

4 Year UG  
from 2024-25

Department of Economics  
D.D.U. Gorakhpur University, Gorakhpur

Minutes of the meeting of Board of Studies for Under Graduate Economics was held on 28/02/2024 at 11.30 am in the Dept of Economics, D.D.U. Gorakhpur University, Gorakhpur.

The following members were present:-

|     |                        |                 |  |
|-----|------------------------|-----------------|--|
| 1.  | Prof. Sandeep Kumar    | Convener        | Head, Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                          |
| 2.  | Prof. S. N. Chaturvedi | External Member | Ex. Head, Department of Economics & Former Dean, Faculty of commerce, MGK Vidyapeeth, Varanasi |
| 3.  | Prof. K.R. Tripathi    | Member          | Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                                |
| 4.  | Prof. A.K. Goyal       | Member          | Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                                |
| 5.  | Dr. R.K. Gupta         | Member          | Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                                |
| 6.  | Dr. A.K. Sharma        | Member          | Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                                |
| 7.  | Dr. S.K. Gupta         | Member          | Department of Economics, D.D.U. Gorakhpur University, Gorakhpur                                |
| 8.  | Dr. Rahul Srivastava   | Member          | Department of Economics, St. Andrews College, Gorakhpur.                                       |
| 9.  | Dr. Poonam             | Member          | Department of Economics, DAV PG College, Gorakhpur.  |
| 10. | Dr. Rakesh Kumar Ojha  | Member          | Department of Economics, Mahavidyalaya Bhatwali Bazar, Unwal, Gorakhpur.                       |
| 11. | Mr. Manish Kumar       | Member          | Department of Economics, Ramji Sahay PG College, Rudrapur, Deoria.                             |

**Agenda of the Meeting:**

1. Approval of the Minutes of the meeting held on 19/08/2023.
2. Discussion on course structure and syllabi of Economics for Four Years UG Programme.
3. Discussion on an ability enhancement course offered by the department for UG students.

**Board Unanimously Resolved that:**

1. Minutes of the meeting held on 19/08/2023 be approved.
2. Course structure and syllabi of Four Years UG Programme be approved.
3. Proposed Ability Enhancement Course titled as 'Elementary Statistics: Techniques and Applications' be approved.

Handwritten signatures and dates of the members present at the meeting:

- Sandeep Kumar: 28-2-24
- S. N. Chaturvedi: 28/2/24
- K.R. Tripathi: 28/2/24
- A.K. Goyal: 28/2/24
- R.K. Gupta: 28-02-2024
- A.K. Sharma: 28/02/24
- S.K. Gupta: 28-02-2024
- Rahul Srivastava: 28/2/24
- Poonam: 28/02/24
- Rakesh Kumar Ojha: 28-02-2024
- Manish Kumar: 28-2-24

# Ability Enhancement Course

## Elementary Statistics: Techniques and Applications

Course Code: ECO 001

Credit: 02

### Course Outcomes:

CO 1. Enables the student to understand the various methods of statistical analysis such as measure of central tendency, measure of dispersion.

CO 2. Enables the student to understand the correlation analysis.

| Unit | Topics   |
|------|--|
| I    | Statistics: Introduction, Data Classification, Tabulation of Data, Representation of Data-Graphic and Diagrammatic                                   |
| II   | Measures of Central Tendency: Mean, Median, Mode, (Meaning, Concept, properties & methods of measurement) and their Applications                     |
| III  | Measures of Dispersion: Range, Mean Deviation, Quartile deviation, Standard Deviation, Coefficient of Variation, Lorenz Curve and their Applications |
| IV   | Correlation Analysis: Concepts and Types, Karl Pearson's Correlation Coefficient and Spearman's Correlation Coefficient and their Applications       |

### Books Recommended:

- Elhance, D.N.: Fundamentals of Statistics (Hindi Ed.) □
- Agarwal, D.R.: Statistics for Economists, Vrinda Publications, New Delhi. □
- Gupta, B.N.: Statistics (fourth edition), Sahitya Bhawan Publication, Agra (UP).
- Singh, S. P.: Sankhyiki Sidhant Avam Vyavhar (Statistics: Theory and Practice), S Chand & Company, New Delhi.
- Shukla, S. M. & Sahai, S. P.: Sankhyiki ke Siddhant (Principles of Statistics), Sahitya Bhawan Publication, Agra (UP)

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## Structure and Syllabi of Economics for Four Year UG Programme

This Four Year Programme is in accordance with ordinance of U G Four Year Programme Framework of the University. This Programme is designed for the students pursuing graduation with subject 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. This under graduate programme will have 25 courses in 8 Semesters in 4 years. The detailed structure and syllabi is given below:

| Year                        | Sem.                             | Course Code                                     | Paper Title                               | Theory/Practical | Credits |  |
|-----------------------------|----------------------------------|---|---|------------------|---------|--|
| 1                           | I                                | ECO 101 F                                       | Principles of Micro Economics             | Theory           | 6       |  |
|                             | II                               | ECO 102 F                                       | Principles of Macro Economics             | Theory           | 6       |  |
| 2                           | III                              | ECO 201 F                                       | History of Economic Thought               | Theory           | 6       |  |
|                             | IV                               | ECO 202 F                                       | Money, Banking and Public Finance         | Theory           | 6       |  |
| 3                           | V                                | ECO 301 F                                       | Economic Growth and Development           | Theory           | 5       |  |
|                             | <b>Optional Course (Any One)</b> |   |   |                  |         |  |
|                             | V                                | ECO 302 F                                       | Environmental Economics                   | Theory           | 5       |  |
|                             |                                  | ECO 303 F                                       | International Economics                   | <b>Theory</b>    | 5       |  |
|                             | VI                               | ECO304 F  | Indian Economy & Economy of Uttar Pradesh | Theory           | 5       |  |
|                             | <b>Optional Course (Any One)</b> |   |   |                  |         |  |
|                             | VI                               | ECO 305 F                                       | Agriculture Economics                     | Theory           | 5       |  |
|                             |                                  | ECO306 F  | Elementary Mathematics                    | <b>Theory</b>    | 5       |  |
| <b>4th Year UG (Honors)</b> |                                  |   |   |                  |         |  |
| 4                           | VII                              | ECO-401 F                                       | Advanced Microeconomics                   | Theory           | 4       |  |
|                             |                                  | ECO-402 F                                       | Theory of Public Economics                | Theory           | 4       |  |
|                             |                                  | ECO-403 F                                       | Indian Economy: Basic Issues              | Theory           | 4       |  |
|                             |                                  | ECO-404 F                                       | Advanced Macroeconomics                   | Theory           | 4       |  |
|                             |                                  | <b>Elective (Any One Course to be selected)</b> |   |                  |         |  |
|                             |                                  | ECO-405 F                                       | Fundamentals of Statistics                | Theory           | 4       |  |
|                             |                                  | ECO-406 F                                       | Industrial Economics                      | Theory           | 4       |  |
|                             |                                  | ECO-407 F                                       | Indian Finance                            | Theory           | 4       |  |
|                             | VIII                             | ECO-408 F                                       | Modern Microeconomics                     | Theory           | 4       |  |
|                             |                                  | ECO-409 F                                       | Fiscal Policy and Federalism              | Theory           | 4       |  |
|                             |                                  | ECO-410 F                                       | Indian Industrial and External Sector     | Theory           | 4       |  |
|                             |                                  | ECO-411 F                                       | Modern Macroeconomics                     | Theory           | 4       |  |
|                             |                                  | <b>Elective (Any One Course to be selected)</b> |   |                  |         |  |
|                             |                                  | ECO-412 F                                       | Research Methodology                      | Theory           | 4       |  |
|                             |                                  | ECO-413 F                                       | Indian Economic Thought                   | Theory           | 4       |  |
|                             |                                  | ECO-414 F                                       | Indian Financial System                   | Theory           | 4       |  |

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| 4th Year UG (Honors with Research) |          |  |                                       |        |    |  |
|------------------------------------|----------|--|---------------------------------------|--------|----|--|
| 4                                  | VII      | ECO-401F                                 | Advanced Microeconomics               | Theory | 4  |  |
|                                    |          | ECO-402F                                 | Theory of Public Economics            | Theory | 4  |  |
|                                    |          | ECO-403F                                 | Indian Economy: Basic Issues          | Theory | 4  |  |
|                                    |          | ECO-404F                                 | Advanced Macroeconomics               | Theory | 4  |  |
|                                    |          | Elective (Any One Course to be selected) |                                       |        |    |  |
|                                    |          | ECO-405F                                 | Fundamentals of Statistics            | Theory | 4  |  |
|                                    |          | ECO-406F                                 | Industrial Economics                  | Theory | 4  |  |
|                                    |          | ECO-407F                                 | Indian Finance                        | Theory | 4  |  |
|                                    | VIII     | ECO-412F                                 | Research Methodology                  | Theory | 4  |  |
|                                    |          |  | Research Project                      |        | 12 |  |
|                                    |          | Elective (Any One Course to be selected) |                                       |        |    |  |
|                                    |          | ECO-408F                                 | Modern Microeconomics                 | Theory | 4  |  |
|                                    |          | ECO-409F                                 | Fiscal Policy and Federalism          | Theory | 4  |  |
|                                    |          | ECO-410F                                 | Indian Industrial and External Sector | Theory | 4  |  |
|                                    |          | ECO-411F                                 | Modern Macroeconomics                 | Theory | 4  |  |
|                                    |          | ECO-413F                                 | Indian Economic Thought               | Theory | 4  |  |
|                                    | ECO-414F | Indian Financial System                  | Theory                                | 4      |    |  |
|                                    | ECO-415F | Elementary Econometrics                  | Theory                                | 4      |    |  |

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 and the 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.   |

