Judiciary in Environmental Protection and Conservation; International Environmental Issuesand Legislations, Carbon Trading.	10

Suggested Readings:

- Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
- Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, Oxford University Press.
- Eugine,T (2005) : Environmental Economics, Vrinda publications, Delhi.
- Jhingan,M.L & Sharma,C.K (2009) : Environmental Economics Theory Mgt & Policy, Vrinda publications, Delhi.
- Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press.

- Nagre,Vijay.H (2012) : Environmental Economics, Chandralok Prakashan.
- Singh, Kartar & Shishodia (2007): Environmental Economics: Theory and Applications, Sage India.
- Singh, S.R(2012): Environmental Economics, APH Publishing Corporation, Delhi.
- Smith, Stephen (2011): Environmental Economics: A Very Short Introduction, Oxford University Press.
- Tripathi, Daya Shanker : Paryaavaran Addhyayan, Motilal Banarasidass Pvt Ltd.

B A 3rd Year,
Sem.V Course II (Optional)
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code:A080503T	Course Title: **International Economics**	

Course outcomes:

- Students should be able to understand and explain the concept, need, significance and scope of international economics.
- Students should be familiar with the approaches of international trade.
- Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups.
- Students are familiar with the international organizations and their objectives. Students should be able to analyse the importance and relevance of these international organizations.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks:40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w	

Unit	Topics	No. of Lectures
	Part I	
I	Need, Significance and Scope of International Economics. Early Trade Theory-Mercantilism; The Classical Theories of Trade -Adam Smith, David Ricardo; Opportunity Cost Approach; Terms of Trade-Meaning and Concepts, Factors affecting Terms of Trade; Mill's Reciprocal Demand Analysis.	8
II	Free Trade and Protection-Meaning of Free Trade, Arguments For and Against Free Trade, Meaning of Protection, Arguments for Protection-Economic and Non-Economic Arguments; Protection and Less Developed Countries.	7
III	Theories and Forms of Economics Integration-Meaning &Benefits; Forms of Economic Integration- Custom Union: Production and Consumption Effects of Customs Union; Problems Involved in the Formation of Customs Union; Political Economy of Protection; SAFTA,BRICS,IBSA.	10
IV	Balance of Payments-Concepts ; Adjustment Mechanisms of Balance of Payments- Adjustment Through Variations in Exchange Rates, Devaluation and Balance of Payments Adjustment, The Elasticity Approach, Marshall-Lerner Condition.	10
	Part II	

V	Heckscher-Ohlin Theorem, The Leontief Paradox, Post-Heckscher-Ohlin Theories of Trade- Technological Gap Model; The Krugman Model, Effects of Growth on International Trade- Production & Consumption Effects, Export Pessimism, Immiserising Growth; Gains from Trade- Meaning and Types, Factors Determining Gains from Trade.	10
VI	International Financial Institutions-IMF,WORLD BANK,ADB; GATT, WTO- TRIPS &TRIMS, WTO and India;, UNCTAD, North-South Trade Dialogue, South-South Cooperation; Globalization; FDI.	10
VII	Quantitative Restrictions: Quota-Meaning, objectives, Types and Effects of Import Quotas; Tariffs-Meaning Types and Effects of Tariffs; Non-Tariff Barriers-Meaning, Classification and Types.	10
VIII	Foreign Exchange-Meaning and Instruments, Exchange Rate Determination, Mint Par Parity theory, Purchasing Power Parity Theory, Hedging, Foreign Exchange Rate Policy- Fixed, Flexible & Multiple Exchange Rate System; Convertibility of Rupee in Current Account and Capital Account, Move Towards Capital Account Convertibility; Global Financial Crisis.	10

Suggested Readings:

- Agarwal,Babita (2009) : Antarrastriya Arthshastra, Omega Publications.
- Bhatia,H.L (2006) :International Economics, Vikash Publishing House.
- Cherunilam,Francis (2008) :International Economics" Tata McGraw Hill Education.
- Field,Alfred.J & Appleyard, Dennis.R (2013) : International Economics, McGraw Hill Education.
- Gerber,James (2012) : International Economics, Pearson.
- Jhingan, M.L (2011): Antarrastriya Arthshastra, Vrinda Publications, New Delhi.
- Krugnan,Paul.R & obstfeld, Maurice (2008) : International Economics, Pearson.
- Lal,S.N (2012) :Antarrastriya Arthshastra, Shiva Publishing House,Allahabad.
- Mannur,H.G (2001) :International Economics, Vikash Publishing House Pvt Ltd.
- Salvatore,Dominick (2012) : International Economics: Trade & Finance, Wiley Publishers.
- Sinha,V.C., Sinha,Pushpa & Sinha,Vivek (2011) : Antarrastriya Vyapar Avam Vitt, Mayur Publications.
- Vaishya,M.C. & Singh,Sudama (2006) : International Economics , Oxford &IBH Publishing House, Delhi.

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/Presenatations/ Research orientation of students

Suggested equivalent online :
Swayam

BA 3rd Year, Sem. V
Course III
(Project)

Program/Class: Degree /BA	Year: Third	Semester: Fifth
Subject: Economics		
Course Code: A080603R	Course Title: Elementary Statistics based Project	

Course Outcome:

- Students to be familiar with the concepts in Statistics.
- The concepts comprehended by the students shall be put to use in practice.

- The students become familiar with the practical aspects of preparing a questionnaire/interview schedule and putting them in usage.
- The information/data collected by the students should be analyzed with the help of Statistical Tools taught so as to derive inferences.
- The students shall experience the practical aspect of the theory of statistics being taught in the class room environment.
- The students are able to use statistical tools vis-à-vis given real life situation.
- Practical work to be based on the topics covered in the contents given below.

Credits: 3	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	**Topics**	**No. of Lectures**
I	Introduction to Basic Concepts in Statistics: Population, Sample, Parameter, Data-Meaning & types. Questionnaire, Schedule & Interview Schedule (meaning, concept & types), Frequency Distribution, Cumulative frequency; Graphic and Diagrammatic representation of data.	**45 (Class room teaching and practical)**
II	Measures of Central Tendency - Mean, Median, Mode, Geometric mean and Harmonic mean. (Meaning, concept, properties & methods of measurement-in brief). Measure of Dispersion: Range, Mean Deviation, Standard deviation, Coefficient of Variation, Quartile deviation, Skewness and Kurtosis (Meaning, concept, properties & methods of measurement-in brief)	
III	Correlation: Meaning, Concept, Types & Properties. Methods of Regression: Meaning and Concept. Least squares method, Interpretation of Regression Coefficients. Meaning, concept & types of Sampling. Meaning & concept of Hypothesis & hypothesis testing.	
IV	Time Series: Concept, Meaning & Components - Determination of Regular, Trend and Seasonal Indices. Index Number: Concept, Classification of Index Numbers-price relative, quantity relative, value relative & special purpose (in brief). Consumer Price Index(CPI), Whole Sale Price Index (WPI), Methods of Construction of Index Numbers- i Unweighted & ii Weighted indices (in brief). Test of Adequacy of Index Number Formulae (in brief).	

Suggested Readings:

- Elhance,D.L (2010) : Sankhiki Ke Siddhant (Hindi), Kitab Mahal.
- Greenlaw, Steven A (2005): Doing Economics: A Guide to Understanding and Carrying Out Economic Research.
- Gupta,S.P (2011) : Statistical Methods, Sultan Chand & Sons, Delhi.
- Hazarika,Padmalochan (2006) : Essential Statistics for Economics and Commerce , Akansha Publishing House.
- Kothari, C.R: Research Methodology: Methods & Techniques. New Age International Publishers ISBN (13) : 978-81-224-2488-1
- Leighton,Thomas (2011) : Using Statistics in Economics, Tata McGraw Hill Education.

- Lind, Wathen &Marchal (2013): Basic Statistics for Business & Economics, McGraw Hill Education.
- Newbold, Paul (2008) : Statistics for Business and Economics , Pearson Education.
- Richard ,I. Levin. H. Siddiqui Masood S. Rubin David Sanjay Rastogi (2017): Statistics for Management. Pearson. ISBN-10 8184957491
- Sharma,J.K(2011) : Business Statistics "Pearson Education.

