R.K.D.F. UNIVERSITY, BHOPAL

MASTER OF ARTS (Ecnomics) (NEP)

First Year

Scheme

The structure of the course will comprise Four-Papers in each Semester.

First Semester

S no	Subject Code	Subject Title	Marks Allotted							
			Assignment Marks		Theory Marks		Practical Marks		Total Marks	Credit
			max	min	max	min	max	min		
1	MAEC-101	Micro Economics	40	16	60	24			100	5
2	MAEC-102	Public Economics	40	16	60	24			100	5
3	MAEC-103	Mathematics for Economics	40	16	60	24			100	5
4	MAEC-104	History of Economics Thought	40	16	60	24			100	5
5	MAEC-105	Internship/Apprenticeship /Seminar					100	60	100	2
Total									500	22

Note-Lecture timing15 Hour/Unit

R.K.D.F. UNIVERSITY, BHOPAL

MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – I

Course	Subject	Subject Code
M.A.(Economics)	**Micro Economics**	**MAEC-101**

Course Learning outcomes (CLO)
On successful completion of this course, the students will be able to:

1. **Economic Thinking:** Develop logical, analytical, and critical thinking for individual and firm-level decisions.
2. **Analytical Skills:** Interpret and analyze economic data, models, and diagrams effectively.
3. **Problem-Solving:** Apply microeconomic concepts to real-world issues and policy challenges.
4. **Quantitative Reasoning:** Use numbers, graphs, and functions to explain and predict economic outcomes.
5. **Career & Policy Awareness:** Gain insight for public policy, further studies, and careers in economics, business, or finance.

Unit 1: Introduction to Microeconomics

- Introduction to Economics: Principles of Economics, Scarcity and Choice.
- Production Possibility Curve; Marginal and Incremental Concepts.
- Methodological Foundations: Approaches to Study Economics (Deductive and Inductive).
- Concepts of Equilibrium: Static, Comparative Statics, and Dynamic Analysis.
- Introduction to Microeconomics: Differences and Similarities between Micro and Macro Economics.

Unit 2: Consumer Behavior

- Cardinal and Ordinal Utility Analysis.
- Indifference Curve Approach and Budget Constraints.
- Income and Substitution Effects: Hicksian and Slutsky Methods; Price Effect.
- Revealed Preference Theory.
- Consumer Surplus and Duality in Consumer Theory.
- Traditional Consumer Preferences: Influence of cultural and religious norms; Concepts of **Aparigraha** (non-possessiveness) and **Sanyam** (restraint) on consumption.

Unit 3: Demand Analysis

- Law of Demand and Demand Curve; Exceptions to the Law of Demand.
- Demand Function and Determinants.
- Movements and Shifts in Demand Curve.
- Concept and Types of Elasticity of Demand.

Unit 4: Theory of Production and Costs

- Production Functions: Short-Run and Long-Run Analysis.
- Laws of Returns: Law of Variable Proportions and Returns to Scale.
- Isoquants and Isocost Lines.
- Cost Concepts: Total, Average, Marginal, and Opportunity Costs.
- Short-Run and Long-Run Cost Curves.
- Indigenous Production Systems:
    - Artisans, weavers, potters – small-scale firm behavior.
    - Cost minimization in traditional agriculture and crafts.
    - Returns to traditional knowledge in agriculture (e.g., crop rotation, use of cow dung as input).

Unit 5: Market Structures

- Perfect Competition: Characteristics, Price and Output Determination, Implications.
- Monopoly: Price Determination, Price Discrimination, Implications.
- Monopolistic Competition: Product Differentiation, Selling Costs, Implications.
- Oligopoly Models: Cournot Model, Kinked Demand Curve, Implications.
- Collusive and Non-Collusive Oligopoly.
- Market Structures in Indian Villages:
    - Weekly markets (haats) as forms of imperfect competition.
    - Pricing and informal institutions in local markets.
    - Case Study: Traditional Handloom Industry.

Suggested Readings:

1. Ahuja, H.L. *Advanced Economic Theory (Microeconomic Analysis)*, S. Chand & Company Ltd., New Delhi, India, 2022, 22nd Edition.
2. Koutsoyiannis, A. *Modern Microeconomics*, Macmillan Publishers, London, UK, 2003, 2nd Edition (Reprinted).
3. Pindyck, R.S., & Rubinfeld, D.L. *Microeconomics*, Pearson Education, New Delhi, India, 2020, 9th Edition.
4. Varian, H.R. *Intermediate Microeconomics: A Modern Approach*, W.W. Norton & Company, New York, USA, 2019, 9th Edition.
5. Mansfield, E. *Microeconomics: Theory and Applications*, W.W. Norton & Company, New York, USA, 2000, 11th Edition.
6. Baumol, W.J., & Blinder, A.S. *Microeconomics: Principles and Policy*, Cengage Learning, Boston, USA, 2020, 14th Edition.
7. Jhingan, M.L. *Microeconomic Theory*, Vrinda Publications (P) Ltd., Delhi, India, 2023, Latest Edition.

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – I

Course	Subject	Subject Code
M.A.(Economics)	**Public Economics**	**MAEC-102**

Course Learning Outcomes (CLO)

On successful completion of this course, the students will be able to:

1. Understand the need for government intervention in the economy.
2. Analyse taxation and public expenditure principles.
3. Evaluate fiscal policy and budgeting processes.
4. Apply economic tools to public policy issues.
5. Assess government programs and financial Reforms

Unit 1: Public Economics – Concept and Scope, Provision of Public Goods

- Public Economics: Concept, Scope, and Role of Government.
- Public, Private, and Merit Goods; Pure and Impure Public Goods.
- Non-Rival Consumption and Non-Excludability of Public Goods.
- Demand and Supply of Public Goods; Problems of Preference Revelation; Voting Rules; Characteristics of Majority Voting Rule.
- Concept of **"Loka-Sangraha"**: The idea of working for the welfare and cohesion of society, linked to public good provision.

Unit 2: Public Expenditure

- Public Expenditure: Structure and Growth.
- Wagner's Law of Increasing State Activity; Wiseman-Peacock Hypothesis.
- Benefit and Ability-to-Pay Approaches to Taxes; Allocative and Equity Aspects of Taxes.
- Economic Effects of Public Expenditure on Production and Distribution; Public Expenditure and Economic Growth.
- Canons of Expenditure; Theories of Public Expenditure: Rahn Curve, Colin Clark's Critical Limit Hypothesis, Maximum Social Advantage Theory by Dalton.
- Allocation of State Resources in Ancient India: Use of resources for defense, infrastructure, welfare, and administration as documented in historical texts.

Unit 3: Public Revenue and Tax System in India

- Meaning, Classification, Sources, Principles, and Effects of Public Revenue.
- Classification of Taxation: Indirect and Direct Tax, Progressive and Non-Progressive Taxation.
- Incidence and Effects of Taxation; Assessment of the Indian Tax System.
- Introduction to MODVAT, CENVAT, and Goods and Services Tax (GST).
- Canons of Taxation and Principles in Ancient Texts (Arthashastra, Manu Smriti, Dharma Shastras) – fairness, types of taxes, and legitimate share of the king.

Unit 4: Budgeting and Public Debt

- Meaning, Objectives, and Different Forms of Budget: Traditional, Performance, Zero-Based, Outcome, and Gender Budget.
- Budgetary Process in India; Cost-Benefit Analysis, Shadow Pricing, Discount Rate.
- Public Borrowing and Public Debt: Objectives, Methods of Debt Redemption, and Effects of Public Debt.
- State Financial Management in Ancient Kingdoms: Managing income, expenditure, surpluses, and deficits through systems like granaries and strategic reserves.

Unit 5: Fiscal Federalism and Fiscal Reforms in India

- Fiscal Federalism and Fiscal Reforms: Centre-State Financial Relations; Balanced Budget Multiplier; Division of Financial Resources in Federation.
- Horizontal and Vertical Imbalance; Finance Commission and Planning Commission in Resource Transfers.
- Ethical Governance and Reforms from an **IKS Perspective**: Applying Indian Knowledge System principles of governance, justice, welfare, sustainability, equity, and public benefit to contemporary fiscal reforms.

Suggested Reading:

Textbooks:

- Dr. S.K. Singh – *Public Finance*, S. Chand Publications, 2008
- Sundaram, K.P.M., & Andley, K.K. – *Public Finance*, S. Chand Publications, 2003
- Dr. B.P. Tyagi – *Public Finance*, Jai Prakashan, 1975
- M. Maria John & Kennedy – *Public Finance*, PHI Pvt. Ltd., 2013
- V.G. Mankar & Prof. L.S. Sharma – *Public Finance*, Himalaya Publications, 2001
- Herper, Bernard P. – *Modern Public Finance*, AITBS Publications, 2006
- Andley, K.K. – *Public Finance*
- R.K. Lekhi – *Public Finance*

Additional Suggested Readings:

- Duff, L. – *Government and Market*, Orient Longman, New Delhi, 1997
- Quillis, John & Jones, Phillip – *Public Finance and Public Choice*, Oxford University Press, 2nd Edition, 1998
- Atkinson, Anthony B. & Stiglitz, Joseph E. – *Lectures on Public Economics*, McGraw-Hill, Singapore, 1980
- Musgrave, Richard A. & Musgrave, Peggy B. – *Public Finance in Theory and Practice*, Tata McGraw-Hill, New Delhi, 2004
- Chelliah, R.J. – *Public Finance*

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – I

Course	Subject	Subject Code
M.A.(Economics)	**Mathematics For Economics**	**MAEC-103**

Course Learning Outcomes (CLO)

On Successful completion of this course, the students will be able to:

1. Explain the interrelationships between mathematics, mathematical economics, and econometrics.
2. Demonstrate a clear understanding of various number systems and effectively apply them in economic contexts.
3. Utilize set theory concepts, including operations on sets to represent and analyze economic problems.
4. Perform matrix operations, including addition, multiplication, finding inverses, and determinates to solve economic models.
5. Employ various methods to solve systems of linear equations arising in economic applications.
   Employ various methods to utilize Integration and Differentiation.