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**BA 1<sup>st</sup> Year, Sem. I,  
Course I  
(Theory)**

|   |   |                   |
|---|---|-------------------|
| <b>Course Code: ECO-101F</b>  | <b>Principles of Micro Economics</b>  | <b>Credits: 6</b> |
| <b>Course Outcome:</b>  |   |                   |
| <p>CO 1. 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 &amp; familiarize with day today happenings.</p> <p>CO 2. The students learn and understand the concepts of consumer behaviour like cardinal utility and ordinal utility analysis.</p> <p>CO 3. The students learn and understand application of Indifference curve analysis in deriving demand curves, price effect, income effect and substitution effect.</p> <p>CO 4. The students learn and understand the Theory of production- iso-quants, laws of returns to scale, law of variable proportion.</p> <p>CO 5. The students learn, understand and compare between the Traditional and modern theory of cost.</p> <p>CO 6. Demonstrate an understanding, usage and application of basic economic principles.</p> <p>CO 7. Describe and apply the methods for analyzing consumer behavior through demand and supply, elasticity and marginal utility.</p> <p>CO 8. To analyze the behavioral patterns of different economic agents regarding profit, price, cost etc.</p> <p>CO 9. The decision-making process in different market situations such as perfect competition, monopolistic competition, monopoly and oligopoly markets.</p> <p>CO 10. To deal with the advance theoretical issues and their practical applications of distribution theories.</p> <p>CO 11. General equilibrium, economic efficiency and market failure.</p> |   |                   |
| <b>Unit</b>   | <b>Topics</b>   |                   |
| <b>I</b>  | Introduction: Meaning of Economics, Problem of scarcity and choice and opportunity cost; production possibility frontier. 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 and shifts of supply versus movements along a supply curve. Elasticity: price elasticity of demand, Methods of Measuring elasticity of Demand, determinants of price elasticity. Income elasticity and Cross elasticity. |                   |
| <b>II</b>   | Consumer Theory: Concept of utility, diminishing marginal utility, Diamond-water paradox, Law of Equi Marginal Utility. Indifference curves, Budget Constraint, Consumer's equilibrium. Price Effect: income and substitution effects; Derivation of demand curve from indifference curve, Theory of Revealed Preference. Consumer surplus, producer surplus.   |                   |
| <b>III</b>  | Production Function: Meaning and types. Law of variable proportions, Iso-quant and Iso-cost lines, Return to Scale, Producer's equilibrium, Ridge Lines. Cost Analysis: Costs in the short run and long run, Relationship between AC and MC, LAC and LMC. Revenue Analysis: Revenue and Profit maximizations, economies and diseconomies of scale, Relationship between AR, MR, and Elasticity.   |                   |

|      |  |
|------|--|
| IV   | Perfect Competition: Assumptions: Price and Output determination under perfect competition, Long run industry supply curve: increasing, decreasing and constant cost industries. Welfare: allocative efficiency under perfect competition. Monopoly Firm: Assumptions: Price and Output determination. Concept of a supply curve under monopoly; Comparison of perfect competition and monopoly, Price Discrimination. |
| V    | Monopolistic competition: Assumptions, Price and output determination under monopolistic competition. Oligopoly: assumptions, Kinked Demand Model.   |
| VI   | Consumer and Producer Theory in Action<br>Externalities: Concept and types. Public goods and Market Failure, Sources of Market Failure, Rationale of the Government in market failure.   |
| VII  | Theory of Factor pricing: Concept of MPP, MRP, MVP, Marginal Productivity theory. Rent: Ricardian theory of rent, Modern Theory of rent and Quasi rent. Wages: Determination of Wage. Profit: Knight's Theory  |
| VIII | Welfare Economics: Concept & Definition of Welfare Economics. Normative and Positive Economics. Concepts of Social Welfare. Pareto Optimality Conditions, Grand Utility Possibility Frontier, New Welfare Economics: Kaldor-Hicks Welfare Criterion. Social Welfare Function. Theories of Social Choice.   |

#### 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., Rubinfeld, Daniel. L., Mehta, Prem. L (2009): "Microeconomics", Pearson.
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) (2nd ed): "Modern Microeconomics", Macmillan.
9. Stonier, A. W & Hague, Douglas. C (2003) (5th ed) : "A Text Book of Economic Theory", Pearson.

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BA 1<sup>st</sup> Year, Sem. II,  
Course I  
(Theory)

| Course Code: ECO-102 F Principles of Macro Economics |   | Credits:6 |
|--|---|-----------|
| <b>Course Outcomes:</b>                              |   |           |
| CO 1.  | Students are able to explain national income, comprehend calculation methods of national income, and concepts related to national income.   |           |
| CO 2.  | Students are able to comprehend classical theory of employment and the Keynesian approach.  |           |
| CO 3.  | Students are able to comprehend the concept of multiplier and it's working.   |           |
| CO 4.  | Students are able to understand the relationship between inflation and employment.  |           |
| CO 5.  | Students are able to relate factors determining national income such as consumption, saving and investment.   |           |
| CO 6.  | 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.   |           |
| Unit   | Topics  |           |
| I  | Introduction: Nature and Scope, Macro vs. Micro Economics, Limitations of Macroeconomics.   |           |
| II   | Circular Flow of Income in Two, Three and Four-sector Economy.  |           |
| III  | National Income Accounting: Concepts of GDP, GNP, NDP and NNP at Market price and Factor Cost; Personal Income and Disposable Income, Green Accounting. Measurement of National Income: Income, Expenditure, Product or Value Added Methods. Nominal and Real income. |           |
| 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; Keynesian Consumption Function - Average and Marginal Propensity to Consume.     |           |
| V  | Theory of Investment - Autonomous and Induced Investment; The Investment Multiplier, Marginal Efficiency of Capital; Savings and Investment - Ex Post and Ex Ante, Equality and Equilibrium. Principle of Accelerator.  |           |
| VI   | Rate of Interest: Classical, Neo-Classical and Keynesian Theories of Interest. Liquidity Preference Theory  |           |
| VII  | IS-LM Analysis: Derivations of the IS and LM functions; IS-LM and Aggregate demand.   |           |
| VIII   | Concept of inflation; determinants of Inflation; relationship between inflation and unemployment. Deflation; Concept and Approaches.  |           |

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

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**BA 2<sup>nd</sup> Year, Sem. III**  
**Course I**  
**(Theory)**

| Course Code: ECO-201F  | History of Economic Thought  | Credits:6 |
|--|--|-----------|
| <b>Course Outcomes:</b>  |  |           |
| <p><b>CO 1.</b> To learn and discuss, at an advanced undergraduate level, how the economic thought has evolved over time.</p> <p><b>CO 2.</b> Introducing students to the critical comparison of the contributions of the main schools of economics.</p> <p><b>CO 3.</b> To introduce &amp; highlight before the students about Indian Economic Thinkers and their valuable contribution in the field of Economics.</p> <p><b>CO 4.</b> 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.</p> |  |           |
| Unit   | Topics   |           |
| I  | Early Period: Economic thought of Plato and Aristotle. Ancient Economic Thought.   |           |
| II   | Mercantilism: Main Characteristics; Thomas Munn - Physiocracy: Natural Order, Primacy of Agriculture, Social Classes, Tableau Economique, Taxation, Turgot - Economic ideas of Petty, Locke and Hume.                    |           |
| III  | 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. |           |
| IV   | 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.                |           |
| V  | Marginalists; Gossen — The Marginalist Revolution: Jevons, Walras and Menger - Bohm-Bawark, Wicksell and Fisher; Economic Ideas of Wicksteed and Weiser.   |           |
| VI   | 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 Economic Ideas.   |           |
| VII  | Economic Thoughts of Keynes: Consumption Function, Paradox of Thrift   |           |
| VIII   | Economic thoughts of Kautilya, Gandhian Economics, J.K. Mehta and Pt. Deen Dayal Upadhyaya.  |           |

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### 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) : Aarthik Vicharon 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) : Aarthik Vicharon 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 Thought, Faber.
11. Schumpeter, J.A (1954) : History of Economic Analysis, Oxford University Press, New York.
12. Sinha, V.C (2011) : Aarthik Vicharon Ka Itihas , Mayur Pu
13. Staley, Charles, E, "A History of Economic Thought: From Aristotle To Arrow", Blackwell Publishing.

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**BA 2<sup>nd</sup> Year, Sem. IV**

**Course I**

**(Theory)**

|                              |  |                   |
|------------------------------|--|-------------------|
| <b>Course Code: ECO-202F</b> | <b>Money, Banking and Public Finance</b>   | <b>Credits: 6</b> |
| <b>Course Outcomes:</b>      |  |                   |
| CO 1.                        | Understand simple concepts related with monetary economics and banking theory.   |                   |
| CO 2.                        | Correlate and apply to current events & key models and concepts of monetary economics and banking theory.  |                   |
| CO 3.                        | Appreciate the potential importance of monetary phenomenon in the economy.   |                   |
| CO 4.                        | Understand the sources of finance both public and private  |                   |
| CO 5.                        | Demonstrate the role of government to correct market failures and possible advantage of public financing.  |                   |
| CO 6.                        | 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.  |                   |
| <b>Unit</b>                  | <b>Topics</b>  |                   |
| <b>I</b>                     | 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, Value of Money; Quantity Theory of Money - Cash Transaction and Cash Balance Approaches; The Keynesian Approach.             |                   |
| <b>II</b>                    | Supply of Money: Definitions—Determinants of Money Supply—High Powered Money and Money Multiplier.   |                   |
| <b>III</b>                   | 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; Tools, Objectives and Limitations of Monetary Policy with Special Reference to India. |                   |
| <b>IV</b>                    | 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; Recent Reforms in Banking Sector in India.   |                   |
| <b>V</b>                     | Public Finance: Meaning and scope; Distinction between Private and Public Finance; Public Goods Vs. Private Goods; The Principle of Maximum Social Advantage.  |                   |
| <b>VI</b>                    | 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.   |                   |
| <b>VII</b>                   | Sources of Public Revenue: Tax Revenue and Non-Tax 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.                  |                   |
| <b>VIII</b>                  | 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. The Role of Finance Commission.  |                   |

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### 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.
- ❖ Eyles, 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, New Delhi.
- ❖ Jhingan, M.L (2012) : Maudrik Arthshastra, Vrinda Publications, New Delhi.
- ❖ Johansen, Life (1965) : Public Economics, Chicago: Rand Menally.
- ❖ 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), Mcmillan.
- ❖ 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.