Note:

- ❖ Aforestated Four units given are to be taught in the classroom keeping in view that the project is based on the use/application of the Statistical tools taught & as per the focus/objective of the problem.
- ❖ Students are expected to develop an understanding of how to prepare a questionnaire/interview schedule for the usage.
- ❖ The field work will be arranged by the department for which an institutional mechanism will be developed by the respective institution.
- ❖ The students will prepare a thorough report after the completion of the field work and submit it for the evaluation thereafter.
- ❖ The template/format for the submission of the report will be developed by the respective department.

BA3rd Year, Sem. VI
Course I
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code:A080601T	Course Title: Indian Economy & Economy of Uttar Pradesh	

Course Outcome :

- Students should be able familiar with the basic characteristics of Indian economy,
- Students should be able familiar with the it's potential on natural resources of Indian economy and the economy of Uttar Pradesh.
- Students are able to understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.
- Students are able to develop an understanding about Uttar Pradesh , its demographic feature, natural resources and factors that cn stimulate its economic growth and development.
- Students should be familiar with the rural development of Uttar Pradesh over the period of time.
- Students should be familiar with the industrial development in India and in Uttar Pradesh.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w	

Unit	Topics	No. of Lectures
Part I		

I	Structure and Features of Indian Economy: Indian economy as a Developing Economy. Comparative Development of Indian States.	8
II	Agricultural Sector: Institutional Reforms, Technological change in Agriculture, Terms of Trade between Agriculture and Industry; Agricultural Policy, Policies for Sustainable Agriculture. Agrarian Crisis and Agricultural Labour.	10
III	The Industrial Sector: Industrial Policy; Public Sector Enterprises and their Performance, Privatization and Disinvestment debate, Small, Medium and Large-scale Sector, Industrial Labour, trade Union Movement.	10
IV	Planning in India: Objectives and Strategy of Planning; Success story of Indian Plans; Strategy of Inclusive Growth, Resource mobilization for Development.	10
Part II		
V	Nature, Features, Demographic Profile, Status of Natural Resources, Major Factors affecting growth and development in Uttar Pradesh. Economic and non-economic factors in economic development of Uttar Pradesh.	10
VI	Sectoral growth pattern in Uttar Pradesh; Economic growth in Uttar Pradesh and Indian economy: A comparison; Infrastructural development of Uttar Pradesh.	7
VII	Pattern of land-holding and irrigation; production and productivity in agriculture, Farm mechanization, Crop diversification, agricultural credit, Agricultural policy and strategies in Uttar Pradesh, Rural Development in Uttar Pradesh.	10
VIII	Problems and Policies. Major industries in Uttar Pradesh, Pattern of Industrial Development in Uttar Pradesh, Industrial Policy in Uttar Pradesh, Growth pattern of Services sector and Its linkages of other sectors of UP Economy. Micro, Small, Medium Enterprises (MSMEs) in Uttar Pradesh. One Product One District (OPOD).	10

Suggested Readings:

1. Agarwal,,M K (2009): Uttar Pradesh ka Arthik Vikas. New Royal Book Company
2. Annual Financial Statement (Budget) of the Government of Uttar Pradesh published in different years & the latest.
3. Annual Financial Statement (Budget) of the Government of Uttar Pradesh published in different years & the latest.
4. Annual Financial Statement (Budget)various years & Latest published by the Government of India.
5. Economic Surveys, Government of India (Hindi/English)
6. Indian Economy by Mishra & Puri. Himalaya Publishing House (Hindi /English)
7. Indian Economy by Uma Kapila, Academic Foundation
8. Indian Economy. Rudra Dutt & Sunderam. S. Chand & Company (Hindi /English)
9. Mishra, Arvind Narayan & Atul Chandra (2018):The Economy of Uttar Pradesh. Gutenberg Publication ISBN: 9789386240224, 9789386240224
10. Mishra, Arvind Narayan & Atul Chandra (2018):The Economy of Uttar Pradesh. Gutenberg Publication ISBN: 9789386240224, 9789386240224
11. Publications of the Government of Uttar Pradesh.
12. Publications of the Government of Uttar Pradesh.
13. Uttar Pradesh Human Development Report, UNDP, 2008.
14. Uttar Pradesh Human Development Report, UNDP, 2008.
15. Uttar Pradesh State Development Report, Volume I & II, State Plan Division, Planning Commission,

Government of India, 2014.
16. Uttar Pradesh State Development Report, Volume I & II, State Plan Division, Planning Commission, Government of India, 2014.