Unit 1: Introduction to Mathematical Economics

- Nature and scope of Mathematical Economics: Mathematical vs Non-Mathematical Economics.
- Concepts: Variables (Endogenous and Exogenous), Constants, Coefficients, and Parameters.
- Equations, Inequalities, and Identities.
- **Mathematical Preliminaries**: Number systems – Natural numbers, Whole numbers, Integers, Rational and Irrational numbers, Complex numbers; Indices and Surds; Laws of Indices; Logarithms.
- **IKS Focus**: Karani (Surds).

Unit 2: Sets and Functions

- **Sets**: Definition, Elements, Notations (Enumeration and Description), Finite and Infinite Sets.
- Set Relationships: Equal Sets, Subset, Superset, Power Set, Null/Empty Set, Disjoint Set.
- Set Operations: Union, Intersection, Complement, Universal Sets; Laws of Set Operations – Commutative and Distributive Laws.
- **Relations and Functions**: Definition, Domain, Range, Continuous and Discrete Functions, Composition, Inverse, Order of Composition, Function Decomposition, Classification of Functions.

Unit 3: Matrices, Determinants, and Simultaneous Linear Equations

- Concept and Types of Matrices.
- Operations: Addition, Multiplication, Transpose, Adjoint, Inverse of Matrices.
- Determinants: Properties and Calculation.
- Solution of Simultaneous Linear Equations using Matrices and Determinants (Cramer's Rule).

Unit 4: Differentiation

- Concept of Derivative and Process of Differentiation.
- Rules of Differentiation, Derivatives of Higher Order.
- Sign of Derivative and Nature of Functions.
- First and Second Order Conditions for Maxima, Minima, and Saddle Points.

Unit 5: Integration

- Basic Formulas and Standard Results of Integration.
- Methods: Substitution, Partial Fractions.
- Applications of Integration in Economics (e.g., Consumer and Producer Surplus, Cost and Revenue Functions).

Suggested Reading:

1. A.C. Chiang – *Fundamental Methods of Mathematical Economics*, McGraw-Hill, New York, 1984
2. Mariappan, P. – *Business Mathematics*, Pearson
3. Mehta, B.C., & Madanani, G.M.K. – *Mathematics for Economists*, Sultan Chand & Sons
4. Wilson, M. – *Business Mathematics*, Himalaya Publishing House
5. Bose, D. – *An Introduction to Mathematical Economics*, Himalaya Publishing House
6. Sydsaeter, K., & Hammond, P. – *Mathematics for Economic Analysis*, Pearson Education, 2002
7. *History and Development of Mathematics in India*, 2022, pp. 182–192

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – I

Course	Subject	Subject Code
M.A.(Economics)	**History of Economic Thoughts**	**MAEC-104**

Course Learning Outcomes
On successful completion of this course, the students will be able to:

1. **History of Economic Thought:** Understand its role in shaping modern economic ideas, including ancient contributions.
2. **Ancient Economic Development:** Analyze economic thought from diverse civilizations and philosophers.
3. **Mercantilism & Physiocracy:** Evaluate their philosophies and the Marxian critique.
4. **Classical Economics:** Examine core concepts and key figures critically.
5. **Neoclassical & Behavioral Economics:** Understand major schools, thinkers, and the emergence of Behavioral Economics.

Unit 1: Introduction to History of Economic Thought

- Definition, scope, and significance of the History of Economic Thought (HET).
- Development of economic ideas from ancient times to modern periods.
- Importance of studying HET in understanding the evolution of economic theory.

Unit 2: Economic Thought in the Ancient World

- Economic ideas from Hebrews, Sumer Civilization, and other non-Western civilizations.
- Contributions of ancient philosophers: Hesiod, Xenophon, Plato, Aristotle, Chanakya, Abu Hamid al-Ghazali, Saint Thomas Aquinas, Ibn Khaldun, etc.
- **IKS Focus**: Kautilya's *Arthashastra* – insights on economics and polity.

Unit 3: Medieval Economic Thought

- Mercantilism: Definitions, features, characteristics, and factors shaping Mercantilist thought.
- Physiocracy: Definitions, features, and key ideas of Physiocrats.
- Marxian Political Economy: Karl Marx's contributions, concepts of socialism, Marxism, and communism – differences and implications.

Unit 4: Classical School of Economic Thought

- Historical development of Classical Economics.
- Core concepts, ideas, and theories of classical economists: Adam Smith, Jean-Baptiste Say, David Ricardo, Thomas Malthus, John Stuart Mill, Anne Robert Jacques Turgot, and others.

Unit 5: Neo-Classical and Modern Economic Thought

- History and contributions of various schools and economists in Neo-Classical thought.

- **Austrian School**: Carl Menger, Eugen von Böhm-Bawerk, Friedrich von Wieser.
- **Lausanne School**: Léon Walras, Vilfredo Pareto, Henry Ludwell Moore.
- **Cambridge School**: Alfred Marshall, A.C. Pigou, Francis Edgeworth, John Maynard Keynes.
- **American School**: J.B. Clark, Irving Fisher.
- Keynesian Economics and the foundation of modern macroeconomic thought.

Suggested Reading:

1. Loganathan, V. 1998. History of Economic Thought, New Delhi: S. Chand ad Company.
2. Sankaran, S. 2000. History of Economic Thought. Chennai: Margham Publications, Self-Instructional Material.
3. Coleman Janet. 2000, A History of Political Thought, New Delhi: Wiley-Blackwell.
4. Jha, Shefali. 2010. Western Political Thought: From Plato to Marx. New Delhi Pearson Education India.
5. Dasgupta, A.K. (2015). Kautilya's Arthasastra: Economics and Policy. In A history of Indian economic thought.

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – I

Course	Subject	Subject Code
M.A.(Economics) NEP	**Internship/Apprenticeship/Seminar**	**MAEC-105**

Internship/Apprenticeship/Seminar

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MASTER OF ARTS (Ecnomics) (NEP)

First Year

Scheme

The structure of the course will comprise Four-Papers in each Semester.

Second Semester

S no	Subject Code	Subject Title	Marks Allotted							
			Assignment Marks		Theory Marks		Practical Marks		Total Marks	Credit
			max	min	max	min	max	min		
1	MAEC-201	Macro Economics	40	16	60	24			100	5
2	MAEC-202	Computer Application For Economic Analysis	40	16	60	24			100	5
3	MAEC-203	Financial Institutions & Markets	40	16	60	24			100	5
4	MAEC-204	Statistics for Economics	40	16	60	24			100	5
5	MAEC-205	Internship/Apprenticeship /Seminar					100	60	100	2
Total									500	22

Note-Lecture timing15 Hour/Unit

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – II

Course	Subject	Subject Code
M.A.(Economics) NEP	**Macro Economics**	**MAEC-201**

Course Learning outcomes (CLO)

On successful completion of this course, the students will be able to:

1. **Core Concepts:** Understand macroeconomic variables and national income accounting.
2. **Aggregate Analysis:** Analyze how aggregate demand and supply determine equilibrium.
3. **Economic Models:** Compare Classical and Keynesian models and their assumptions.
4. **Policy Tools:** Explain fiscal and monetary policy using the IS-LM framework.
5. **Economic Behavior:** Interpret theories of consumption, investment, and money demand in current contexts.

Unit 1: Introduction to Macroeconomics

- Basic concepts: Macroeconomic variables – consumption, savings, investment, national income and its components.
- Stock and flow variables.
- Circular flow of income in two-sector, three-sector, and open economies.
- Aggregate Supply (AS) and Aggregate Demand (AD) curves; long-run equilibrium.
- Methods of national income accounting: Income Approach, Expenditure Approach, and Value Added Approach.

Unit 2: Classical and Keynesian Economics

- **Classical Economics**: Classical theory, Say's Law of Markets, Classical model with and without saving & investment, criticisms of the model.
- **Keynesian Economics**: Keynesian model of aggregate demand and supply, comparison with classical theory, criticisms of Keynesian model.

Unit 3: Fiscal and Monetary Policy

- Objectives and instruments of fiscal policy.
- Objectives and instruments of monetary policy and their effects on the economy.
- IS-LM Model: Goods market (IS curve), Money market (LM curve), equilibrium in IS-LM.
- Crowding-out effect and impacts of taxes and money supply on IS-LM curves.
- Multiplier theory: Investment & government budget multiplier, tax multiplier, foreign trade multiplier.

Unit 4: Theories of Consumption and Investment

- **Consumption**: Consumption function, APC, MPC, factors affecting consumption. Theories of consumption – Absolute Income, Relative Income, Life-Cycle, and Permanent Income Hypothesis.
- **Investment**: Investment function, determinants, MEC & MEI, dynamic multiplier.
- Saving function and the Paradox of Thrift.
- Trends in consumption, saving, and investment in India.