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BA 3<sup>rd</sup> Year, Sem. V

Course I  
(Theory)

| Course Code: ECO-301   | Economic Growth and Development   | Credits:5 |
|--|---|-----------|
| <b>Course Outcomes:</b>  |   |           |
| CO 1. Students should be able to comprehend the concept and meaning of economic growth and economic development.             |   |           |
| CO 2. Students should be able to distinguish between economic growth and economic development.                               |   |           |
| CO 3. Students should be able to comprehend the issues and challenges in economic growth and development.                    |   |           |
| CO 4. Students should be able to comprehend and explain the concept of poverty and human development & the related concepts. |   |           |
| CO 5. Students should be familiar with the approaches to development:  |   |           |
| CO 6. Students should be able to understand and explain the factors and variable of economic development.                    |   |           |
| CO 7. Students are able to understand how international factors facilitate and impede economic development.                  |   |           |
| Unit   | Topics  |           |
| 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.  |           |
| II   | Concept of Poverty and Inequality, Vicious circle of poverty, Lorenz Curve, Gini Coefficient. Concept of Human Development and Human Development Index, Quality of Life Indices: Physical Quality of Life Index, Hunger Index, Happiness Index, Gender & Development. Concept of Sustainable Development. Millennium Development goals. |           |
| III  | Rosentain Rodan's theory of Big Push, Nelson's Low Level of Equilibrium Trap, Leibenstein. Theory Balanced vs Un-balanced growth, Rostow's stages of growth, Harrod and Domar Growth models.  |           |
| IV   | Theory of Demographic Transition, Population as Limits to Growth. The Concept of Inclusive Growth- with Reference to India. Food Security, Education, Health and Nutrition.   |           |
| V  | Development & Underdevelopment: an Overview; The Characteristics and Explanations Of Underdevelopment-, Circular Causation, Dualism-Social, Technological, Financial, Organizational, Model of Dual Economy, Lewis, Ranis-Fei, Jorgenson, Dependency Theories of Underdevelopment.  |           |
| VI   | Models of Technical Progress, Embodied and Disembodied Technical Progress, Neutral Technical Progress- Hicks, Harrod, Solow, Arrow's Learning by Doing Approach to Economic Growth.   |           |
| VII  | Endogenous growth, Intellectual capital, Role of Learning, Education and Research, Explanations of Cross country Differentials in Economic Growth,  |           |
| VIII   | Role of Technology Transfer and Multinational Corporations for promoting of development in developing countries-with Reference to India.  |           |

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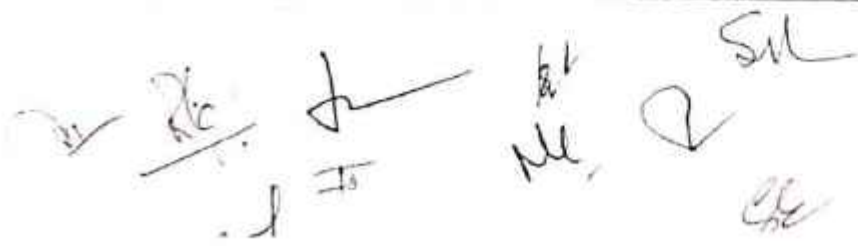
## Suggested Readings:

- ❖ 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, New Delhi.
- ❖ Jhingan ,M.L (2013): Vikas Ka Arthshastra Awam Niyojan, Vrinda Publications, New Delhi.
- ❖ 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 and Applications, SageIndia.
- ❖ Singh,S.R(2012):Environmental Economics ,APH Publishing Corporation, Delhi.
- ❖ Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
- ❖ Taneja,M.L&Myer,R.M (2011): Arthshastra Ki Yojnaye Awam Vistaar, Visha Publishing Company 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.

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**BA 3<sup>rd</sup> Year, Sem. V**  
**Course II (Optional)**  
**(Theory)**

|                              |   |                   |
|------------------------------|---|-------------------|
| <b>Course Code: ECO-302F</b> | <b>Environmental Economics</b>  | <b>Credits: 5</b> |
| <b>Course Outcomes:</b>      |   |                   |
| CO 1.                        | Students should be familiar with the basic concepts of ecology environment and economy.   |                   |
| CO 2.                        | Students to understand the solution to environmental problems- the command and control approach, market based methods, tax tradable pollution permit, etc, carbon trading   |                   |
| CO 3.                        | Students should be familiar with the concept of Sustainable development, environmental impact assessment, Global and local environmental concerns.  |                   |
| CO 4.                        | Students should be comprehend the Local Issues of Economic Bearing related to environment & development.  |                   |
| CO 5.                        | Students should realize the importance and influence of environment on the economy including the quality of manpower.   |                   |
| CO 6.                        | Students should realize the importance to make cleaner environment so as to achieve harmonious development.   |                   |
| CO 7.                        | Students should comprehend that environmental problem is not the problem of a single country or region but a global problem/issue.  |                   |
| CO 8.                        | Demonstrate an awareness of economic growth problems, issues in globalisation, and provide grounding in major growth strategies and development.  |                   |
| <b>Unit</b>                  | <b>Topics</b>   |                   |
| I                            | Environmental Economics: Definition, Nature, Environmental Problems as Economic Problem, Environment-Development Trade-off, Environment-Economy Inter-relationship, Environmental functions for Economy, Environmental Crises.  |                   |
| II                           | Pareto Optimality Conditions and Reasons of Market Failure, Externalities and their Consequences, Social Optimal Level of Pollution.  |                   |
| III                          | Limits to Growth: Concepts and Environmental Kuznets Curve, Sustainable Development: Concept, Approaches, Indicators of Sustainability, Indian Perspective- Sustainable Development Goals. Sustainable National Income, Ecological Footprint. Sustainable Industrialization |                   |
| IV                           | Environmental Regulation: Government Rationale for Regulation, Command Control Method: Liability laws, Emissions Standards, Allocation of Property Rights (Coasian Approach).   |                   |
| V                            | Environmental Regulation: Market Based Instruments: Pollution Taxes, Environmental Subsidy, Marketable Pollution Permit System and their Applications.  |                   |
| VI                           | Economic Valuation of the Environment: Market Price Approach, Hedonic Price Method, Travel Cost Approach, Defensive Expenditure Method, Contingent Valuation Method.  |                   |


  
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|      |  |
|------|--|
| VII  | WTO and Environment; Population, Poverty and Environment, Renewable and Non-Renewable Resources, Common Property Resources: Problems and Management, Valuation of The Environmental Projects, Cost benefit Analysis, and Environmental Impact Assessment.                            |
| VIII | Global Environmental Problems & International Policy: Ozone Depletion, Acid Rain, Climate Change, Loss of Biodiversity, Environmental Issues and Challenges in India, Environmental Policy of India, Constitution & Environment. Environmental Ethics, Environment and Human Health. |

**Suggested Readings:**

- Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
- Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, OxfordUniversity Press.
- Eugene, 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.

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B A 3rd Year, Sem. V

Course II (Optional)

(Theory)

| Course Code: ECO-303F   | International Economics  | Credits: 5 |
|-------------------------|--|------------|
| <b>Course Outcomes:</b> |  |            |
| CO 1.                   | Students should be able to understand and explain the concept, need, significance and scope of international economics.  |            |
| CO 2.                   | Students should be familiar with the approaches of international trade.  |            |
| CO 3.                   | Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups.   |            |
| CO 4.                   | Students are familiar with the international organizations and their objectives. Students should be able to analyse the importance and relevance of these international organizations.   |            |
| Unit                    | Topics   |            |
| I                       | Need, Significance and Scope of International Economics. Earlier Trade Theories: Mercantilism, Classical Theories of Trade -Adam Smith, David Ricardo and Opportunity Cost Approach. Mill's Reciprocal Demand Analysis. Terms of Trade: Meaning and Concepts, Factors affecting Terms of Trade.; Gains from Trade, Factors Determining Gains from Trade. |            |
| II                      | Offer Curve Analysis, Heckscher-Ohlin Theory, Leontief Paradox, Effects of Growth on International Trade:- Concept of Immizerising Growth.   |            |
| III                     | Free Trade and Protection: Arguments For and Against Free Trade, Meaning of Protection, Arguments for Protection. Tools of Protection: Quantitative and Non Quantitative Restrictions.   |            |
| IV                      | Tariffs-Meaning Types and Effects of Tariffs; Non- Tariff Barriers-Meaning, Classification and Types. .Quota-Meaning, objectives, Types and Effects of Import Quotas.  |            |
| V                       | Theories and Forms of Economics Integration-Meaning & Benefits; Forms of Economic Integration- Custom Union: Production and Consumption Effects of Customs Union.  |            |
| VI                      | Balance of Payments: Concepts. Concept of BoP Disequilibrium. Adjustment Mechanisms of Balance of Payments- Devaluation Method of Balance of Payments Adjustment, The Elasticity Approach, Marshall-Lerner Condition.  |            |
| VII                     | Foreign Exchange Rate: Meaning, Foreign Exchange Rate Determination: Mint Par Parity Theory, Purchasing Power Parity Theory. Foreign Exchange Rate Policy: Fixed, Flexible & Multiple Exchange Rate System. Convertibility of Rupee in Current Account and Capital Account.  |            |
| VIII                    | International Financial Institutions-IMF, WORLD BANK, ADB; GATT, WTO- TRIPS & TRIMS, WTO and India;, UNCTAD, North-South Trade Dialogue, South-South Cooperation; Globalization; FDI.  |            |

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### 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.
- Krugman, 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.

