

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

Course Code	Name of the Course	Credit
Semester I		
ECO101T	Principles of Micro Economics	3
ECO102MDC-I	Contemporary Issues in Indian Economy-I	3
Semester II		
ECO201T	Principles of Macroeconomics	3
ECO202VAC	Indian Knowledge System	3
ECO203MDC-II	Contemporary Issues in Indian Economy-II	3
Semester III		
ECO301T	History of Economic Thoughts	4
ECO302MDC-III	Contemporary Issues in Indian Economy-III	3
Semester IV		
ECO401T	Money and Banking	3
ECO402T	Public Finance	3
Semester V		
ECO501T	Economics of Growth and Development	3
ECO502T	Environmental Economics	3
ECO503T	Elementary Statistics (Minor)	4
Semester VI		
ECO601T	International Economics	4
ECO602T	Indian Economy & Economy of Uttar Pradesh	4
ECO603T	Research Methods in Social Sciences (Minor)	4
Semester VII		
ECO701T	Advanced Microeconomic Theory	4
ECO702T	Quantitative Methods in Economics-I	4
ECO703T	Environmental Economic Analysis	4
ECO704T	Public Economics	4
ECO705T	Computer Applications in Economics (Minor)	4
Semester VIII		
ECO801T	Advanced Macroeconomics	4

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ECO802T	Quantitative Methods in Economics-II	4
ECO803T	International Economics: Theory & Policy	4
ECO804T	Industrial Economics	4
ECO805T	Demography (Minor)	4
(The Students who secure minimum 75% Marks up to six semesters)		
Semester VII		
ECO701R	Advanced Microeconomic Theory	4
ECO702R	Mathematics for Economics	4
ECO703R	Statistical Applications in Economics	4
ECO704R	Elementary Econometrics	4
ECO705R	Economics of Infrastructure (Minor)	4
Semester VIII		
ECO801R	Research Methodology	4
ECO802R	Resource Economics (Minor)	4

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BA I Year Sem-I ECONOMICS
Principles of Micro Economics
Core Course

Programme/Class BA Economics	Year: First	Semester: I
Subject: Economics		
Course Code: ECO101T		Course Title: Principles of Micro Economics
Course Outcomes: On completion of this course, students will be able to understand the basic concepts of microeconomics and learn how to consumer's and producer's equilibrium achieve through demand analysis and production function.		
Credit:3		Core Course
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Units	Contents	Lectures
Unit I	Basic Economic Concepts: Meaning and definition of economics, Problem of scarcity and choice, Opportunity cost and production possibility frontier, Methods of Economic Study, Static and Dynamic Economics, Equilibrium and its types.	10
Unit II	Demand Analysis and Consumer Behaviour-I: Concept of Demand, Demand function, Law of Demand, Elasticity of Demand- Types, Measurement and Factors affecting demand elasticity. Utility Analysis- Cardinal Approach; Law of Diminishing Marginal Utility, law of Equi-Marginal utility, Consumer's Equilibrium Utility Analysis- Ordinal Approach, Indifference curve analysis- Properties, Budget line and its slope, Consumer's Equilibrium, Price effect, Income effect and Substitution Effect, derivation of demand curve, Consumer's Surplus, Revealed Preference Theory.	15
Unit III	Production , Costs and Revenue Concept of Production, factors of production, production possibility curve, production function, Short run theory of production, Law of Variable proportions; Long run theory of production, Laws of Returns to scale, concept of Iso-cost line and Producer's Equilibrium Concept and Types, Total, Average and Marginal cost: short run and long run, Inter Relationship between cost curves. Concept of revenue, Total, Average and Marginal revenue and its interrelationship, shape of revenue curves. Break even analysis.	10
Unit IV	Market Structure, Price Determination and Theory of Distribution Structure of markets, perfect competition- characteristics, Equilibrium of firm and Industry, price determination under perfect competition, Monopoly-Characteristics, equilibrium, price or output determination under monopoly. Price discrimination and its degrees. Nature of Monopolistic competition-Characteristics, equilibrium, price and non-price competition. Concept of Factor income: Marginal Productivity theory, Concept of rent and Quasi rent, theories of rent: classical and modern, concept of quasi rent. Concept of Wage and Wage Determination; Theories: Classical, Neo-Classical and Modern. Concept of Interest and its theories: Classical, Neo-Classical and Modern; Concept and Theories of Profit: Classical, Neo-Classical and Modern.	10
References: Text Books		

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1. Stonier and Hague: A text book of Economic theory.
2. R.G. Lipsey: An Introduction to positive economics.
3. P. A. Samuelson: Economics.