Suggested Continuous Evaluation Methods:
Assignment / test / Quiz(MCQ) / Seminar/ Presentations/ Research orientation of students

Suggested equivalent online :
Swayam

BA 3rdYear
Sem. VI
Course II (Optional)
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080602T	Course Title: Agriculture Economics	

Course Outcome

- Students should be able to comprehend and explain the approaches to economic development with respect to dualistic development.
- Students should be able to understand and explain the basics of agriculture economics.
- Students should be familiar with labour issues in agriculture sector.
- Students should be able to explain the significance of agriculture in the economic growth and economic development of an economy and in case of Indian Economy.
- Students should be familiar with the institutional initiates to strengthen the rural and agricultural development to achieve self sufficiency.
- Students should be able to comprehend the role of credit in the development of agriculture in a country like India and the significance of institutional mechanism in this regard.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Part I	
I	Models of Agricultural Development: Physiocrats approach, W. A. Lewis model, Fei & Ranis Model, Schultz Theory of Agricultural Development, Jorgenson's Dual Economy Model	10
II	Agricultural Production Function, Supply Response, Farm Size, Returns to Scale and Productivity. Cobweb Theorems. Farm Size and Productivity Debate; Theoretical And Empirical Findings. Agricultural Price Policy in India.	10
III	Labour in Agriculture- Interlocking of Factor Markets, Labour and Work Force in Rural Farm and Non-Farm Sectors. Agricultural Labour- Problem and Policy. Concept and Measurement of Rural Poverty & Employment, Poverty Alleviation Programmes (in brief-the Objectives, Achievements & the Shortcomings).	10
IV	Current Issues in Indian Agriculture- Poverty & Food Security in India, Agro- Subsidies in India, Subsidy Vs Public Investment. Export and	10

	Imports of Agricultural Commodities, Terms of Trade in Indian Agriculture, WTO and Indian Agriculture-Bali Negotiations	
Part II		
V	Role Of Agriculture in Economic Growth and Development in India. Backward, Forward Linkage between Agriculture and Industry, Approaches towards Agriculture And Allocation of Resources under Different Plans in India. Employment Elasticity in Indian Agriculture, Challenges & Issues Regarding Agricultural Area Expansion, Production and Productivity in India (With Focus On Post Reform (Post 1991 & 1995) Period.	10
VI	Land Reforms in India & Its Contemporary Relevance, Green Revolution and the Need for Second Generation, Green Revolution, Role of Infrastructural Support-Irrigation, Power, Seeds Fertilizers, Marketing Support System and Roads in Agricultural Development in India..	10
VII	Role of Credit in Agricultural Development, Institutional & Non-Institutional Sources of Credit in India, Cooperative Movement in India (In Brief). Role of Schedule Commercial Banks, Lead Banks, Regional Rural Banks and NARBAD to Promote Agricultural Development.	8
VIII	Agricultural Marketing: Meaning and Concept. Structure of Agricultural Markets in India, Issues and Challenges in the Marketing of Agricultural Products in India (With Focus On The Post Reform Period-Post 1991). Agricultural Diversification: Meaning, Concept & Issues. Crop Diversification: Meaning, Concept and Issues. Farm Incomes and Employment in Indian Agriculture.	7

Suggested Readings:

- Bardhan, P. (1984) Land, Labour and Poverty; Essays in Economic Development, OUP, New Delhi**.**
- Bhaduri, A. (1984), The Economic Structure of Backward Agriculture; Macmillan, Delhi.
- Bhalla, G.S., (2007) Indian Agriculture since Independence, National Book Trust, India
- Bharadwaj, K. (1974), Production Conditionin India Agriculture; OUP, Cambridge.
- Black, J.D, (1953) Introduction to Economics for Agriculture, Macmillan.
- Dantawala, M.L. et al. (1991): Indian Agricultural Development since Independence, Oxford & IBH, New Delhi.
- Dash, Mrutyunjay (2013): Agricultural Economics, Anmol Publications.
- Ghatak, Sand K. Ingerscant(1984),Agriculture and Economic Development; Select Books, New Delhi.
- Griffin, K.(1973): Political Economy of Agrarian Change.
- Gupta,P.K (2012) : Agricultural Economics, Vrinda Publications,Delhi.
- Gupta,P.K (2012) : Krishi Arthsastra , Vrinda Publications,Delhi.
- Khusro, A.M.(1973), The Economics of Land Reforms and Farm Size in India, MacMillan.
- Kumar,N.S.Ravi (2010) : Agricultural Economics, Neha Publishers.
- Lekhi,R.K(2013) : Agricultural Economics, Kalyani Publishers.
- Lekhi,R.K(2013) : Krishi Arthsastra, Kalyani Publishers.
- Mahajan, Ashwani (2010): Agricultural Economics, Centrum Press.
- Mellor, J.W., The Economics of Agricultural Development, Vora and Co., Bombay, 1964.
- Raghavan and L. Sarkar (Eds.) (1996): Poverty and Employment: New Delhi.
- Raj, K.N. et.al. (1988): Essays in the Commercialization of Indian Agriculture; OUP, New Delhi.
- Rao, CHH (1993):Agricultural Growth, Rural Poverty and Environmental Degradation in India, OUP, NewDelhi.
- Rao, CHH, (1975): Technological Change and Distribution of Gains in Indian Agriculture, MacMillan.
- Rudra, A. (1982): India Agriculture Economics; Myths and Reality: Allied Publishers, New, Delhi.

- Sarap Kailash (1991): Interlinked Agrarian Markets in Rural India, Sage Publication, New Delhi.
- Schultz, T.W.(1964): Transforming Traditional Agriculture, Yale University Press.
- Soni, R.N (2011): Krishi Arthshastra Ke Mukhya Vishay, Vishal Publishing Company,Jalandhar (New Delhi)
- Soni, R.N (2011): Leading Issues In Agricultural Economics, Vishal Publishing Company,Jalandhar (New Delhi)
- Sunder,I (2010): Principles of Agricultural economics, Neha Publishers.
- Talathi, J.M (2008): Introduction To Agricultural Economics And Agribusiness Management, Ane Books.
- Taylor, H.C., (1949), Outlines of Agricultural Economics, MacMillan.
- Verma, N.M.P. (1990), Irrigation Change and Agricultural Development, Uppal, New Delhi.

BA 3rdYear, Sem. VI
Course III(Optional)
(Theory)

Program/Class: Degree /BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code: A080603T	Course Title: Elementary Mathematics	

Course Outcome

- Students should be familiar with the basis concepts of mathematics and their application in economics.
- Students are able to comprehend & explain the concepts of straight lines slope etc of mathematics and its application in economics.
- Students should be able to understand basics of differential & its application in economics.
- Students should be able to understand and work with matrices and determine if a given square matrix is invertible.
- Learn about and work with vector spaces and subspaces.
- Students are able to understand and work with the concepts of linear programming & graphic methods.

Credits: 5	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w

Unit	Topics	No. of Lectures
	Part I	
I	Basic Concepts: Variables, Sets, Functions, Equations, Identities, Systems of Equations	9
II	Application of Straight Line System, Slope of the Line, Homogeneous Function.	9
III	Role Of Mathematical Techniques In Economic Analysis, Theory of Numbers, Indices and Factorization.	9
IV	Progression, Growth Rate, Equilibrium.	9
	Part II	
V	Basics of Calculus: Rules of Differentiation of a Function; Maxima and Minima,	9
VI	Elasticities; Inter- relationships among Total, Marginal and Average Cost and Revenues; Constrained Optimisation Problem; Integration of a Function, Consumer's and Producer's Surplus	10