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BA3<sup>rd</sup> Year, Sem. VI

Course I

(Theory)

| Course Code: ECO-304F    | Indian Economy and Economy of Uttar Pradesh  | Credits: 5 |
|--------------------------|--|------------|
| <b>Course Outcomes :</b> |  |            |
| CO 1.                    | Students should be able familiar with the basic characteristics of Indian economy,   |            |
| CO 2.                    | Students should be able familiar with the it's potential on natural resources of Indian economy and the economy of Uttar Pradesh.  |            |
| CO 3.                    | Students are able to understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.  |            |
| CO 4.                    | Students are able to develop an understanding about Uttar Pradesh , its demographic feature, natural resources and factors that can stimulate its economic growth and development.   |            |
| CO 5.                    | Students should be familiar with the rural development of Uttar Pradesh over the period of time.   |            |
| CO 6.                    | Students should be familiar with the industrial development in India and in Uttar Pradesh.   |            |
| Unit                     | Topics   |            |
| I                        | Structure and Features of Indian Economy: Indian Economy Comparative Development of Indian States.   |            |
| II                       | Agricultural Sector: Institutional Reforms, Technological Change in Agriculture, Agricultural Policy, Policies for Sustainable Agriculture. Agrarian Crisis and Agricultural Labour.   |            |
| III                      | 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.  |            |
| IV                       | The Industrial Sector: Industrial Policy; Public Sector Enterprises and their Performance, Privatization and Disinvestment Debate, Small, Medium and Large-scale Industry, Industrial Labour and Industrial Relation, Industrial Sickness.   |            |
| V                        | Planning in India: Objectives and Strategy of Planning; Success Story of Indian Plans; Strategy of Inclusive Growth, Resource mobilization for Development.  |            |
| VI                       | Nature and Features of Demographic Profile, Status of Natural Resources, Major Factors affecting growth and development in Uttar Pradesh.  |            |
| VII                      | Sectoral growth pattern in Uttar Pradesh; Economic growth in Uttar Pradesh and Indian economy: A comparison; Infrastructural development of Uttar Pradesh.   |            |
| 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). |            |

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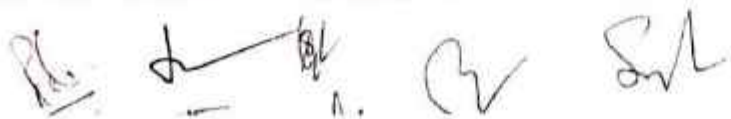
### Suggested Readings:

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.

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**BA 3<sup>rd</sup> Year**  
**Sem. VI**  
**Course II (Optional)**  
**(Theory)**

| Course Code: ECO-305F   | Agriculture Economics  | Credits:5 |
|-------------------------|--|-----------|
| <b>Course Outcomes:</b> |  |           |
| CO 1.                   | Students should be able to comprehend and explain the approaches to economic development with respect to dualistic development.  |           |
| CO 2.                   | Students should be able to understand and explain the basics of agriculture economics.   |           |
| CO 3.                   | Students should be familiar with labour issues in agriculture sector.  |           |
| CO 4.                   | 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.  |           |
| CO 5.                   | Students should be familiar with the institutional initiatives to strengthen the rural and agricultural development to achieve self sufficiency.   |           |
| CO 6.                   | 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.   |           |
| Unit                    | Topics   |           |
| I                       | Agricultural Economics: Meaning, Scope and Nature, Role Of Agriculture in Economic Growth and Development in India. Backward and Forward Linkage between Agriculture and Industry. Farm Incomes and Employment in Indian Agriculture. Employment Elasticity in Indian Agriculture. |           |
| II                      | Models of Agricultural Development: Physiocrat's approach, W. A. Lewis model, Fei & Ranis Model, Schultz Theory of Agricultural Development, Jorgenson's Dual Economy Model.   |           |
| III                     | Agricultural Production Function, Returns to Scale, Cobweb Theorems. Farm Size and Productivity Debate; Theoretical and Empirical Findings. Challenges and Issues Regarding Production and Productivity in India (With Focus On Post Reform Period).                               |           |
| IV                      | Labour in Agriculture- Labour and Work Force in Rural Farm and Non-Farm Sectors. Agricultural Labour- Problem and Policy. Concept and Measurement of Rural Poverty and Employment, Poverty Alleviation Programmes (in brief- the Objectives, Achievements & the Shortcomings).     |           |
| V                       | Current Issues in Indian Agriculture- Poverty and Food Security in India, Agro- Subsidies in India, Export and Imports of Agricultural Commodities, Terms of Trade in Indian Agriculture, WTO and Indian Agriculture-Bali Negotiations   |           |
| VI                      | Land Reforms in India, Green Revolution and the Need for Second Generation, Role of Infrastructural Support for Agricultural Development- Irrigation, Power, Seeds, Fertilizers and Roads.   |           |
| VII                     | Role of Credit in Agricultural Development, Institutional and 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.  |           |



VIII

Agricultural Marketing: Meaning, Concept and Structure, Issues and Challenges in the Marketing of Agricultural Products in India (With Focus On The Post Reform Period). Agricultural Diversification: Meaning, Concept & Issues. Crop Diversification: Meaning, Concept and Issues. Agricultural Price Policy in India.

**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 Condition in 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.
- 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)

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**BA 3rd Year, Sem. VI**  
**Course III (Optional)**  
**(Theory)**

|   |  |                  |
|---|--|------------------|
| <b>Course Code: ECO-306F</b>  | <b>Elementary Mathematics</b>  | <b>Credits:5</b> |
| <b>Course Outcomes:</b>   |  |                  |
| <p>CO 1. Students should be familiar with the basis concepts of mathematics and their application in economics.</p> <p>CO 2. Students are able to comprehend &amp; explain the concepts of straight lines slope etc of mathematics and its application in economics.</p> <p>CO 3. Students should be able to understand basics of differential &amp; its application in economics.</p> <p>CO 4. Students should be able to understand and work with matrices and determine if a given square matrix is invertible.</p> <p>CO 5. Learn about and work with vector spaces and subspaces.</p> <p>CO 6. Students are able to understand and work with the concepts of linear programming &amp; graphic methods.</p>   |  |                  |
| <b>Unit</b>   | <b>Topics</b>  |                  |
| <b>I</b>  | Basic Concepts: Variables, Sets, Functions, Equations, Identities, Systems of Equations  |                  |
| <b>II</b>   | Application of Straight Line System, Slope of the Line, Homogeneous Function.  |                  |
| <b>III</b>  | Theory of Numbers, Indices and Factorization.  |                  |
| <b>IV</b>   | Progression, Growth Rate, Equilibrium.   |                  |
| <b>V</b>  | Basics of Calculus: Concept of Limit, Rules of Differentiation of a Function, Partial Differentiation, Maxima and Minima. Integration of a function.   |                  |
| <b>VI</b>   | Role of Mathematical Technique in Economic analysis: Demand Function, Elasticity of Demand, Cost Function, Revenue Function. Profit Maximization: Constrained Optimisation Problem, Consumer's and Producer's Surplus. |                  |
| <b>VII</b>  | Determinants and Matrix:, Determinants, Various types of Matrices, Inverse of a Matrix , Application of Determinants and matrices in Solution of Linear Simultaneous Equations   |                  |
| <b>VIII</b>   | Linear Programming: Meaning and Methods, Graphic Methods, Application of Linear Programming in Economics.  |                  |
| <b>Suggested Readings:</b>  |  |                  |
| <ol style="list-style-type: none"> <li>1. Agarwal, D.R. (2009): Mathematics for Economics, Vrinda Publications, Delhi. Livernois, John., Rees, Ray., &amp; Hoy, Michael (2012) : Mathematics for Economics , PHI Learning.</li> <li>2. Agarwal, D.R. "Prarambhik Ganitiya Arthshastra (Hindi), Vrinda Publications, Delhi.</li> <li>3. Allen, R.G.D (2008) : Mathematical Analysis for Economics , AITBS.</li> <li>4. Bhardwaj, R.S(2006): Mathematics for Economics and Business, Excel Books.</li> <li>5. Chiang, A.C &amp; Wainwright, Kevin (2013) : Fundamental Methods of Mathematical Economics" McGraw Hill Publication.</li> <li>6. Dowling, Edward.T(2005): Schaum's Easy Outline of Introduction to Mathematical Economics , Tata McGraw Hill Education.</li> <li>7. Madhani, G M K : Mathematics for Economics. Sultan Chand &amp; Sons</li> <li>8. Mishra, J.P. "Ganiteeya Arthshastra", Pratiyogita Sahitya.</li> <li>9. Rosser, Mike (2003) : Basic Mathematics for Economists , Routledge.</li> <li>10. Seth, M.L., " Arthshastramei Prarambhik Ganit", Laxmi Narayan Publications, Agra.</li> <li>11. Sharma, J.K(2007): Business Mathematics, Ane Books Pvt.Ltd.</li> <li>12. Yamane, Taro (2007) : Mathematics For Economists : An Elementary Survey , PHI Learning</li> </ol> |  |                  |

**BA 4th Year, Sem. VII**  
**Course I**

| Course Code: ECO 401F |  | Advanced Microeconomics | Credits:4 |
|-----------------------|--|-------------------------|-----------|
| <b>Unit I</b>         | Equilibrium in Economics, Types of Equilibrium; Cobweb Model. Existence, Uniqueness and Stability of equilibrium; Demand Function, Elasticity of Demand; Analysis of Consumer Behaviour: Marginal Utility Theory, Indifference Curve Technique, Revealed Preference Theory   |                         |           |
| <b>Unit II</b>        | New Dimensions in Consumer Behaviour: Lancaster's Approach to Consumer Theory. Consumer Behaviour under uncertainty: St. Petersburg Paradox, N-M Utility Index, Friedman Savage Hypothesis, Markowitz hypothesis; Consumer's attitude towards Gamble & Insurance; Compensated Demand Function, Expenditure Function, Indirect Utility function: Leibenstein's consumer demand theory: Network externalities. |                         |           |
| <b>Unit III</b>       | Theory of Production: Production Function. Cobb-Douglas, Constant Elasticity of Substitution (CES) production functions. Law of Production: Short-run and Long-run. Technical limit of production; producer's choice of optimum factor combination, Product lines & Expansion path of firm, Technical Progress, Learning Curve Analysis.   |                         |           |
| <b>Unit IV</b>        | Theory of Value: Neo-Classical Theory of firm: Market of Perfect Competition, Monopoly: Bilateral Monopoly, Price-Discrimination, Dead weight loss. Monopolistic Competition: Chamberlin's models, Theory of Excess Capacity, Non-Price Competition. Classical oligopoly models; Modern oligopoly.   |                         |           |
| <b>Unit V</b>         | Basic Concepts & terms of Theory of Games; Types of Strategies, Pure and Mixed Strategy Games, Two-person zero sum game, Cooperative and Non-Cooperative Games, Prisoner's Dilemma model and its implications for market and business firms.   |                         |           |

**Books Recommended:**

- Henderson J, and R.E. Quandt: Microeconomic Theory: A Mathematical Approach, Mc Grow Hill, New Delhi
- Koutsoyiannis A: Modern Microeconomics: ELBS, Macmillan, Tokyo
- Varian, H.R.: Intermediate microeconomics: A Modern Approach, East West Press, New Delhi
- Hirshleifer, J and A Glazer: Price Theory and Applications, Prentice Hall of India, New Delhi
- Browning & Browning: Microeconomic Theory and Application, Kalyani Publications.
- Rubin field & Pindyck: Microeconomics, Maxwell Macmillan.
- H.L. Ahuja: Advanced Economic Theory (Hindi & English)
- Mishra & Puri: Advanced Microeconomics, Himalaya Publishing House.
- M.L. Jhingan: Advanced Economic Theory, Vrinda Publications, Delhi
- P.K. Gupta & D.S. Hira: Operation Research, S. Chand & Company.