Unit 5: Money and Monetary Theory

- Functions and types of money.
- Theories of money demand: Pre-Keynesian, Keynesian liquidity preference, Post-Keynesian approaches.
- Money multiplier and its components.
- Supply of money and stock of money.

Suggested Readings / Reference Books

1. Shapiro, E. (1996) – *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
2. Mankiw, N.G. (2009) – *Macroeconomics*, 7th Edition, Worth, New York.
3. Dornbusch, R., & Stanley, F. (1997) – *Macroeconomics*, McGraw-Hill, New York.
4. Ackley, G. (1978) – *Macroeconomics: Theory and Policy*, Macmillan, New York.
5. Ahuja, H.L. (2008) – *Modern Economics*, 13th Edition, S. Chand & Company Ltd., New Delhi.
6. Jhingan, M.L. (2002) – *Macro Economics Theory*, Vrinda Publishers, New Delhi.
7. Agrawal, S. (2025) – *Growth of Indian Economy through Indian Knowledge System*, IKS-Chapter 29.

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – II

Course	Subject	Subject Code
M.A.(Economics) NEP	**Computer Application For Economic Analysis**	**MAEC-202**

Course Learning outcomes (CLO)

On successful completion of this course, the students will be able to:

1. **Data Management:** Master handling and manipulation of datasets.
2. **Statistical Analysis:** Apply various statistical techniques effectively.
3. **Data Visualization:** Create meaningful visual representations of data.
4. **R Programming:** Use R for data analysis and interpretation.
5. **Advanced Software:** Work with statistical tools like SPSS for complex analyses.

Unit 1: MS-Excel Basics

- Introduction and features of MS-Excel.
- Workbook, worksheet, cell pointer, cell range, cell address, name box, function bar.
- Functions: Date & Time (DAY, TODAY), Lookup (VLOOKUP, HLOOKUP), Basic Statistical Functions (SUM, AVERAGE, MAX, MIN, COUNT).
- Data formatting: Insertion of charts, wrap text, merge & center.

Unit 2: MS-Excel Advanced & Data Analysis

- Data validation and data import procedures.
- Statistical analysis: Hypothesis testing, t-test, measures of central tendency (mean, median, mode), correlation analysis, linear regression.
- What-If Analysis: Goal Seek, Scenario Manager, Data Table.

Unit 3: R Programming

- Introduction, features of R, and RStudio setup.
- Installation, basic syntax, packages, and algebraic operations.
- Data structures: Vectors, operators, data types, strings, matrices, lists, data frames, arrays, factors.
- Built-in functions: `abs()`, `sqrt()`, `ceiling()`, `trunc()`, `round()`, `floor()`, `seq()`, `rnorm()`, `print()`, `log()`, `exp()`.
- Charts, graphs, and data manipulation.

Unit 4: SPSS Basics

- Introduction, features, uses, and installation of SPSS.
- Qualitative & quantitative data.
- Variables: Nominal, Ordinal, Interval, Ratio.
- Preparing datasheets, entering data according to variable types, importing Excel files into SPSS.

Unit 5: SPSS Advanced Analysis

- Statistical tools in SPSS: t-Test, Chi-Square Test.
- Descriptive statistics: Frequency, measures of central tendency (mean, median, mode), and variation.

Text Books, Reference Books, and Other resources.

1. Microsoft Office Excel 2007 step by step: Frye, PHI, MS Office: Sanjay Saxena, Vikas Publishing House, Mahoney, M. (2019).
2. Introduction to Data Exploration and Analysis with R, Performing Data Analysis using IBM SPSS, Lawrence S. Meyers, Glenn C. Gamst, A. J. Guarino, Wiley Publication.
3. SPSS for Windows Step by Step A Simple Guide and Reference, Darren George and Paul Malley.
4. https://bookdown.org/mikemahoney218/IDEAR/ Phillips, N.D. (2018). YaRrr, The Pirate's Guide to R. https://bookdown.org/ndphillips/YaRrr/

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – II

Course	Subject	Subject Code
M.A.(Economics) NEP	**Financial Institutions & Markets**	**MAEC-203**

Course Learning outcomes (CLO)
On successful completion of this course, the students will be able to:

1. **Financial System Fundamentals:** Understand the structure, functions, and characteristics of the Indian Financial System.
2. **Market Players:** Identify and analyze key participants in financial markets.
3. **Financial Markets:** Comprehend the evolution, segments, and role of financial markets in the economy.
4. **Money Market:** Gain knowledge of the Indian Money Market and its functioning.
5. **Technological & Global Impact:** Assess the impact of technology and understand the structure of Foreign Exchange Markets.

Unit 1: Indian Financial System & Institutions

- Structure, functions, characteristics, and key players.
- Insights from ancient India (Arthashastra): currency, taxation, state finance, interest rates, trade.
- Major reforms: Payment banks, monetary policy, regulatory institutions (RBI, SEBI, IRDA, PFRDA).
- Indigenous instruments: Hundis for trade and credit.
- Commercial banking and NBFCs: roles, services, CBS, comparison, growth.

Unit 2: Financial Markets & Products

- Evolution and development of financial markets.
- Segments: money market, capital market, derivatives, other markets.
- Financial products: shares, bonds, mutual funds, insurance, etc.
- Role of markets: efficiency, resource allocation, wealth creation.

Unit 3: Money Market

- Introduction, characteristics, functions.
- Historical perspective: Hundis as primitive commercial papers.
- Instruments: T-bills, commercial papers, CDs, call money, repo.
- Role of RBI and linkage with monetary policy.

Unit 4: Capital Market

- Functions: capital formation, resource allocation, price discovery, risk sharing.
- Ancient India insights: wealth accumulation, ethical economic conduct (Arthashastra, Dharmashastras).

- Development in India: primary & secondary markets, SEBI, reforms.
- Instruments: stock exchanges, IPOs, classification of markets.

Unit 5: Technology & Fin-Tech Innovations

- Technological impact on money & capital markets.
- Historical innovations: decimal system, Bahi-khata (double-entry bookkeeping), Hundi system.
- Modern innovations: online trading, clearing & settlement, digital payments, e-commerce.
- Role in connecting Indian markets globally.

Suggested Readings:

1. Bhole, L.M.(1999), Financial Institutions and Markets, Tata Mc Graw Hill Company Ltd. New Delhi.
2. Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
3. Johnson, H.J.(1993), Financial Institutions and Markets, Mc Graw Hill, New York.
4. Machiraju, M.R.(1999), Indian Financial Systems, Vikas Publishing House, New Delhi.
5. Ohlson, J.A.(1987), The Theory of Financial Markets and Institutions, North Holland, Amsterdam.
6. Prasad, K.N.(2001), Development of India's Financial System, Sarup & Sons, New Delhi.
7. Mith,P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.
8. Chandra, P. (1997), Financial Markets, (4th Edition), Tata Mc Graw Hill, New Delhi.
9. Machiraju, H.R.(1997), International Financial MarketsinIndia, Wheeler Publishing, Allahbad.
10. Fenstermaker, J.V.(1969), Readings in Financial Markets and Institutions, Appleton, New York.

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – II

Course	Subject	Subject Code
M.A.(Economics) NEP	**Statistics of Economics**	**MAEC-204**

Course Learning outcomes (CLO)

On successful completion of this course, the students will be able to:

1. **Descriptive Statistics:** Summarize and interpret data using measures of central tendency, dispersion, and skewness.
2. **Probability Modeling:** Apply probability distributions (Binomial, Poisson, Normal) to quantify uncertainty.
3. **Index Numbers:** Construct and adjust index numbers to track economic trends and inflation.
4. **Correlation & Regression:** Analyze relationships between variables and predict outcomes using regression models.
5. **Critical Evaluation:** Assess the usefulness and limitations of statistical and mathematical tools in economics.

Unit 1: Understanding the Data & Data Presentation

- Definition, scope, and uses of statistics in economics
- Classification of data: Quantitative and Qualitative
- Attributes, variables, and scales of measurement: Nominal, Ordinal, Interval, Ratio
- Data presentation: Tabular and graphical (Bar Diagram, Line Diagram, Pie Chart, Histogram, Ogive, etc.)

Unit 2: Frequency Distribution, Measures of Central Tendency, Quartiles, Dispersion, and Skewness

- Frequency Distribution
- Mathematical Averages: Arithmetic Mean, Geometric Mean
- Positional Averages: Median, Mode
- Quartiles
- Measures of Dispersion: Range, Interquartile Range, Quartile Deviation, Mean Deviation, Variance, Standard Deviation
- Skewness

Unit 3: Index Numbers

- Concept, types, and applications of index numbers
- Construction problems, chain index numbers
- Base shifting and deflating index numbers
- Cost of living index numbers

Unit 4: Correlation and Regression

- **Correlation Analysis:** Karl Pearson coefficient, Spearman's rank correlation, concept of probable error

- **Regression Analysis:** Regression lines, regression coefficients, equations, and prediction

Unit 5: Probability and Probability Distributions

- Probability concepts; Axiomatic probability
- Laws of probability, conditional probability, and independence
- Random variables, expectation
- Discrete and continuous probability distributions
- CDF and PDF of Binomial, Poisson, and Normal distributions
- **IKS Integration:** Probability in Ancient India (Raju, C., 2011)

Suggested Readings:

1. Chiang, A. C. "Fundamental Methods of Mathematical Economics." Mc Graw-Hill, New York, 1984.
2. Gupta, S.C. and Kapoor, V.K. (1997) Fundamentals of Mathematical Statistics. Sultan Chand and Sons, New Delhi, 11.23-12.23. 3. Gupta, S. P. "Statistical Methods," Sultan Chand and Sons, New Delhi, 2000.
4. Raju, C. (2011). Probability in Ancient India. In Elsevier eBooks (pp. 11751195). https://doi.org/10.1016/6978-0-444-51862-0.50037-x