Suggested Readings

4. Gould and Ferguson: Micro Economic Theory.
5. Awasthi & Agnihotri: Arthik Siddhant.

Web References

<http://heecontent.upsdc.gov.in/>

<https://epgp.inflibnet.ac.in/>

<https://swayam.gov.in/>

<https://udrc.lkouniv.ac.in/Department/DepartmentDetail/StudyMaterial?dept=5>

<https://www.coursera.org/in>

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BA I Year Sem-I ECONOMICS
Contemporary Issues in Indian Economy-I

Programme/Class BA Economics	Year: First	Semester: I
Subject: Multidisciplinary Course (MDC-I)		
Course Code: ECO102MDC-I	Course Title: Contemporary Issues in Indian Economy-I	
Course outcomes: After completing this course, students will be able to: <ol style="list-style-type: none"> 1. Explain the basic structure and key characteristics of the Indian economy. 2. Analyze the role of agriculture, industry, and services in economic growth. 3. Interpret economic indicators like GDP, inflation, and employment data. 4. Discuss government initiatives and policy interventions for rural and industrial development. 5. Relate structural features of the Indian economy to issues in current affairs and competitive exams. 		
Credits: 3	Multidisciplinary Course (MDC-I)	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Basic Structure and Features of the Indian Economy Nature and characteristics of the Indian economy: Developing economy, mixed economic system. National income concepts and trends (GDP, GNP, NDP, PCI). Population and demographic dividend. Poverty, inequality, and unemployment — nature, causes, and policy measures.	15
II	Agriculture and Rural Development Role and importance of agriculture in India's development. Land reforms, Green Revolution, and agricultural productivity. Agricultural marketing, MSP, and government initiatives (PM-KISAN, PMFBY, e-NAM). Rural credit and rural development programs: MGNREGA, NRLM, SHGs.	15
III	Industry, Infrastructure, and Services Industrial policy: Pre-1991 and post-reform era. MSMEs, Make in India, Start-up India, ODOP, OSOP, ODOC, PLI scheme. Infrastructure development: Transport, energy, and urban infrastructure. Service sector growth: IT, tourism, healthcare, education, financial services.	15

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Suggested Readings:

- ❖ **Ramesh Singh** – *Indian Economy*, McGraw Hill.
- ❖ **Uma Kapila** – *Indian Economy: Performance and Policies*
- ❖ **Singhania, Nitin.** *Indian Economy.* McGraw Hill.
- ❖ **Economic Survey of India** (Latest Edition)
- ❖ **Union Budget Documents** (Latest)
- ❖ **NITI Aayog Reports** and *SDG India Index*
- ❖ Periodicals: *Yojana, Kurukshetra, EPW*
- ❖ Official Sources: *PIB, PRS India, RBI Bulletin, NABARD Reports*
- ❖ लाल, एस. एन एवं लाल, एस. के. *भारतीय अर्थव्यवस्था सर्वेक्षण तथा विश्लेषण.* शुभम पब्लिशर्स।
- ❖ सिंह, रमेश, *भारतीय अर्थव्यवस्था.* McGraw Hill Education
- ❖ वर्मा, संजीव. *भारतीय अर्थव्यवस्था.* McGraw Hill Education
- ❖ सिंघानिया, नितिन. *भारतीय अर्थव्यवस्था.* McGraw Hill Education
- ❖ मिश्रा, एस. के. व पुरी, वी. के. *भारतीय अर्थव्यवस्था का परिचय.* हिमालय पब्लिकेशन।

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BA I Year SemII
Principles of Macroeconomics
Core Course

Programme/Class BA Economics	Year: First	Semester: II
Subject: Economics		
Course Code: ECO201T	Course Title: Principles of Macroeconomics	
Course Outcomes: This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money and inflation.		
Credits: 3		Core Course
Max. Marks:25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Units	Contents	Lectures
Unit I	Introduction to Macroeconomics and Basic Concepts Macro vs. Micro Economics, Macroeconomic issues, Limitations of Macroeconomics; Introduction to National Income, Concepts of GDP, GNP, NDP and NNP at market price and factor cost; Personal Income and Disposable Personal Income; Concept and Components of Saving and Capital Formation.	10
Unit II	Measurement of Macroeconomic Variables Approaches to the Measurement of GDP: Income, expenditure, product or Value added Methods, Difficulties of Estimating National Income, Circular Flow of Income and expenditure in two, three, and four-sector economy. Measuring Inflation rate and Unemployment rate; National Income and Economic Welfare; Green Accounting.	15
Unit III	Determination of Income and Employment Basic Assumptions of Classical Theory - Classical Theory of Employment - Say's Law of Market - Wage - Price Flexibility (Pigou's Version) - Saving and Investment Equality -Evaluation of the Classical Theory of Employment; Keynesian Theory of Employment.	10
Unit IV	GDP: Its Components and Determinants Actual and Potential GDP; Okun's Law, Components of GDP: Consumption Function; Saving Function; Investment Function; Concept of Multiplier; National Income Determination in two and three sectors economy; Simple IS-LM model.	10
Text Books		
1. Branson, W. A., Macroeconomics: Theory and Policy, 3rd ed. Harper and Row, NY.		
2. N. Gregory Mankiw, Macroeconomics, 7th edition, Cengage Learning India Private Limited, New Delhi		
3. Shapiro, E., Macroeconomics: Analysis, Galgotia Publication, New Delhi.		
Suggested Readings		
1. Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007		
2. Lipsey R.G. and K.A. Christal, Principles of Economics, 9th Ed., Oxford University Press.		