**Course Outcomes**

- CO 1.** Enables the student to understand the various behaviours of various economic units such as consumer, producer and firm.
- CO 2.** Enables the student to understand the decision making process of various economic units such as consumer, producer and firm.
- CO 3.** Enables the student to understand the price determination process of firm under different market conditions



**BA 4th Year, Sem. VII**  
**Course II**

| Course Code: ECO 402F | Theory of Public Economics   | Credits:4 |
|-----------------------|--|-----------|
| <b>Unit I</b>         | Role of Government in Organized Society., Branches of Public Finance- Allocation, Distribution and Stabilization, Market Performance- Efficiency in Partial and General Equilibrium, Equity and Social Welfare function, Concept of Bliss Point, Government Intervention and Dead weight loss, Pareto Improvement. Pareto Potential Improvement, Double Edged Criteria, I M D Little Criteria and Theory of Second Best. |           |
| <b>Unit II</b>        | Externalities- Characteristics, Coase Theorem and its Problems, Public Sector solution to Externalities Problems, Externalities and Equity, Welfare gains From Alternative Interventions- Tax versus Regulation: efficiency Comparison and Public Choice rationale.  |           |
| <b>Unit III</b>       | Concepts of Public Goods, Private Goods and Merit Goods; Nature of public goods-Non rival and Non Excludability Principles, Causes of Market Failure -- Imperfections, Decreasing costs, Theories of Social Goods- Samuelson Model, Musgrave's Budget Model, Political Process of Voting (Bowen Model, Black Theorem, Logrolling ) for the Provision of Public Goods, Voting Paradox.                                    |           |
| <b>Unit IV</b>        | Public Expenditure: Structure and Growth of Public Expenditure - Wagner's Law of Increasing State Activities, Wiseman- Peacock hypothesis. Public Expenditure in Relation to Economic Activity, Employment and Income Distribution. Evaluation of Public Expenditure: Cost Benefit Analysis,<br>Public Revenue: Principles of taxation -- Benefit Theory of Taxation, Ability to Pay Theory of Taxation.                 |           |
| <b>Unit V</b>         | Theories of incidence- Elasticity, Cost condition and Incidence, Market Structure and Incidence, Tax Structure and Incidence, Excess burden- Marsallian and Hicksian approach, Indirect tax vs Direct Tax, Effects of taxation on Supply of Labour, Double taxation, Taxation and Incentives, Theory of Tax Structure, changes during economic development. Goods and Service Tax (GST).                                 |           |

**Books Recommended:**

- Musgrave, R.A. and P.B. Musgrave, Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Herber, B.P., Modern Public Finance, Richard D. Irwin, Homewood.
- Musgrave, R.A., The Theory of Public Finance: A Study in Public Economy, Tokyo, McGraw Hill Book Co. and Kogakusha Co., ( International student Edition)
- Musgrave, R.A., Fiscal Systems.
- Houghton, R.W., Public Finance
- Cutt, James., Taxation and Economic Development in India, Frederick A Praegar Publishers, New York.
- Gandhi, V.P., Some Aspects of India's Tax Struture, Vora and Company, Bombay.
- John Cullis & Philips John, Public Finance & Public Chioce: Analytical Perspectives, Oxford University Press, New York

**Course Outcomes**

- CO 1. Enables the student to understand the concepts of social, private and merit goods importance of government in the allocation of resources in social good.
- CO 2. Enables the student to understand the various aspects of public expenditure as well as the theory of public expenditure.
- CO 3. Enables the student to understand the various aspects of taxation as well as theories of taxation.



**BA 4th Year, Sem. VII**  
**Course III**

| Course Code: ECO 403F |   | Indian Economy: Basic Issues | Credits:4 |
|-----------------------|---|------------------------------|-----------|
| Unit I                | National Income: Concept, Trends, Composition and Structural change, Sectoral growth, Income Distribution and Income Inequality, Regional Disparities.  |                              |           |
| Unit II               | Poverty in India: Absolute and Relative, Poverty indices- Poverty Ratio; Poverty Gap Index and Squared Poverty Gap Index; Multi-dimensional Poverty index; Analysis of Poverty in India, Inclusive Growth, Unemployment- Unemployment Rates; Structure and Jobless Growth; Social Welfare Schemes.  |                              |           |
| Unit III              | Population: Labour Force and Occupational Distribution of Population, Population Growth, Population Problem, Latest Census, Population Policy, Planning in India: Plan Models in India, NITI Aayog  |                              |           |
| Unit IV               | Resource Base and Infrastructure: Sources of Energy-Hydro, Thermal and Nuclear, Transport and Communication, Social infrastructure -- Education, Health and Environment, Sustainable Development  |                              |           |
| Unit V                | Agriculture Sector: Role of Agriculture, Interrelationship between Agriculture and Industry, Growth of Indian agriculture. Institutional aspects -- Land reforms, Green Revolution and Need for Second Green Revolution, Technological Change in Agriculture, Agriculture Price Policy of India, Agricultural Finance, Agricultural Marketing, Food Security. |                              |           |

**Books Recommended:-**

- Datt, R. and K.P.M. Sundharam, Indian Economy, S. Chand & Company Ltd., New Delhi.
- Misra, S.K. and V.K. Puri, Indian Economy -- Its Development Experience, Himalaya Publishing House, Mumbai.
- Kapila, Uma., Indian Economy : Since Independence, Acedmic Foundation, Delhi
- Agrawal, A.N., Indian Economy, New Edge International Pvt Limited, New Delhi.
- Government of India, Economic Survey (Annual), Economic Division, Ministry of Finance, New Delhi.
- Ahluwalia, I.J. and I.M.D. Little (Eds), India's Economic Reforms and Development ( Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
- Jalan, B, India's Economic Policy -- Preparing for the Twenty-first Century, Viking, New Delhi.
- Parikh, K.S., India Development Report -- 1999-2000, Oxford University Press, New Delhi.
- Datt, R. (Ed.), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
- Wadhawa, Charan, D., Some Aspects of Indian Economy
- Lucas and Papanek, The Indian Economy-Recent Development and Futre Prospects
- Agrawal, A.N and S.P.Singh., The Economics of Under Development
- Myrdal, Gunnar, Asian Drama (Vols. I and II)
- Hicks, Mukherjee and Ghosh, The Economic Framework of the Indian Economy

**Course Outcomes**

- CO 1. Enables the student to understand the facts and various aspects of basic issues of Indian economy such as national income, poverty, unemployment, population, labour force etc.
- CO 2. Enables the student to understand the planning process and resources base such as natural resources, physical infrastructure and social infrastructure of Indian economy.
- CO 3. Enables the student to understand the situation, problems and prospects of agriculture sector of Indian economy.

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**BA 4th Year, Sem. VII**  
**Course IV**

| Course Code: ECO 404F |   | Advanced Macroeconomics | Credits:4 |
|-----------------------|---|-------------------------|-----------|
| Unit I                | National Income: Concept and Measurement of National Income, Composition of National Income, Measuring Macro Variables, Keynesian Consumption Function, Determination of National Income in Closed Economy                            |                         |           |
| Unit II               | Determination of National Income with Government Expenditure and Taxation, Determination of National Income in an Open Economy, Multiplier Analysis, Concept of Inflationary Gap.   |                         |           |
| Unit III              | Post Keynesian Consumption Function: Absolute Income Hypothesis, Relative Income Hypothesis, Life Cycle Hypothesis and Permanent Income Hypothesis of Consumption Function, Consumption Under Uncertainty- The Random Walk Hypothesis |                         |           |
| Unit IV               | Investment Theory: Autonomous and Induced Investment, Marginal Efficiency of Capital Theory of Investment, Accelerator Theory of Investment, Tobin's Theory of Investment.  |                         |           |
| Unit V                | Multiplier and Acceleration Principles, Interaction between Multiplier and Accelerator, Concept of Super Multiplier.  |                         |           |

**Books Recommended :**

- Ackley, G., Macroeconomics : Theory and Policy, Macmillan Publishing Company, New York.
- Samuelson A. & William D Nordhaus: Macroeconomics, (19<sup>th</sup> edition), McGraw Hill Publication.
- Shapiro, E., Macroeconomic Analysis, Galgotia Publications, New Delhi.
- N Gregory Mankiw: Macroeconomics, (sixth edition), Low Price Edition.
- David Romar: Advanced Macroeconomics, (4<sup>th</sup> edition), McGraw Hill Publication.
- H L Ahuja: Macroeconomics: Theory and Policy, (20<sup>th</sup> edition), S Chand Publication.
- Keynes, J.M., The General Theory of Employment, Interest and Money, Macmillan, London.
- Branson, W.A., Macroeconomic Theory and Policy, Harper and Row, New York.
- Dornbusch, R. and F. Stanley, Macroeconomics, McGraw Hill, Inc., New York.
- Surrey, M.J.C.(Ed.), Macroeconomic Themes, Oxford University Press, Oxford Press.