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MASTER OF ARTS M.A.(Economics) (NEP)

FIRST YEAR

Semester – II

Course	Subject	Subject Code
M.A.(Economics) NEP	**Internship/Apprenticeship/Seminar**	**MAEC-205**

Internship/Apprenticeship/Seminar

Faculty of Social Science

(RKDF University Bhopal)

M.A. Economics **Semester – III**

S no	Subject Code	Subject Title	Marks Allotted							
			Assignment Marks		Theory Marks		Practical Marks		Total Marks	Credit
			max	min	max	min	max	min		
1	MAEC-301	Research Methodology	40	16	60	24			100	5
2	MAEC-302	International Trade and Relations	40	16	60	24			100	5
3	MAEC-303	Basic Econometrics	40	16	60	24			100	5
4	MAEC-304	Economic Growth and Development	40	16	60	24			100	5
5	MAEC-305	Internship/Apprenticeship					100	60	100	2
Total									500	22

Note-Lecture timing15 Hour/Unit

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M.A. Economics Semester – III

Course	Subject	Subject Code
M.A. (Economics)	**Research Methodology**	**MAEC-301**

CLO 1 Understand ancient and Historical method of research by way of Shruti, Smriti, anveshan and logical debates (shastrarth)
CLO 2 a structured and systematic approach for conducting research. Planning, organizing, and execute their research studies and be able to draw meaningful conclusions.
CLO 3-Student will be able to understand different methodologies of sampling techniques and data collection
CLO 4-Help students to replicate the study, verifying the results through hypothesis testing and building upon existing knowledge.
CLO 5-Student will be able to learn skills of computer use for collection and analysis of data by implying different software's.

UNIT-I

Introduction to Research: Concept, Definition and Features of good 08 research study, Research Philosophy Ontology & epistemology of research. Research methods used by ancient thinkers perusing inter disciplinary approach and exploratory methods. Application of Research in Economics. Introduction, Types & Process of research
Types of Research: Pure or fundamental research, Exploratory Research and Applied research: Descriptive, Casual, Analytical, and Experimental Research, Qualitative and Quantitative Research. Action research, Case Study, Ethnographic Methods.
Process of Research: Different Sources of Research Problem, Problem Identification & Formulation of Research problem, Characteristics of good Research problem. Importance &Organizing of Review of Literature, Identification of GAP from review of literature, Designing of objectives for research. Formulation of Research Hypothesis, its need and importance.
Activities: Find a Research Problem, Frame on the basis of current fact. Discuss its historical context, used by ancient thinkers. exploratory and comparative research Methods.
Think Which type of research is suitable to solve this problem & Why? Discuss its relevance in current & ancient context.

UNIT-II

Research Design & Sampling Techniques
Research Design: Nature & Types of research design Exploratory, 10 Descriptive, Experimental research Design, Field Surveys and Case study Design, Action research Design, Formulation of Research Design. Features of good Research design.

Sampling Technique: Concept of sampling (Census Vs Sample) Characteristics of good sample, Small Vs Large samples, Sampling frame, sampling Errors, Sample Determination and Sample Selection Procedure: Probability Sampling Methods: Simple random sampling, Multi-stage sampling, Stratified Sampling. Cluster Sampling etc.. Non-Probability sampling methods: Purposive Sampling, Convenience cafe Laye Sampling, Snow ball sampling & Judgmental Sampling etc.
Activities:(1) Select an area and determine the size of sample.
(2) Decide which method of sampling will you use and why?
(3) The Indian Knowledge System is deeply rooted in diverse traditions such as Vedic texts, Ayurveda, Yoga, classical arts, philosophy, and indigenous agricultural practices try to analyse it by reading.

UNIT-III

Types of Measurement Scales: Nominal, Ordinal, Ratio, & Interval Scale. Attitudes & its component, - Cognitive, Affective, & Action, Scaling Technique - Likert Scale.
Attitude Measurement & Scales, Data Collection, Classification & Processing Hypothesis testing Types and Sources of data - Primary Vs Secondary sources of data collection, Methods of collection of data. Designing of Questionnaire/Interview Schedule.
Classification and tabulation of data, Graphical representation of data, graphs and charts etc.
Hypothesis Testing: Need of hypothesis, Types of hypothesis (Null & Alternative hypothesis), Types of Error, Parametric & Non- Parametric Tests of Hypothesis for small and large samples - Z Test, t-Test, Chi-Square Test & ANNOVA.
Activity: (a) Frame 5 questions each using Nominal, ordinal, ration, & interval Scale.
(b) Take Data set from website and construct Graphs & Charts.
(C) Take data set from Web of any two variable / attributes, frame hypothesis & calculate using Tests. Research Report Writing: Structure of Abstract and keywords, Layout of the Research Report Writing: Different formats of Thesis, Dissertation, Reports, Proof Correction, and Finalization of Report / Thesis.

UNIT-IV

Report Writing & Referencing Style
Referencing styles: Citation and bibliography: Footnotes, End notes, Basic knowledge of indexing of Journals-h-index-i10-index- Impact Factor. Ethics in Research - Understanding Plagiarism - Definition, different forms& Consequences.
Activity: Collect 10 research papers from internet, understand different patterns of referencing.
Assignment - Visit to websites like Google scholar,80% PubMed, Research Gate, Scopus, Web of Science, JSTOR, and Semantic Scholar and explain similarities and dissimilarity.

UNIT-V

Use of Computer For Research
ICT Tools for Research Use of Computer MS-Word, MS-Excel & 10 Spread Sheets - Word Processor Packages, Computer Software in Research: SPSS, N-Vivo. Use of tabulation and Graphical Presentation of research data. Maintenance of data using software: Referencing Style, Reference Manager, and Endnote.
Activity: Documenting these oral traditions-stories, practices, rituals, medicinal

knowledge, etc. of any rural heritage or tribal area.
Collect Data from any site and use SPSS or NVivo analyse data and make interpretation.
Keywords/Tags: MS Word, Excel, SPSS, N-Vivo. E-Pathshala, Swayam Portal.

Text books, Reference books and other sources

1. Research Methodology: Concepts And Cases: Concepts & Cases. Deepak Chawla & Neena Sondhi, Vikaas Publishing Private limited, New Delhi.
2. Kothari C. R - Research Methodology,
3. Gupta Mukul & Gupta Deepa, "Research Methodology" PHI learning PVT. Ltd., Print Book ISBN:9788120343818, Binding: Paperback
4. Donald Cooper and PS Schindler (2009) Business Research Methods, 9th edition, Tata McGraw Hill.
5. Uma Sekaran (2010) Research Methods for Business, 4th edition, Wiley Publication
6. Ranjit Kumar (2009) Research Methodology, 2nd edition, Pearson Education
7. Naresh Malhotra and S Dash (2009) Marketing Research, 5th edition, Pearson Prentice Hall.
8. Michael V. P Research Methodology.
9. S.P. Gupta: Theory and Practice of Statistics

Recommended Reading on application of research in Indian knowledge System.
1. https://link.springer.com/series/15723-Palgrave studies in ancient economics
2. Handbook of Research Methods and Applications in Heterodox Economics"
3. "Ancient Economies in Comparative Perspective". This book examines the economic organization of ancient societies from a comparative perspective, exploring economic thought, institutions, and systems. (2022)
https://link.springer.com/book/10.1007/978-3-031-08763-9Playp CROS
4. Research in the History of Economic Thought and Methodology: A Research Annual:30, Part A (Research in the History of Economic Thought and Methodology, 30, Part A), 17 July 2012.
Amezon Books.https://www.amazon.in/Research-History-Economic-Thought-Methodology/dp/1780528248

Suggested Readings
1. For Data Collection & Analysis Computer tools:
(a) SPSS: A statistical package widely used for quantitative data analysis.
(b) NVivo: A qualitative data analysis software for analyzing text and other qualitative data.
(c) ATLAS.ti: Another qualitative data analysis software specializing in coding and analysis.

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M.A. Economics Semester – III

Course	Subject	Subject Code
M.A. (Economics)	**International Trade and Relations**	**MAEC-302**

On successful completion of this course, the students will be able to:

CLO 1 Understand and explain major theories of international trade, including ancient, classical, neoclassical, and modern approaches.
CLO2- Analyze the effects of trade policies such as tariffs, quotas, subsidies, and trade agreements on domestic and global economies.
CLO3- Evaluate the role and functioning of key international trade and financial institutions like the WTO.IMF, World Bank, and regional trade organizations.
CLO4 Interpret global trade data and trends, including patterns of exports, imports, and balance of payments.
CLO5 -Examine the influence of political, economic, and strategic factors on international trade relations and foreign policy.

UNIT-I

International Trade: distinguishing features and Scope, Distinction between interregional and international trade. Ancient Indian Trade Routes and Networks (e.g., Silk Road, maritime trade). Foreign Trade and Economic Development. International division of labor and specialization. Smith's theory of absolute Achau CBOS
differences; Ricardo theory of comparative differences in costs and its applicability in underdeveloped countries. Production possibility curve and Community Indifference Curve.

Unit Activity:
Mock Trade Negotiation, Hypothetical illustration of trade theories, Applicability of trade theories in present perspectives, create a digital map or a poster showcasing these routes, highlighting the commodities exchanged (spices, textiles, precious stones, etc.) and discussing the socio-economic and cultural impacts of this trade. Present findings to the class.