VII	Matrix and Determinants: Various types of Matrices, Determinants, Inverse of a Matrix,Crammer's Rule.	10
VIII	Concept of Linear Programming — Graphic Methods.	10

Suggested Readings:

1. Agarwal, D.R. (2009): Mathematics for Economics, Vrinda Publications, Delhi. Livernois,John., Rees,Ray., & Hoy,Michael (2012) : Mathematics for Economics , PHI Learning.
2. Agarwal, D.R. "Prarambhik Ganitiya Arthshastra (Hindi), Vrinda Publications, Delhi.
3. Allen,R.G.D (2008) : Mathematical Analysis for Economics , AITBS.
4. Bhardwaj,R.S(2006):MathematicsforEconomicsandBusiness,ExcelBooks.
5. Chiang,A.C & Wainwright,Kevin (2013) : Fundamental Methods of Mathematical Economics" McGraw Hill Publication.
6. Dowling,Edward.T(2005):Schaum'sEasyOutlineofIntroductiontoMathematical Economics , Tata Mcgraw HillEducation.
7. Madnani, G M K : Mathematics for Economics. Sultan Chand & Sons
8. Mishra,J.P. "Ganiteeya Arthshastra", Pratiyogita Sahitya.
9. Rosser,Mike (2003) : Basic Mathematics for Economists , Routledge.
10. Seth,M.L.," Arthshastramei Prarambhik Ganit",Laxmi Narayan Publications,Agra.
11. Sharma,J.K(2007):BusinessMathematics,AneBooksPvt.Ltd.
12. Yamane,Taro (2007) : Mathematics For Economists : An Elementary Survey , PHI Learning

Suggested Continuous Evaluation Methods:

Assignment / test / Quiz(MCQ) / Seminar/ Presentation/ Research orientation of students

Suggested equivalent online :
Swayam

BA3rd Year, Sem. VI
Course IV
(Project/Dissertation)

Program/Class: Degree/BA	Year: Third	Semester: Sixth
Subject: Economics		
Course Code:A080604R	Course Title**: Project/Dissertation**	

Course outcomes:

- The objective of introducing Dissertation/Project at the graduation level is to familiarise, aquaint and experience the local issues of economic implication or focued on economic welbeing and behaviour of consumers/citizens.
- It aims at enabling the students to use and apply the learned economic principles vis-a-vis local economic issues.
- To enable them to learn preperation of questionnaire/interview schedule.
- The Template/Format of the Dissertation/Project shall be developed by the resepcteive Department.
- The idea behind this is to develop economic thikning in the students through direct experience to real life.

Credits: 3	Core Compulsory
Max. Marks: 25+75	Min. Passing Marks:40

Total No. of Lectures-Tutorials-Practical (in hours per week): P-2/w

Unit	Topics	No. of Lectures
I	Dissertation Topic on the Local/Current Issues with Economic Focus plus Presentation using Ppt. Dissertation Report will be prepared using Statistical/Research Techniques .Surveys, Questionnaire/interview schedule. Questionnaire/Interview Schedule must be attached with the report as	45

	annexure.	

Suggested Readings:

- Choubey, Varanya (2018): Research Writing: The Structural Challenge of Communicating Knowledge + A Method to Meet it. ISBN-13: 978-1974673162 & ISBN-10: 1974673162
- Greenlaw, Steven A (2005): Doing Economics: A Guide to Understanding and Carrying Out Economic Research, Houghton Mifflin Harcourt (HMH).
- Kothari, C R (2013): Research Methodology. New Age International Publishers.
- Paliwal, Neha & Surendra Khatri (2018): Sodh Pravidhi. National Publishing House. ISBN: 9788180181726, 8180181723
- Pandey Arun & Ganesh Pandey (2009): Sodh Pravidhi. Radha Publication. ISBN-10 : 8174873805
- Sharma, Vinay Mohan(2018): Sodh Pravidhi. Mayur Books.
- Thomson, Williams (2011): A Guide for the Young Economists. MIT Press

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods:

Fieldwork, Seminar, Presentations, VIVA, Dissertation.

Suggested equivalent online :
Swayam