**Course Outcomes**

- CO 1. Enables the student to understand the concept of national income, composition and methods of national income and determination of national income.
- CO 2. Enables the student to understand the Investment Multiplier and super multiplier, Concept of Inflationary Gap and Post Keynesian Consumption Function.
- CO 3. Enables the student to understand the various Consumption hypotheses and Theory of Investment

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**BA 4th Year, Sem. VII**  
**Course V**

| Course Code: ECO 405 F | Fundamentals of Statistics  | Credits:4 |
|------------------------|---|-----------|
| Unit I                 | Measures of Central Tendencies: Mean, Median, Mode, Quartiles and Percentiles. Measures of Dispersion: Mean, Standard Deviation and Lorenz Curve, Skewness, Moments upto fourth order and Kurtosis.   |           |
| Unit II                | Correlation Analysis: Assumptions and Concept of Correlation, Karl Pearson's and Spearman's Rank Correlation Coefficients and their Properties, Partial and Multiple Correlations; Association of Attributes, Independence of Attributes, Coefficients of Association.  |           |
| Unit III               | Time Series and Regression Analysis: Components of a Time Series, Fitting a Linear and Non-linear trend by Least Squares Method; Measurement of seasonal variations; Regression Analysis: Meaning and Uses, Regression Lines and Regression Equations, Regression Coefficients, Regression Equations by Least Squares Method; |           |
| Unit IV                | Index Number: Concept and Classification of Index Number, Chain Base and Fixed Base Index Number, Laspeyre, Paasche and Fisher Index Number, Tests for an Ideal Index Number.   |           |
| Unit V                 | Interpolation and Extrapolation: Concept, Assumptions and Uses of Interpolation and Extrapolation. Methods of Interpolation and Extrapolation -- Parabolic Curve method, Binomial Expansion, Newton's Formula and Lagrange's Method.  |           |

**Books Recommended:**

- Mood, A.M. and P.A. Graybill: Introduction to the Theory of Statistics.
- Yule, G.U. and M.G. Kendall: An Introduction to the theory of Statistics.
- Gupta, S.C. and V.K. Kapoor: Fundamentals of Mathematical Statistics (eighth edition), S.Chand & Sons Publications, New Delhi.
- Gupta, S.C. and V.K. Kapoor: Fundamentals of Applied Statistics (third edition), S. Chand & Sons Publications, New Delhi.
- Gupta, S.C. and V.K. Kapoor: Elements of Mathematical Statistics (fourth edition), S. Chand & Sons Publications, New Delhi.
- Elhance, D.N.: Fundamentals of Statistics (Hindi Ed.)
- Agarwal, D.R.: Statistics for Economists, Vrinda Publications, New Delhi.
- Gupta, B.N.: Statistics (fourth edition), Sahitya Bhawan Publication, Agra (UP).
- शुक्ला, एस0एम0 एवं एस0पी0 सहाय: सांख्यिकी विश्लेषण, साहित्य भवन पब्लिकेशन, आगरा, 30प्र0।

**Course Outcomes**

- CO 1.** Enables the student to understand the various methods of statistical analysis such as measure of central tendency, measures of dispersion.
- CO 2.** Enables the student to understand the correlation analysis, Time series analysis and regression analysis.
- CO 3.** Enables the student to understand the Concept of Index Number and the techniques of Interpolation and Extrapolation

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**BA 4th Year, Sem. VII**  
**Course VI**

| <b>Course Code: ECO 406F</b> |  | <b>Industrial Economics</b> | <b>Credits:4</b> |
|------------------------------|--|-----------------------------|------------------|
| <b>Unit I</b>                | Meaning and Scope of Industrial Economics, Basic Concepts of Industrial Economics -- Concept and Types of Firm, Concepts of Industry, Market, Market Structure, Market Power, Market Conduct and Market Performance, Profit maximizing Goals and Alternative Goals of a Firm.  |                             |                  |
| <b>Unit II</b>               | Expansion and Growth of Firm: Concept, Types and Motives of Diversification, Vertical Integration, Merger and Takeover. Growth of Firm: Need for Growth of a firm, Factors Affecting Growth of Firm.   |                             |                  |
| <b>Unit III</b>              | Market Innovation and Market Concentration: Concept of Innovation Process -- Invention, Innovation, and Imitation. Measurement of Innovation Activities, Determinants of Innovation Activities. Industrial Concentration – Concept, Types and Measurement of Industrial Concentration, Industrial Concentration in India.                              |                             |                  |
| <b>Unit IV</b>               | Project Appraisal: Cash - Flow Analysis of a Project, Break - even - Point, Pay - back Period. Margin of Safety, Contribution, Profit - Volume Ratio. Methods of Project Appraisal: Pay -back Period Method, Return on Capital Method, Cost-Benefit Analysis - Net Present Value Method, Internal Rate of Return Method, Social Cost-Benefit Analysis. |                             |                  |
| <b>Unit V</b>                | Industrial Location analysis and Industrial Finance: Determinants of Industrial Location, Theories of Industrial Location -- Weber Theory, Sargent Florence Theory. Industrial Finance: Need for Industrial Finance -- Short-term, Medium-term and Long- term Finance, Sources of Industrial Finance -- Internal and External Sources.                 |                             |                  |

**Books Recommended :**

- Divine, P.J. and R.M. Jones et. al.: *An Introduction to Industrial Economics*, George Allen and Unwin Ltd., London.
- Hay, D. and D.J. Morris.: *Industrial Economics -- Theory and Evidence*, Oxford University Press, London.
- Bains, J.S.: *Industrial Organisation*, Cheltenham, U.K.
- Barthwal, R.R.: *Industrial Economics* (second edition), New Age International Pvt. Ltd., New Delhi.
- Martin, Stephen: *Industrial Economics – Economic Analysis and Public Policy*, Macmillan Publishing Company, London.
- Smith, D.M.: *Industrial Location -- An Economic and Geographic Analysis*, John Wiley, New York.
- Prasanna and Chandra: *Project Appraisal and Investment Planning*.
- Singh, A and Sadhu, A.N.: *Industrial Economics*, Himalaya Publishing House, New Delhi.
- के० आर० त्रिपाठी: *औद्योगिक अर्थशास्त्र*, युनिवर्सिटी पब्लिकेशन, नई दिल्ली ।

**Course Outcomes**

- CO 1.** Enables the student to understand the various terms used in industrial economics such as firm, industry, market, market structure etc. It also enables the student to understand the various forms of firm that exist in an industrial society.
- CO 2.** Enables the student to understand the various conducts such as product differentiation, product diversification, vertical integration, merger, acquisition, takeover, innovation etc. performed by a firm to achieve its goal.
- CO 3.** Enables the student to understand the various problems such as industrial concentration, industrial inefficiency that may exist in an industrial society

**BA 4th Year, Sem. VII**  
**Course VII**


| <b>Course Code: ECO 407F</b> |   | <b>Indian Finance</b> | <b>Credits:4</b> |
|------------------------------|---|-----------------------|------------------|
| <b>Unit I</b>                | Federal Finance: Principles and Problems, Meston Award, Neimeyer Award, Deshmukh Award; Financial Federalism under Constitution of India: Allocation of Resources, Salient features of Indian system.   |                       |                  |
| <b>Unit II</b>               | Indian Finance Commission: Role and Importance; Resource Transfer to states: Tax Sharing and Grants; Recommendation of successive Finance Commission; Sixteenth Finance Commission: Terms of Reference, Issues and Approaches, Recommendations, Recent Finance Commissions's Recommendations. |                       |                  |
| <b>Unit III</b>              | Public Debt in India; Deficit Financial in India; Fiscal Sector Reforms in India. Classification of Budgets: Functional Economic Performance and Zero Base Budgeting; Indian Budget.  |                       |                  |
| <b>Unit IV</b>               | Revenue and Expenditure of State Government; Problem of State Finances; Central Government Support to State Finance; Local Finance: Sources and Problems  |                       |                  |
| <b>Unit V</b>                | Sources of Revenue of Central Government; Indian Tax System: Direct and Indirect Taxes; Chelliah Committee, Kelkar Committee-Task Force Recommendations; GST: Features and Experiences  |                       |                  |

**Books Recommended :**

- Kaldor, N., Indian Tax Reform
- James Cutt, Taxation of Economic Development of India
- Bhargava, R.N., A Manual of Economic and Functional Classification of Government Transaction
- U.N., A Manual for Programme and Performance Budgeting
- N.C.A.E.R., Economic Functional Classification of Central and State Government Budget 1957-58
- Govt. of India, Annual Budgets

**Course Outcomes:**

- CO1. Enables the student to understand the theory of Federal Finance as well as idea, Principles and Problems of Fiscal Federalism.
- CO2. Enables the student to understand the India's long – term Fiscal Policy and Fiscal Sector Reforms in India.
- CO3. Enables the student to understand the Tax Structure, Tax Policy and Budget formation process in India.