UNIT-II

Harberler's theory of opportunity costs; International trade under constant, Increasing and decreasing opportunity costs; Explanation of Mill's concept of reciprocal demand with the help of Marshall's offer curves. Heckscher Ohlin theory of factor endowment underprice criteria and physical criteria. Samuelson factor price equalization theorem, Leontief paradox. Gravity Model by Jan Timbergen and Economies of Scale by Paul Krugman.

Unit Activity:

Mock Trade Negotiation, Hypothetical illustration of trade theories, Applicability of trade theories in present perspectives, Research India's trade data with 3-5 countries. Present findings on how factors like GDP, distance, and shared borders (historical ties) might explain the trade volume.

UNIT-III

Economic Growth and International Trade, Terms of 10 Trade, factors affecting terms of trade. Free trade vs. protection. Commercial policies- Tariff and non-tariff barriers, Tariffs: meaning and types effects of tariffs under partial and general equilibrium; optimum tariff and welfare; The Stopler Samuelson Theorem, Dumping: types, objectives, and effects of dumping, Anti-dumping measures, Historical Trade Policies in India (pre-colonial era)

Unit Activity:

Practical illustrations of Terms of Trade, Recent incidence of Dumping in India and its impact on our Economy. Recent challenges of imposition of tariff among countries, Assign roles (e.g., industry representatives, consumer advocates, government economists). Each group prepares arguments for or against protection, considering the economic effects of tariffs and subsidies.

UNIT-IV

Balance of payments- Composition and significance. Disequilibrium in BOP causes and measures of correcting BOP. Adjustment mechanism of balance of payment under gold standard system, under Elasticity approach Marshall-Lerner condition. The Hundi System as an indigenous financial instrument for trade, Foreign exchange rate determination- the purchasing power parity theory, the mint parity and Balance of payment theory. Fixed and flexible exchange rates. Exchange control measures- meaning, objective and method of exchange control, appreciation and depreciation of currency, Spot, and forward exchange rates. Volatility of exchange rates and their effects. Volatility of exchange rate in relation to dollar and euro. Convertibility of currency.

Unit Activity:

Fixed vs. Flexible Exchange Rates Debate, India's Major exports and imports, Differentiate Spot and Forward exchange rate Forex Reserves & Exchange Control Game, Currencies of major countries of world, Locations of top countries of world on world map, Research recent BOP data for India. Design an infographic that visually represents current account, capital account, and highlights a period of disequilibrium with its causes and corrective actions.

UNIT-V

Foreign Capital Movements- FDI, FII, Multinational 10 corporation, Foreign Trade Policy relations. Foreign Trade and India's diplomacy. India's Bilateral trade with developed and developing countries. Contemporary issues of international Trade. International institutions-WTO, IMF, World Bank, Regional Trade Blocks-EU, ASEAN, SAARC, NAFTA, Directions, and trends in India's balance of payment position since the reform period, Current challenges of India's export Sector. India's approach to Globalization informed by concepts like Atmanirbhar Bharat (self-reliance) and sustainable development.

Unit activity:

Directions, and trends in India's balance of payment position since the reform period. Current challenges in India's export and identify the nations where we have recently started exporting, students to select an institution/block and to highlight India's relationship with it, and contemporary issues or debates involving India.

Text books, Reference books and other sources

Chacholiades, M. (2009), The Pure Theory of International Trade, Aldine Transaction, New Brunswick.
Chacholiades, M. (1981), Principles of International Economics, Mc-Graw Hill Book Company, New Delhi.
Krugman, P.R. and Obstfeld, M. (2013), International Economics: Theory and Policy, 8 th Edition, Pearson Education, New Delhi.
Kindleberger, C.P. (1998), International Economics, 8th Edition, Richard D. Irwin, Inc., USA.
Mannur, H.G. (1996), International Economics, 2nd Revised Edition, Vikas Publishing House Pvt. Ltd., New Delhi.
Sodersten, B. (1984), International Economics, 2nd edition, Macmillan, Hong Kong.
Sodersten, B. and Reed, G. (1994), International Economics, 3rd edition, Macmillan, New Delhi.
Salvatore, D. (2000), International Economics, John Wiley, London.
Thompson, H. (2011), International Economics: Global Markets and Competition, 2nd edition, Cambridge University Press India Pvt. Ltd., New Delhi.
Bhagwati, J. (Ed) (1998), International Trade, Selected Readings Cambridge, University Presses Massachusetts.
Carbough, R.J. (1999), International Economics, Internation Thmopson Publishing, New York.
Chachliadas, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
Dana, M.S. (2000), International Economics; Study Guide and Work Book (5th Edition), Routledge Publishers, London.
Dunn, R.M. and J.H.M and (2000), International Economics, Routiedge, London.
Kenen, P.B. (1994), The Internal Economy, Cambridge University Press, London.
Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
King, P.G. (1995), International Economics and International Economics Policy:
A Reader, McGraw and International, Singapore.
Krugman, P.R. and M.C. bet fled (1994), International Economics; Theory and Policy, Glenview, Foresman.
D.M. Mithani- Internation Economic, Himalaya Pub. 2004
P. Subba Rao- International Business, Himalaya Pub.2001
Cherwnilam Francis- International Economics Tata Megrawsai 1999

Suggested Readings for Indian Knowledge System in International Economics:

1 . Kautilya Artha shastra. (Translated by R. Shama Sastry, Motilal Banarsidass Pub. or Penguin Classics, various years). 2 . Gandhi, Mahatma Hind Swaraj or Indian Home Rule. (Nava Jivan Publishing House or other publishers, various years).
3. Dharampal Indian Science and Technology in the Eighteenth Century: Some Contemporary European Accounts. (Other India Press, various years).
4. Sanyal, B.S. Ancient Indian Economic Thought. (Specific publisher and year would depend on a particular academic publication).

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M.A. Economics **Semester – III**

Course	Subject	Subject Code
M.A. (Economics)	Basic Econometrics	MAEC-303

On successful completion of this course, the students will be able to:
CLO 1 To apply the method of Ordinary Least Squares to estimate and interpret simple and multiple linear regression models.
CLO 2 To evaluate the validity of classical OLS assumptions and diagnose potential violations (e.g., multicollinearity, heteroskedasticity).
CLO 3- To incorporate and interpret dummy variables in regression frameworks, including ANOVA and seasonal models.
CLO 4 To formulate and estimate basic distributed lag and AR-DL models for time-series analysis.
CLO 5- To analyze identification issues in simultaneous-equation systems and explain the need for advanced estimation techniques.

UNIT-I

Nature and scope of econometrics Meaning of Econometrics; Importance of Econometrics as a separate discipline; Methodology of Econometrics.
Unit Activity: Identify 5 Causal Relationships from the news articles, identifying Dependent and Independent variables.
IKS: History of Optimization Models in Evolutionary Algorithms

UNIT-II

Simple Linear Regression Model: Two Variable Case
The concept of Population Regression Function (PRF) and Sample Regression Function (SRF); Ordinary Least Squares (OLS): The Classical Linear Regression Model: The Assumptions Underlying the Method of Least Squares; Properties of Least-Squares Estimators: The Gauss- Markov Theorem (Proof); The Coefficient of Determination R^2.
Unit Activity:
Activity: Hands-On OLS Estimation with Real Data
1. Provide students with a small CSV (e.g., data on advertising spend vs. sales).
2. In pairs, they compute by hand (with calculators) the OLS estimates and for a 5-point sample.
3. Plot the points and fitted line on graph paper.

4. Compute R^a and interpret its meaning.
5. How cioes a single outlier change

UNIT-III

Multiple linear regression model Interpretation and application of Multiple Regression Equation ; forms of Multiple Regression Equation (MLRM).
Unit Activity: Use a data set from one of the books mentioned in the reference to run a Regression on Excel and interpret the results.

UNIT-IV

Introduction to Dummy Variable Regression Models
The Nature of Dummy Variables ANOVA Models; Regression with a Mixture of Quantitative and Qualitative Regressors: The ANCOVA Models; The Use of Dummy Variables in Seasonal Analysis.
Unit Activity: Using the quarterly data for Agricultural produce, estimate a regression model with the help of Excel to include the seasonality in the produce.
Activities-Project

UNIT-V

Introduction to Distributed Lag Models and Simultaneous-Equation 12 Models
Introduction to AR-DL models Problems in estimation and their application, detecting autocorrelation in Autoregressive Model (Durbin
Mayeh test).Need of studying Simultaneous Equation Models Problem of Endogeneity, Rank and Order conditions of Identification.
Unit Activity: Identify Simultaneous relationships in Economic Theory.
Learning Resources **Activities: - Group discussion**

Text books, Reference books and other sources

1. Gujarati, Damodar. N. and Porter, D.C. (2008) Basic Econometrics. 5th Edition. McGraw-Hill, Boston.

2. Wooldridge, J. M. (2016). Introductory Econometrics: A Modern Approach. Adrian MI: South-Western Cengage Learning.

3. Maddala, G.S. (2001) Introduction to Econometrics. 3rd Edition, Wiley, New York. Edition, Palgrave.

4. Koutsoyiannis, A. (2003) Theory of Econometrics. 2nd

5. Stock, J. H., & Watson, M. W. (2018). Introduction to Econometrics. London: Pearson.

6. IKS: History of Optimization Models in Evolutionary Algorithms

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M.A. Economics   Semester – III

Course	Subject	Subject Code
M.A. (Economics)	Economic Growth and Development	MAHS-304

On successful completion of this course, the students
CLO1. To orient students with traditional system of economic development.
CLO 2. Understanding of concepts and approaches in Economic Development and Economic Growth.
CLO 3. To develop keen interest in various aspects of Economic Development, as well develop their theoretical, empirical and analytical skills.
CLO 4. To Develop critical understanding of key theories of economic development.
CLO.5. The Syllabus emphasizes on conceptual understanding and some applications of important growth models.

UNIT-I

Indian Knowledge Tradition and Development Perspectives, Kautilya's Arthashastra: Nature of State and Economy Treasury, Taxation, Agriculture, Trade, Welfare, Gandhian Model of Village Swaraj and Self-reliance, Decentralization, Village Industries, Ethics,Thirukkural and Economic Morality - Labor, Charity, Ethical Wealth Accumulation, Ancient Indian Concepts of Craft, Skill Development, Artisan-Guru Tradition, Economic Autonomy, Folk Economics and Coexistence with Nature, Sustainable Resource Use, Water Conservation, Indigenous Practices. Concepts of Trade, and Prosperity in ancient times.
Activity:Find cases in your village or nearby areas where GURU tradition in different skill formats persists.Study of a traditional knowledge system (e.g., water management, local trade practices).Analysis of economic ideas from Hind Swaraj, Arthashastra, or Thirukkural.
Case Studies:
Ralegan Siddhi (Anna Hazare) - Water and Village Development Hiware Bazar - Economic Transformation

UNIT-II

Introduction to Economic development and Growth, Structural view of underdevelopment vicious circle of poverty, circular causation, Measurement of development-Conventional,

Factors affecting economic growth and development-Natural resources, capital, labour, technology, human re-sources development and infrastructure. Importance/role of Institutions-government and markets. Concept and initiatives of sustainable development.
Activity: Evaluation of a development model in a village or region.
Describe different initiatives of sustainable development in India.

UNIT-III

Theories of Development& Growth: Classical Theories: Adam Smith, David Ricardo, Malthus, James Mill, Harrod-Domar Model, Solow's Model. Rostow's stages of growth, dualistic development theories.
Keynesian Model of development. Classical, Marx, Schumpeter and structural analysis of development- imperfect market paradigm, Lewis model of development. Dependency theory of development.
Activity:
Assignment: Collect information on Indian economy and perform its structural analysis of development.

UNIT-IV

Neoclassical Growth Model: Endogenous Growth Theory (Romer, 08 Lucas), Big Push Theory and Balanced/Unbalanced Growth Models. Human development Index and quality of life indices. Modern Growth Theories: Levis model, Hirschman model; Leibenstien"s model; Nelson's low level Equilibrium trap.
Activity: Read indicators of HDI & Quality of Life Indexes and discuss the position of India.
Case Study: Construct SWOC analysis on balanced growth in India.

UNIT-V

Technological progress embodied and disembodied technical 08 progress; Solow's model; Steady state growth Technical Progress-Hicks, Growth models of Kaldor Mahalnobis model. Harrod and Domar Cambridge criticism of neo-classical analysis of growth: The Capital controversy. Endogenous growth; Intellectual capital: role of learning, education and research. Development Challenges in the Indian Context. low income equilibrium trap.
Activity: Find through survey, the reasons of unbalanced growth in recent times.Debate: Role of learning in intellectual capital development. Traditional Trade Models from Gujarat/Karnataka.

Text books, Reference books and other sources

1. Economic of Development and Planning, HPH, S.K. Mishra, V.K.Puri
2. The Economic of Development & Planning, M.L. Jhingam
3. Development Economic- Ray Oxford
4. fodki dk vFkZZ;kkL=200 vk;kstu& MkW-eksgu izlkn JhokLro
5. vkfFkZd fodkl,oa fu;kstu& vkj-,u-nqes
6. Economics of Development & Planning- R.C.Agrawal
7. Development Economy- H.L. Ahuja
8. Kaushik Basu - Analytical Development Economics
9. Todaro & Smith - Economic Development

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M.A. Economics **Semester – III**

Course	Subject	Subject Code
M.A. (Economics)	Internship/Apprenticeship	MAHS-305

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M.A. Economics Semester – IV

S no	Subject Code	Subject Title	Marks Allotted							
			Assignment Marks		Theory Marks		Practical Marks		Total Marks	Credit
			max	min	max	min	max	min		
1	MAEC-401	Indian Economic Policy & Analysis	40	16	60	24			100	5
2	MAEC-402	Environmental Economics	40	16	60	24			100	5
3	MAEC-403	Behavioral Economics	40	16	60	24			100	5
4	MAEC-404	Economics of Agriculture & Rural Development	40	16	60	24			100	5
5	MAEC-405	Internship/Apprenticeship					100	60	100	2
Total									500	22

Note-Lecture timing15 Hour/Unit

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M.A. Economics **Semester – IV**

Course	Subject	Subject Code
M.A. (Economics)	Indian Economic Policy & Analysis	MAEC-401

CO1 Understand the Ancient economic structure of Indian Economy and learn & how to integrating traditional, indigenous, and cultural knowledge with contemporary economic development. Governance, development strategies, goal of self-reliance,during ancient period, during colonial period &post independence era.
CO2- Able to analyze the role of planning in economic development, economic reforms and policies carried out in Indian economy and in different sectors, their impact on the growth of Indian economy.
CO3- Able to understand and analyse various social problems such as poverty, inequity, unemployment, population, migration etc; & their remedial measures, undertaken in the form of programmes & policies.
CO4- Able to analysis of the agriculture, industry, and service sectors, along with policy issues related to them and also the issues of internal and foreign investments, Import and export policies.

UNIT-I

Introduction to Indian Economy: Structure and Growth during Ancient Indian economy-state of the economy during Indus Valley civilization, (1st to 17th century golden period), during Ancient rulers like Maurya, Gupta etc. Silk route of trade, trade pramotion practices, Indian Economy During colonial period. Alternative development strategies goal of self-reliant economy.Post independence economic policies, Objectives and strategy of planning; Failures and achievements of Plans. Economic growth of different sectors during plan period.

Activities: Give Assignment / case study to compare key features of Indian economy with ancient economies.Compare & analyse the concept and goal of self- reliance in different period of Indian economy.

UNIT-II

Issues of Economic Development in Indian Economy:Economic growth and development: measures, concepts, and strategies.National income accounting (GDP, GNP, etc.). Problems in estimation of national income in India, National income &economic welfare. Economic reforms since 1991: Liberalization, Privatization, and Globalization (LPG).

Role of NITI Aayog and National Development Council. Indicators of Social Sector development -Human development Index (HDI), GDI (gender development indices), Inequality, Poverty & MPI (multi-dimensional Poverty Index), environment & economic development, sustainable development & its Goals, Employment & unemployment in India, population & demographic issues, Migration and causes of migration.

Activities: Discuss indicators of HDI and other indices in the class.
Give Assignment - Understand & Compare (HDI) of different countries and suggest measures to improve our indicators Human Development Indicators. Survey SHGs (Self Help Groups) in your area and analyse their progress from economical point of view.

UNIT-III

Sectoral Performance in Indian Economy-
Performance Agriculture & Allied sectors -Agricultural policies in India, linkages between Traditional farming techniques: Organic farming, crop rotation, natural fertilizers (panchagavya, vermicomposting) & Current farming practices adopted in agriculture, Agriculture growth in India.
Growth & Performance of Industrial Sector - Pre-reform & post reform Industrial policies, role of public, private & joint sectors in industrial development. Growth & Contribution of MSME in Indian economy. Role of Infrastructure Sector & Construction, Pharma sector, etc.
Growth & Performance of Services Sector in Indian economy Major Services like Banking, Tourism, Education and Health,Energy sectors,

Activities: Field Assignment Find How Traditional hand-loom weaving, dyeing (like Bandhani, Ikat, Chikankari), & Use of natural fibers and dyes were used.
Assignment: How religious tourism used to flourish in ancient times.

UNIT-IV

Sectoral Performance II:
1. Indian FinancialSystem: Money Market, Its instruments, and Role of money market in control of money supply in the economy.
2. Capital Market in India and Working of SEBI
3. International financial system & FDI, FIIs in Indian Economy.
4. Government budget, and public debt, GST, Govt. Revenue and expenditure, and fiscal deficits.

Activity: Go to RBI and SEBI Website and analyse different indicators of Money and capital market.
Prepare a SWOC analysis on the basis of Government Budgetary indicators like revenue, expenditure, fiscal deficit.

UNIT-V

Major government policies& their Analysis fiscal and monetary policies, trade and investment policies, Welfare Policies like MNERGA, MUDRA YOJANA, STAND-UP INDIA, SEZ, Role of NITI Aayog. Role of State, market and other institutions; for development Panchayats, NGOs and SHGs.Regional Issues of Indian Economy: Regional development of states, imbalance; Issues and regional policies.

Activities:

1. Take any programme or policies of Indian government and check its impact on particular village or city.
2. Prepare an assignment on any one issues of regional development.
3. Case: prepare a case on how intiatives like stand up India, skill development is performing for its target group.