**BA 4th Year, Sem. VIII  
Course VIII**

| <b>Course Code: ECO 408F</b> |   | <b>Modern Microeconomics</b> | <b>Credits:4</b> |
|------------------------------|---|------------------------------|------------------|
| <b>Unit I</b>                | Critique to Neo-Classical Theory of Firm, Modern Theories of Firm: Managerial Theories of Firm: Baumol, Marris and Williamson. Limit Price Theory, Pricing Strategies.  |                              |                  |
| <b>Unit II</b>               | Micro Distribution Theories: General Theory of Factor Pricing, Classical and Modern theories of Rent, Theories of Profit – Knight and Shackles. IS-LM Curves and Interest Rate determination; Adding-up Problem.  |                              |                  |
| <b>Unit III</b>              | Normative Approach to Economics: Old Welfare Economics: A.C. Pigou; New Welfare Economics: Pareto optimality Conditions and Its Violation, Kaldor-Hicks Criterion and Scitovsky Paradox; Social Welfare Function, Social Choice Theory: Arrow, Rawl's Theory of Justice. Theory of Second Best. |                              |                  |
| <b>Unit IV</b>               | Linear Programming Technique: Basic Terms, Problem Formulation. Solution of LPP: Graphical Method & Simplex Method. Primal & Dual Problems. Input-Output Problem: Nature and Utility; Input-output Model, Hawkin- Simon Conditions.   |                              |                  |
| <b>Unit V</b>                | Economics of Information: Properties and Value of Information; Asymmetric Informations: Problems of Adverse Selection & Moral Hazard. Insurance and Moral Hazard Problem; Market Signalling In labour market; Wage Efficiency Model; Principal-Agent Problem and Solution.                      |                              |                  |

**Books Recommended:**

- Dr. Sandeep Kumar; Vayashiti Arthshastra Me Naye Vikas, ASR Publications, Ghaziabad 201102
- Henderson J, and R. E. Quandt: Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Koutsoyiannis A.: Modern Microeconomics: ELBS, Macmillan, Tokyo.
- Varian, H. R.: Intermediate Microeconomics: A Modern Approach, East West Press, New Delhi.
- Hirshleifer, J. and A. Glazer: Price Theory and Applications, Prentice Hall of India, New Delhi.
- Browning & Browning: Microeconomic Theory and Applications, Kalyani Publications.
- Rubin Field & Pindyck: Micro Economics, maxwell Macmillan.
- H.L. Ahuja: Advance Economic Theory (Hindi & English)
- Mishra & Puri: Advance Microeconomic, Himalaya Publishing House.
- M.L. Jhingan: Advance Economic Theory, Vrinda Publications, Delhi
- P. K. Gupta & D. S. Hira: Operation Research, S. Chand & Company.
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**Course Outcomes**

- CO 1.** Enables the student to understand the Alternative Theory of Firms, Input-Output Analysis and Linear Programming as well as Utility of Input-Output Analysis Linear Programming Technique in economic analysis.
- CO 2.** Enables the student to understand the Theory of Factor Pricing, Economic Welfare Criterion, Pareto Optimality Conditions, Social Welfare Function.
- CO 3.** Enables the student to understand the Theories of Search, Economics of Information, Asymmetric Information.

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**BA 4th Year, Sem. VIII**  
**Course IX**

| Course Code: ECO 409F | Fiscal Policy and Federalism  | Credits:4 |
|-----------------------|---|-----------|
| <b>Unit I</b>         | Fiscal Policy: Objectives and Instruments, Types – Expansionary and Contractionary, Compensatory Finance, Functional Finance, Effectiveness of tools of fiscal policies: Closed and Open Economy, Interdependence of fiscal and monetary policies, Fiscal policy for developing economies, Concept of Crowding out Effect |           |
| <b>Unit II</b>        | The Budget: Concept, Types, Budget Making and the Budgetary Process, Theory of Optimum Budget. Zero-base Budgeting system; Performance based budgeting system.  |           |
| <b>Unit III</b>       | Deficits: Concept and Types, Deficit Financing, Public Debt: Concept, Nature and Management, Burden of Public debt, Methods of Redemption.  |           |
| <b>Unit IV</b>        | Fiscal Federalism: Multi Level Government Importance, Principles & Problems, Optimal Community size, Optimal Services Level, Optimal Structure of Community and Service, Vertical and Horizontal Fiscal Imbalances.   |           |
| <b>Unit V</b>         | Fiscal federalism in India, Union-/State Financial Relations in India, Reports of Finance Commission in India; Problems of States' resources and indebtedness, Problems of Local Finance.   |           |

**Books Recommended:**

- Musgrave, R.A. and P.B. Musgrave, Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.
- Herber, B.P., Modern Public Finance, Richard D. Irwin, Homewood.
- Musgrave, R.A., The Theory of Public Finance: A Study in Public Economy, Tokyo, McGraw Hill Book Co. and Kogakusha Co. (International student Edition)
- Musgrave, R.A., Fiscal Systems.
- Houghton, R.W., Public Finance
- Cutt, James., Taxation and Economic Development in India, Frederick A Praeger Publishers, New York.
- Gandhi, V.P., Some Aspects of India's Tax Structure, Vora and Company, Bombay.
- John Cullis & Philips John, Public Finance & Public Choice: Analytical Perspectives, Oxford University Press, New York

**Course Outcomes**

- CO 1.** Enables the student to understand the Nature and Management Public Debt, Budget Making and the Budgetary Process and various types of budgeting system such as Zero-base Budgeting, Performance based budgeting etc.
- CO 2.** Enables the student to understand the Nature and functioning of Fiscal Policy, Interdependence of fiscal and monetary policies.
- CO 3.** Enables the student to understand the Principles & Problems of Fiscal Federalism, Union- /State Financial Relations in India and Reports of Finance Commission in India.



**BA 4th Year, Sem. VIII**  
**Course X**

| Course Code: ECO 410F | Indian Industrial and External Sector  | Credits:4 |
|-----------------------|--|-----------|
| Unit I                | Industrial Sector: Growth and Structure of Indian industries; Industrial Productivity. Industrial policy of India; Policies towards public sector enterprises -- Privatisation and Disinvestment Policy. |           |
| Unit II               | Concept and classification of SSIs, Role of SSIs in Indian Economy, Policy towards cottage and small-scale industries; Industrial sickness and problem of under utilisation of capacity.                 |           |
| Unit III              | Industrial labour and industrial relation, issues in labour market reforms, Exit policy.   |           |
| Unit IV               | External Sector: Composition and direction of foreign trade of India; Balance of payments situation; Trade and exchange rate policies, FEMA; Inflow and outflow of foreign capital and MNCs in India.    |           |
| Unit V                | Economic Reforms: Fiscal sector reforms, Financial sector reform; Globalisation of Indian economy, WTO and its impact on Indian economy; Issues in competition and safety nets in Indian economy.        |           |

**Books Recommended:-**

- Datt, R. and K.P.M. Sundharam, Indian Economy, S. Chand & Company Ltd., New Delhi.
- Misra, S.K. and V.K. Puri, Indian Economy -- Its Development Experience, Himalaya Publishing House, Mumbai.
- Kapila, Uma., Indian Economy : Since Independence, Academic Foundation, New Delhi
- Agrawal, A.N., Indian Economy, New Edge International Pvt Limited, New Delhi.
- Government of India, Economic Survey (Annual), Economic Division, Ministry of Finance, New Delhi.
- Ahluwalia, I.J. and I.M.D. Little (Eds), India's Economic Reforms and Development ( Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
- Jalan, B, India's Economic Policy -- Preparing for the Twenty-first Century, Viking, New Delhi.
- Parikh, K.S., India Development Report -- 1999-2000, Oxford University Press, New Delhi.
- Datt, R. (Ed.), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.

**Course Outcomes**

- CO 1. Enables the student to understand the Different aspects and problems as well as policies of industrial sector of Indian economy.
- CO 2. Enables the student to understand the Different aspects and problems as well as policies of external sector of Indian economy.
- CO 3. Enables the student to understand the Process of Economic Reforms in India, globalization of Indian economy, Issues in competition and safety nets in Indian economy.

**BA 4th Year, Sem. VIII**  
**Course XI**

| Course Code: ECO 411F | Modern Macroeconomics  | Credits:4 |
|-----------------------|--|-----------|
| <b>Unit I</b>         | Post-Keynsian Developments in Macroeconomics: The IS-LM Model, Inflation-Unemployment Trade-off. Supply-Side Economics- Basic Propositions.  |           |
| <b>Unit II</b>        | The New Classical Economics:- Rational Expectation Model – Lucas Critique, Lucas Aggregate Supply Function, Lucas Rational Expectation Model. The New Keynesian Economics: Some Common Elements of New Keynesian Models – Mankiw's New Keynesian Models. |           |
| <b>Unit III</b>       | Economic Fluctuations: Types of fluctuations, Theories of Trade Cycle: Monetary Theories, Samuelson's Theory, Hicks Theory, Kaldor's Theory, Real Business Cycle Theory. Aggregate Demand – Aggregate Supply Model (with Price Flexibility).             |           |
| <b>Unit IV</b>        | Growth Theories: Meaning and Determinants of Economic Growth, Classical Theory, Harrod Model, Domar Model, Solow Model, Concept of Endogenous Growth.  |           |
| <b>Unit V</b>         | Economic Policy: Objectives and Role of Economic Policy, Theory and Tools of Fiscal Policy. Theory and Tools of Monetary Policy. Effectiveness of Fiscal and Monetary Policy: IS-LM Approach.  |           |

**Books Recommended :**

- Ackley, G., Macroeconomics : Theory and Policy, Macmillan Publishing Company, New York.
- Samuelson A. & William D Nordhaus: Macroeconomics, (19<sup>th</sup> edition), McGraw Hill Publication.
- Shapiro, E., Macroeconomic Analysis, Galgotia Publications, New Delhi.
- N Gregory Mankiw: Macroeconomics, (sixth edition), Low Price Edition.
- David Romar: Advanced Macroeconomics, (4<sup>th</sup> edition), McGraw Hill Publication.
- H L Ahuja: Macroeconomics: Theory and Policy, (20<sup>th</sup> edition), S Chand Publication.
- Keynes, J.M., The General Theory of Employment, Interest and Money, Macmillan, London.
- Branson, W.A., Macroeconomic Theory and Policy, Harper and Row, New York.
- Dornbusch, R. and F. Stanley, Macroeconomics, McGraw Hill, Inc., New York.
- Surrey, M.J.C.(Ed.), Macroeconomic Themes, Oxford University Press, Oxford Press.