Text books, Reference books and other sources

Suggested Readings:

(1) PDF-HISTORY OF INDIAN ECONOMY, Swadeshi Shodh Sansthan, New Delhi. ISBN-267-622636.
(2) Indian Economy, V.K. Puri & S. K. Mishra, Himalaya Publishing House, 39th edition, 2021.
(3) Indian Economy, Uma Kapila,
(4) Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), India's Economic Reforms and Development (Essay in honour of Manmohan Sing), Oxford University Press, New Delhi.
(2) Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
(3) Bawa, R.S. and P.S.Raikhy (Ed.) (1997), Structural Changes in Indian Economy, Guru Nanak Deve University Press, Amritsar.
(4) Brahmananda, P.R. and V.R.Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
(5) Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Helaye Publications, New Delhi.
(6) Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.
(7) Jalan, B. (1992), India's Economic Policy - Preparing for the Twenty First Century, Viking, New Delhi.
(8) Joshi, V. and I.M.D.Little (1999), India: Macro Economics and Political Economy, 1964-1991, Oxford University Press, New Delhi.
(9) Parikh, K.S. (1999), Indian Development Report - 1999-2000, Oxford University Press, New Delhi.
(10) Sandesara, J.C. (1992), Industrial Policy and Planning, 1947-1991: Tendencies,Interpretations and Issues, Sage. Publications, New Delhi.
(11) Sen, R.K. and B.Chatterjee (2001), Indian Economy: Agenda for 21st Century (Essays in honour of Prof.P.R.Brahmananda), Deep & Deep Publications, New Delhi.
(12) World Bank (2000), India: Reducing Poverty, Accelerating Economic Development, Oxford University Press, New Delhi.
(13) Brahmananda, P.R. and V.R.Panchmukhi (Eds.) (1987), The Development Process of the Indian Economy, Himalaya Publishing House, New Delhi.
(14) Byres, T.J. (Ed.) (1998), The Indian Economy: Major Debates Since Independence, Oxford University Press, New Delhi.
(15) Chatopadhyaya, M., P.Matiti and M.Rakshit (Eds.) (1996), Planning and Economic Policy in India - Evaluation and Lessons for the Future, Sage Publications, New Delhi.
(16) Chelliah, Raja J. and R.Sudarshan (1999), Income, Poverty and Beyond: Human Development in India, SocialScience Press, New Delhi.

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M.A. Economics **Semester – IV**

Course	Subject	Subject Code
M.A. (Economics)	**Environmental Economics**	**MAEC-402**

On successful completion of this course, the students will be able to:
CLO 1- Understand the nexus between environment and economic development.
CLO 2- Understand fundamental concepts like market failures, externalities, and property rights.
CLO-3 It also delves into specific environmental issues, valuation methods, and policy instruments for environmental protection
CLO-4 Explores the interaction between the economy and the environment, including topics like energy, climate change, and sustainable development.

UNIT-I

Introduction and Fundamental Concepts: Understanding Environment, Traditional system of environmental conservation.
Indian indigenous practices for environmental sustainability, Environmental Economics - meaning, scope, and nature of environmental economics. Relation between Environment & Ecology, Significances of Environmental balance, Role of Economics in Environment. Nature of Environmental Economics. Environmental problems & Current Policy Solutions.

Unit Activity: Write a Case talking about environmental management practices in Ancient Indian System and compare it with contemporary environment.
Discussion the Specific Environmental Issues: like Energy and Climate Change. Air and water pollution. Biodiversity conservation. Land degradation and deforestation.

UNIT-II

Market Failure and Externalities:
Understanding how markets fail to allocate resources efficiently in environmental contexts, including the role of externalities, Positive & Negative. Pigouvian taxes, and the Coase theorem. Conventional solutions to Environmental Problems The command and control Approach. Economic solutions to Environmental problems The market approach- pollution charges - A public good.
Unit Activity: Write 10 examples of Public and Private Goods. Discuss 10 examples of positive & negative externalities.

Role play/Poster Making - How economic development destroyed environment and recent solutions to balance environmental Pressure.

UNIT-III

Environmental Subsidies Deposit/Refund System pollution permits 10 trading system. Assessing benefits for Environmental Decision making.Property Rights and Resource Allocation: Exploring the importance of property rights and their role in resource management, including common property resources and collective action.
Unit Activity: Discussion The Interaction Between Economy and Environment - Topics -
(1) Poverty and the environment.
(2) The role of information in environmental health.
(3) Environmental education.
(4) The relationship between development and environmental degradation.

UNIT-IV

Environmental Valuation: Different methods for valuing environmental goods and services including market-based and non-market-based approaches.
Cost benefit Analysis in Environmental decision making Conflicts between Environment Economic Development Population growth
Unit Activity: This can include the use of economic models in environmental policy assessment like -Discuss and draw -The Environmental Kuznets Curve. Use cost-benefit analysis on few indicators of environment, Assess risk management technique for environmental project. Understanding of Waste management and recycling in any village or city or an industry.

UNIT-V

Environmental Policy and Regulation: Examining different policy instruments for environmental protection, including market-based approaches (like cap-and-trade systems and tradable permits) and command-and-control strategies. Sustainable Development: Exploring the concept of sustainable development, including indicators of sustainability and the principles of environmental accounting. Environmental Laws & their implementation
Unit Activity: Case Studies: Assessment of environmental policies and their impact.

Keywords/Tags:. Cost benefit Analysis, Environmental Law

Text books, Reference books and other sources

Suggested Readings:
1.Baumol, W.J. and W.E.Oates (1988), The Theory of Environmental Policy (2nd Edition) CUP, Cambridge. 2.Bhattacharya, R.N. ed. (2001): Environmental Economics, An Indian Perspective, Oxford University Press, New Delhi.
3.Hanley, N.J.F.Shogren and B. White (1997) Environmental Economics in Theory and Practice. Macmillan.
4.Jarret H. ed. Environmental Quality in a Growing Economy. John Hopkins Press, Baltimore.
5.Kalpagram. (1998): Environmental Economics, Sterling Press.
6.Kolstrad, C.D. (1999): Environmental Economics, Oxford University Press, New Delhi.
7.Mehta, S, S. Mundle, and U.Sankar (1995): Controlling Pollution: Incentives and Regulation, Sage, New Delhi.

8.Murthy, M.N., A. James and S.Misra (1999): The Economics of Water Pollution in India. Oxford University Press, New Delhi.
9.Pearce, D.W and R. Turner (1991): Economics of Natural Resource Use and Environment. John Hopkins Press, Baltimore.
10.Rao, O.K. (2000): Sustainable Development, Economics and Policy, Blackwell Publishers, UK.
11.Sankar, U ed (2001): Environmental Economics, Oxford University Press, New Delhi.
12.Saxena, H.M. (2000): Environmental Management. Rawat Publishers, New Delhi.
13.Sengupta, R.P. (2000): Ecology and Economics: An Approach to Sustainable Development Oxford University Press, New Delhi.
14.State of India's Environment. The Hindu Annual Publications.
15. Tietenberg, T, ed. (1997): Economics of Global Warming. Edward Elgar, UK.
16.Blaug, Mark (1972) Introduction to Economics of Education, Penguin, London.
17.Becker, G.S . (1974) Human Capital. 2nd Edn., NBER, New York.
18.Berman, P and M.E. Khan (1993) Paying for India's Health Care, Sage
19.Panchamukhi. P.R. (1980) Economics of Health: A Trend Report, ICSSR Survey, Allied, New Delhi.
20. Tilak, J.B.G. (1989) Economics of Inequality in Education. Sage, New Delhi.

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M.A. Economics **Semester – IV**

Course	Subject	Subject Code
M.A. (Economics)	Behavioral Economics	MAEC-403

On successful completion of this course, the students will be able to:
CO1. Understand the limitations of standard economic models by identifying how real human behavior often deviates from rational choice assumptions.
CO2. Recognize and explain key behavioral biases (e.g., loss aversion, present bias, status quo bias) and heuristics that influence individual decision-making.
CO3. Apply behavioral concepts such as mental accounting, framing, and nudging to real-life financial, consumer, and policy decisions.
CO4. Evaluate how behavioral insights can be used to improve public policy, financial inclusion, health, and development programs in the Indian context.

UNIT-I

Introduction to Behavioral Economics
Introduction to Behavioral Economics, History and emergence of Behavioral Economics, Relationship with other disciples
Rational Choice Theory vs. Real-World Behavior Bounded Rationality (Herbert Simon) Heuristics: Mental shortcuts (availability, representativeness, anchoring) Kahneman's System 1 vs. System 2 thinking,Indian traditions often train the Buddhi (System 2) to guide and refine the Manas (System 1). Concept of Dhyana (meditation) to balance system 1 and system 2 thinking

Activity

Students can design and conduct a short, simple questionnaire with questions framed to reveal biases like anchoring or framing. Present your observations in class or a short reflection note.

UNIT-II

Time, Risk, and Human Choices
Inter temporal Choice: Now vs. Later decisions Present Bias and Hyperbolic Discounting Self-Control Problems and Commitment Devices Risk Preferences: Risk aversion, loss aversion, and ambiguity aversion,
Mental Accounting, Status Quo Bias Practices like Tapas (austerity), Vrata (vows), and Dhyana (meditation), which cultivate inner discipline and align actions with long-term goals. Relation of this concept with self-control problems

Activity-Students can track a small everyday decision over a week (e.g., study vs. entertainment) and reflect on their self-control and temptation. Connect it to theories learned.

UNIT-III

Fairness, Ultimatum Game and Dictator Game Inequality Aversion and Social Preferences Emotions, and Social Behavior in Economic Decisions Reciprocity and Trust
Role of Identity, Emotions, and Social Norms, Culture and 02 Economic Behavior
Activity-Students can play the Ultimatum Game and Dictator Game in class. Discuss: Were outcomes "rational"? What do they reveal about fairness?

UNIT-IV

Introduction to Nudging and Choice Architecture, Defaults, Framing, Salience, and Social Proof Nudges and Public Policy Applications Behavioral Interventions in Public Policy: Health (organ donation, vaccination) Finance (retirement saving, budgeting)
Environment (energy use, littering Critiques of nudging Explain how Indian traditional concepts are a nudge for sustainable life.

Activity

Students can design a simple behavioral nudge for a social issue (e.g., reducing plastic use in campus canteen). Write a 2-page idea pitch and present it briefly.

UNIT-V

Ethics, Criticisms, and the Future of Behavioral Economics
Criticisms of Behavioral Economics (e.g. too descriptive? Not predictive?)
Ethical concerns with nudging (paternalism vs. autonomy)
The "Replication Crisis" in psychology and behavioral experiments Impact of Behavioral Economics.
Future Directions: Behavioral tech, digital nudges, neuroeconom
Activity- Students can organize a Debate on "Are Nudges really a Manipulation?

<u>Text books, Reference books and other sources</u>

Tversky & Kahneman (1979) - Prospect Theory paper
Thaler (1980)-Mental Accounting
Fehr & Schmidt (1999) - Theory of Fairness, Competition, and Cooperation
Thaler & Sunstein (2008) - Nudge (selected chapters)
Sunstein (2014) - Why Nudge?

Rajesh K. Pillania :Behavioral Economics: Understanding Human Behavior to Improve Decision Making
R. K. Mandal Book: Introduction to Behavioral Economics
"Indian Psychology" by K. Ramakrishna Rao

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M.A. Economics — Semester – IV

Course	Subject	Subject Code
M.A. (Economics)	**Economics of Agriculture & Rural Development**	**MAEC-404**

On successful completion of this course, the students will be able to:
CO1 -To understand the traditional system of agriculture and rural development and relate it with present rural villages.
CO2 - To familiar with the basic concepts, theories and approaches of agricultural and rural development and will be able to understand important issues like the theories of agriculture, agrarian structure and land reforms.
CO3.Develop an understanding of the manifold obstacles to agricultural development, and the policies adopted to overcome them, with particular emphasis on the Indian agricultural scenario.
CO4-Awareness of the debates on farm size and productivity. Gathering knowledge about state interventions and planning for agricultural and rural development.
CO5 - Understand the policy formulation process for agricultural and rural development. So that they get insights about present condition and suggest ways to improve public policy, financial inclusion, health, and development programs in the Indian context.

UNIT-I

Introduction Agriculture Economics

Agricultural Economics: Nature and scope of agricultural economics, Role of agriculture in economic development; Interface between Agriculture and Industry; Schultz's prescription of transforming traditional agriculture; Mellor's model; Land Reforms, Agricultural labor and employment trends, Agriculture Development during Planning Periods; Green Revolution; Farm Size Productivity Relationships, Growth, Productivity and Regional Disparities in Indian Agriculture.
Activities:- Understanding Traditional farming techniques based on lunar cycles,
Organize a debate on Green Revolution: Success vs. Challenges.
Analyze regional disparities in agricultural growth using government reports
Compare agricultural development during different planning periods

UNIT-II

Agriculture Growth, Productivity

Agricultural Growth, Productivity and Regional Disparities in Indian Agriculture; Agricultural Markets and pricing structure- Problems, Costs and Efficiency in the markets, Marketing Reforms, Innovations in Agricultural Marketing System. Agricultural subsidies, Food Security and Public Distribution System (PDS), Traditional knowledge on food preservation and storage, indigenous Agricultural Finance: Role, Agencies, Inter-linked Markets, Value Chain, Market Reforms,Indebtedness. Role of NABARD and self-help groups, Agricultural insurance and risk mitigation. Financial inclusion: Microfinance, SHGs, and rural banking.

Activity-Visit a local PDS distribution center to understand food security mechanisms Conduct surveys with farmers on traditional rural financing methods buyers Simulate a market negotiation between farmers and Role-play government policy-making for agricultural reforms.
Visit farms to study risk and uncertainty in agriculture

UNIT-III

Sustainable Agriculture:
Sustainable Agriculture: Principles of sustainable agriculture, organic farming in India, Zero Budget Natural farming practices, Biodiversity in Indian agriculture, traditional Indian farming methods Vedic agricultural practices, Water management and irrigation economics, Technological advancements in agriculture, Jugaad Technology in Indian Agriculture, Climate change and its impact on agriculture.
Activities: Understanding Traditional farming techniques based on lunar cycles,
Visit a local organic farm to observe sustainable practices.
Learn about rainwater harvesting and its role in irrigation economics.
Analyze biodiversity trends in Indian agriculture using government reports.
Study the Jugad Technology in Agriculture

UNIT-IV

Definitions and scope of rural development
Definitions and scope of rural development, Theories of rural development (e.g., modernization, dependency, and participatory approaches), Historical perspectives: Rural development in Indian contexts, Key challenges: Poverty, inequality, employment and access to resources. Overview of rural development policies- MGNREGA, NRLM, PMGSY and other Centre/ State schemes
Activities: Evaluation of major rural development policy (MGNREGA, NRLM, PMGSY, etc.). Conducting a mock policy discussion where students debate improvements.

UNIT-V

Decentralize d planning:
Decentralized planning: Role of Panchayati Raj Institutions (PRIs), Social issues in rural areas: Gender inequality, Role of NGOs and community-rural based organizations (CBOs) in development. Education and health in rural areas. Strategies for empowering rural women, rural infrastructure, Cooperative Structure: Functions & its role in rural development, Agricultural Exports: Nature, Trend, Rural-urban migration and its impact on agriculture, Composition; WTO and international trade in agricultural commodities.

Activity-Debate on the effectiveness of WTO policies in Indian agricultural trade Discuss the role of Panchayat Raj in rural governance and its impact reflect on how gender roles in agriculture have evolved over time. Designing a small-scale development initiative such as skill training, healthcare awareness, or microfinance solutions by the students.

Keywords/Tags: WTO

Text books, Reference books and other sources

1. Acharya, S.S. and Agarwal, N.L.. (2012). Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Bansil, P.C. (2017). Economic ProblemsofIndianAgriculture. Daya Publishing House,
3. New Delhi. Bhalla, G.S. and Gurmail S.(2001). Indian Agriculture, Four Decades of Development. New Delhi: Sage Publications.
4. Chand, R. (2012). Development Policies and Agricultural Markets. Economic and Political Weekly, 47(52): 53-63.
5. Chand, R., SSRaju, S. GargandL.M.Pandey (2011). InstabilityandRegionalvariation inIndian Agriculture, NCAP, New Delhi.
6. Arya, M.P. (2015). Fundamentals of Agriculture. New Delhi: Kalyani Publishers
7. Jagdishwar Sahay (2018). Elements of Agricultural Engineering. New Delhi: CBS Publishers & Distributors.
8. Kenneth K. Tanji & Bruno Yaron (2015). Management of Water Use in Agriculture. New York: Springer.
9. Katar Singh (2016). Rural Development: Principles, Policies, and Management. New Delhi: Sage Publications.
10. G.S. Bhalla (2018). Agricultural Development and Rural Transformation in India. New Delhi: Oxford University Press.
11. Ramesh Chand (2021). Indian Agriculture: Policies and Performance. NewDelhi: NITI Aayog Publications.
12. Pant, R.M. & Shrivastava, Mukesh Kumar (2020). Indigenous Knowledge Systems for Sustainable Rural Development in North East India. New Delhi: Amazon Publications.
13. National Institute of Agricultural Extension Management (MANAGE) (2016). Farmer's Handbook on Basic Agriculture. Hyderabad: MANAGE Publications.
14. Indian Council of Agricultural Research (ICAR) (2021). ICAR Significant Achievements in Agriculture and Rural Development. New Delhi: ICAR Publications.

Suggested equivalent online courses:

SWAYAM (Government of India MOOCs Platform)
https://swayam.gov.in
Udemy-Courses on Behavioral Economics https://www.udemy.com/topic/behavioral-economics/
Coursera Courses on Behavioral Economics
https://www.coursera.org/courses
Swayam Courses - https://onlinecourses.swayam2.ac.in/cec21hs05/preview
IKS Books PDF Indian Knowledge System
https://www.kdpublications.in ISBN: 978-81-974990-0-5 187 16.
Impact of Indian Knowledge Systems on Sustainable Development Goals
Better achievement of Sustainable Development Goal - 1(No Poverty)
(https://pib.gov.in/Press ReleasePage.aspx?PRID=2032857)

1. Biswas, S. (2021). Indian Knowledge system and NEP-2020 Scope, Challenges and Opportunity, National Journal of Hindi & Sanskrit Research, 1(39), 179-183.
2. Chandel, N., & Prashar, K., K. (2024). Indian knowledge system and NEP: a brief analysis, Journal of Emerging Technologies and Innovative Research, 11(1), d260-d263.
3. Kumari, D. (2024), Indian Knowledge for Sustainable Futures, International Journal of Novel Research and Development, 9(3), d259-d262.
4. NITI Aayog (2024). Release of SDG India Index 2023-24. Retrieved from https://pib.gov.in/ Press Release Page.aspx? PRID-2032857.
5. Sharma, R. (2024). Incorporation of India Knowledge System through NEP (2020) For Sustainable

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M.A. Economics   Semester – IV

Course	Subject	Subject Code
M.A. (Economics)	Internship/Apprenticeship	MAHS-405