**Course Outcomes**

- CO 1. Enables the student to understand the Different aspects and problems as well as basic propositions of Modern Macroeconomics.
- CO 2. Enables the student to understand the various models of modern macroeconomics
- CO 3. Enables the student to understand the Process of Economic policy in India, theory and tools of monetary policy as well as effectiveness of fiscal and monetary Policy

BA 4th Year, Sem. VIII

Course XII

| Course Code: ECO 412F | Research Methodology  | Credits:4 |
|-----------------------|---|-----------|
| Unit I                | Research Methodology: Meaning and Objectives of Research, Motivation in Research, Types of Research, Significance of Research, Research Method Vs. Methodology, Research Process, Criterion of Good Research  |           |
| Unit II               | Research Problem: Definitions of Research Problem, Selecting the Research Problem, Techniques involved in Defining a Problem; Research Design: Meaning of Research Design, Need for Research Design, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs    |           |
| Unit III              | Theoretical Statistical Distribution: Binomial Distribution, Poisson Distribution and Normal Distribution -- Properties and Uses, Sampling Theory: Universe and Sample, Parameter and Statistic, Sampling Distribution, Standard Error, Sampling Error, Methods of Sampling- Probability and Non Probability. |           |
| Unit IV               | Elements of Hypothesis Testing: Concept of Hypothesis, Null and Alternative Hypothesis, Type I and Type II Error, Level of Significance and Critical Region, One-tail and Two-tail Tests, Procedure for Hypothesis Testing.   |           |
| Unit V                | Test of Significance: Large and Small Sample Tests, Chi Square Test and Goodness of fit, Contingency Table and Goodness of fit.   |           |

**Books Recommended:**

- Kothari, C. R.: Research Methodology: Methods and Techniques, New Age International Publisher, New Delhi
- Mood, A.M. and P.A. Graybill: Introduction to the Theory of Statistics.
- Yule, G.U. and M.G. Kendall: An Introduction to the theory of Statistics.
- Gupta, S.C. and V.K. Kapoor: Fundamentals of Mathematical Statistics (eighth edition), S.Chand & Sons Publications, New Delhi.
- Gupta, S.C. and V.K. Kapoor: Fundamentals of Applied Statistics (third edition), S. Chand & Sons Publications, New Delhi.
- Gupta, S.C. and V.K. Kapoor: Elements of Mathematical Statistics (fourth edition), S.Chand & Sons Publications, New Delhi.
- Elhance, D.N.: Fundamentals of Statistics (Hindi Ed.)
- Agarwal, D.R.: Statistics for Economists, Vrinda Publications, New Delhi.
- Gupta, B.N.: Statistics (fourth edition), Sahitya Bhawan Publication, Agra (UP).
- शुक्ला, एस०एम० एवं एस०पी० सहाय: सांख्यिकी विश्लेषण, साहित्य भवन पब्लिकेशन, आगरा, 30901

**Course Outcomes**

- CO 1. Enables the student to understand the Introduction of research methodology, Research Problem and Research Design
- CO 2. Enables the student to understand the various types of Theoretical Statistical Distributions such as Binomial Distribution, Poisson Distribution, Normal Distribution etc.
- CO 3. Enables the student to understand Sampling Theory and various methods of sampling.
- CO 4. Enables the student to understand the elements of hypothesis testing and various Statistical testing procedures.

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BA 4th Year, Sem. VIII

Course XIII

| Course Code: ECO 413F | Indian Economic Thought   | Credits:4 |
|-----------------------|---|-----------|
| Unit I                | Ancient and medieval Thoughts; Sources of Thoughts; Dhram, Arth, Kaam, Moksha, Wealth and Its Use; Micro Foundations of Human Welfare; Srimad Bhagwat Geeta and Ancient Thoughts; Brahaspati and Shukracharya, Somdev Suri. |           |
| Unit II               | Economic Thoughts of Kautilya: Arth (Wealth), Public Finance; Varta, Functions of State; Thoughts of Thiruvalluvar.   |           |
| Unit III              | Gadhian Economics: Sarvoday Arthshastra: Trusteeship; Rural Reconstruction, Industrialization and Mechanization, Khadi: Evaluation of Gadhian Economic Thoughts.  |           |
| Unit IV               | Modern Economic Thinking in India: Indian Nationalist Economists: Dada Bhai Naoroji; M.G.Ranade; R.C.Dutt, G.K.Gokhle; Vishveshvraya' K.T.Shah, RadhaKamal Mukherjee, C.N.Vakil, D.R.Godgil.                                |           |
| Unit V                | Economic Thouths of J.K.Mehta, B.R.Ambedkar, Ram Manohar Lohiya, Amartya Sen, Jagdish Bhagwati and Pt. Deendayal Upadhyaya.   |           |

**Books Recommended:**

- Kumar Sandeep (2023): Institutional Economics & Indian Economic Thoughts, Shree Publication & Distributers, New Delhi.
- Eric Roll: A History of Economic Thought , Faber & Faber.
- Charles Guide & Charles Rist: A History of Economic doctrines, George G. Harrap & Co.
- Lewis H. Haney: History of Economic Thought, Macmillan & Co.
- T.W. Hutchison: A Review of Economic Doctrine.
- Bell John Fred: A History of Economic Thought, The Ronald Press.
- Mark Blaug: Economic Theory in Retrospect.
- T.N. Hajela: History of Economic Thought, Ane's Student Edition, Ane Books Pvt. Ltd, New Delhi.
- H. L. Bhatia: History of Economic Thought, Vikas Publishing House Pvt. Ltd, New Delhi.
- चतुर्वेदी महेश चन्द्र: आर्थिक चिन्तन का इतिहास, चतुर्वेदी मिथिलेश: साहित्य भवन पब्लिकेशन्स ए आगरा

**Course Outcomes:**

- CO 1. Enables the student to understand the Economic Thoughts in Pre Classical Period, Idea of Subjectivism and Marginalism.
- CO 2. Enables the student to understand the Economic Thoughts in Neo Classical Period, Idea of Institutionalism.
- CO 3. Enables the student to understand the Economic Thoughts on Welfare Economics.

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BA 4th Year, Sem. VIII

Course XIV

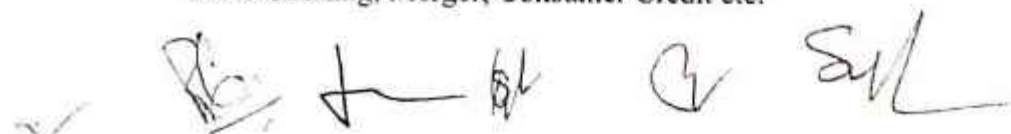
| Course Code: ECO 414F | Indian Financial System   | Credits:4 |
|-----------------------|---|-----------|
| Unit I                | Meaning, Importance & Components of Financial System in India- Banking Institution; RBI, Public Sector Banks, Private Sector Banks, Regional Rural Banks and Cooperative Banks.   |           |
| Unit II               | Non-Banking Institutions- Meaning, Role and Growth of Non-Banking Financial Institutions in India. Development Finance Institutions, Investment Institutions- LIC, GIC, UTI, Specialized Institutions. Non-Banking Financial Companies.                                     |           |
| Unit III              | Indian Financial Market- Money Market and Capital Market. Money Market- Unorganized and Organised Money Market, Call Money Market. Primary Capital Market, Secondary Capital Market, Derivative Market.   |           |
| Unit IV               | Financial Instrument- Short Term, Medium Term and Long Term. Primary Securities, Secondary Securities- Debt and Equity, Shares- Ordinary and Preferential Shares, Types of Debenture, Commercial Papers, Certificates of Deposits.  |           |
| Unit V                | Financial Services- Meaning of Financial Services- Leasing, Hire Purchase, Consumer Credit, Bill Discount, Venture Capital, Housing Finance. Merchant Banking- Credit Rating, Debt Restructuring, Insurance, Factoring, Stock Broking, Merger and Financial Sector Reforms. |           |

**Books Recommended:**

- Bhole, L.M., Financial Markets and Institution, Tata McGraw Hill (TMH) Publication, New Delhi.
- Machiraju, 'Indian Financial System' - Vikas Publication House, 2nd Edition, 2002.
- Khan, M.Y., 'Indian Financial System- Theory and Practice', Tata McGraw Hill (TMH) Publication, New Delhi.
- Bharati Pathak, 'The Indian Financial System', Pearson Education Publication, New Delhi, 2009.
- Varshney P.N., & Mittal D.K., 'Indian Financial System', Sultan Chand & Sons, New Delhi, 2002.
- Annual Reports of Major Financial Institution in India.

**Course Outcomes**

- CO 1. Enables the student to understand the Importance and Components of Financial System of India as well as Banking Institutions
- CO 2. Enables the student to understand the Role and Growth of Non-Banking Financial Institution in India.
- CO 3. Enables the student to understand the various Indian Financial Market and Financial Instruments.
- CO 4. Enables the student to understand the various Financial Services such as Credit Rating, Stock Broking, Merger, Consumer Credit etc.



BA 4th Year, Sem. VIII

Course XV

| Course Code: ECO 415F | Elementary Econometrics   | Credits:4 |
|-----------------------|---|-----------|
| Unit I                | Methodology of Econometrics, Economics and Econometrics, Method of Ordinary Least Squares, Two-Variable Linear Regression Model, Best Linear Unbiased Estimator, Significance Tests of Parameters, Maximum Likelihood Estimators -- MOM and GMM Estimators. |           |
| Unit II               | Multivariable Linear Regression Model -- Estimation and Properties of Estimators, Test of Overall Significance of the Regression.   |           |
| Unit III              | Heteroscedastic Disturbance, Problem of Autocorrelation, Generalized Least Squares: Aitken's Procedure, Properties of GLS Estimators.   |           |
| Unit IV               | Problem of Misspecification and Multicollinearity, Restricted Least Squares. Instrumental Variables, Errors in Variables, Dummy Variables, Ridge Regression.  |           |
| Unit V                | Simultaneous Equation Model, Structural and Reduced Form, Identification Problem -- Rank and Order Condition, Simultaneous Equation Bias, Indirect Least Squares Method, Estimation of Production and Cost Function.  |           |

**Books Recommended:**

- Gujarati, D.N.: *Basic Econometrics* (fourth edition), McGraw Hill.
- Johnston, J.: *Econometric Methods*, McGraw Hill.
- Madala, G.S.: *Econometrics* (third edition), McGraw Hill.
- Klein, L.R.: *Text Book of Econometrics*
- Theil, H.: *Principles of Econometrics*
- Kmenta, J.: *Elements of Econometrics*
- Imtriligator, M.D.: *Econometric Models -- Techniques and Applications*.

**Course Outcomes:**

- CO 1. Enables student to understand methodology of econometrics and various tools of mathematical analysis of economic problems.
- CO 1. It develops quantitative analytical skill to solve economic problems of real worlds.
- CO 2. It develops skill to give practical quantitative estimates of production functions, demand, demand forecasting, etc.
- CO 3. It prepares students for mathematical treatments of economic issues in modern times.