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3. SaumanSikdar, Principles of Macroeconomics, Oxford University Press.
4. Stiglitz J. E. and Carl E. Walsh Principles of Macroeconomics, W.W. Norton and Company, New York.

Web References

<http://heecontent.upsdc.gov.in/>, <https://epgp.inflibnet.ac.in/>,
<https://swayam.gov.in/>, <https://www.coursera.org/in>

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BA I Year Sem-II
Indian Knowledge System in Economics
(Under NEP 2020, Ability Enhancement / Value Added Course)
Paper Code: ECO202VAC Credits: 3

Units	Contents	Lectures
Unit I	Foundations of Indian Economic Thought Concept, meaning, and scope of Indian Knowledge System (IKS); Sources of economic thought in ancient India — Vedas, Upanishads, Smritis, Arthashastra, Mahabharata; Kautilya's Arthashastra: principles of wealth creation, taxation, trade, and welfare; Economic and ethical values in Indian tradition — Dharma, Artha, and Kama and Relevance of Indian economic philosophy in contemporary economic systems.	10
Unit II	Economic Institutions and Practices in Ancient and Medieval India Agrarian structure: land, labour, and ownership patterns; Guilds (Shrenis), crafts, industries, and trade networks; Indigenous banking, currency, and taxation systems; Market regulation and administration under Mauryan, and Gupta, rulers; Maritime and overland trade: India's connection with Central Asia and the Indian Ocean world, TodarMal's land arrangements, settlements, and craftsmen.	10
Unit III	Modern Relevance and Continuity of Indian Economic Ideas Gandhian economics: Swadeshi, trusteeship, and self-reliance; Integral humanism (DeendayalUpadhyaya) and Indian developmental philosophy; IKS perspective on sustainable and inclusive growth; Environmental realization and economic ethics in Indian tradition; Application of traditional Indian economic wisdom in policy and modern development	10

References

Kautilya — Arthashastra (translated by R. Shamasastri)
S.K. Das — Economic Thought of Ancient India
D.R. Gadgil — The Industrial Evolution of India
M.K. Gandhi — Hind Swaraj and Constructive Programme
DeendayalUpadhyaya — Integral Humanism
KapilaVatsyayan — Traditional Knowledge System in India
IKS Division, AICTE — Indian Knowledge System Curriculum Framework (2022)
BalbirSihag (2014): Kautilya: The True Founder of Economics
Atharvaveda (selected suktas)
P.V. Kane: History of Dharmashastra

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BA I Year Sem-II ECONOMICS
Contemporary Issues in Indian Economy-II

Programme/Class BA Economics	Year: First	Semester: II
Subject: Multidisciplinary Course (MDC-II)		
Course Code: ECO203MDC-II	Course Title: Contemporary Issues in Indian Economy-II	
Course outcomes: After completing this course, students will be able to: <ul style="list-style-type: none"> ❖ Understand the functioning of India's fiscal and monetary policy systems. ❖ Evaluate the effectiveness of government programs for inclusive and sustainable growth. ❖ Analyze employment trends and labour market reforms in India. ❖ Discuss the opportunities and challenges of globalization for the Indian economy. ❖ Apply knowledge of economic policies to interpret contemporary economic issues and current affairs. 		
Credits: 3	Multidisciplinary Course-II (MDC-II)	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Fiscal and Monetary Framework Public finance concepts: Taxation, expenditure, and fiscal deficit. Budget structure and recent trends in fiscal policy. GST, Direct Tax reforms, and Finance Commission recommendations. Monetary policy framework, tools, and the role of RBI in inflation control. Financial inclusion and digital finance initiatives.	15
II	Inclusive Growth and Human Development Meaning and importance of inclusive growth and sustainable development. Human development: Education, health, and skill formation. Major social welfare schemes: NEP 2020, Ayushman Bharat, PoshanAbhiyan. Gender and development: Women empowerment, SHGs, microfinance. Regional disparities and policy responses.	15
III	Employment, Globalization, and External Sector Employment trends and challenges in India. Labour reforms, gig economy, skill development initiatives. Globalization and its impact on Indian economy and society. Foreign trade, balance of payments, and FDI/FPI flows. India's participation in WTO, IMF, World Bank, G20, and BRICS.	15

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Suggested Readings:

- ❖ **Ramesh Singh** – *Indian Economy*, McGraw Hill.
- ❖ **Uma Kapila** – *Indian Economy: Performance and Policies*
- ❖ **Singhania, Nitin.** *Indian Economy*. McGraw Hill.
- ❖ **Economic Survey of India** (Latest Edition)
- ❖ **Union Budget Documents** (Latest)
- ❖ **NITI Aayog Reports** and *SDG India Index*
- ❖ Periodicals: *Yojana, Kurukshetra, EPW*
- ❖ Official Sources: *PIB, PRS India, RBI Bulletin, NABARD Reports*
- ❖ लाल, एस. एन एवं लाल, एस. के. *भारतीय अर्थव्यवस्था सर्वेक्षण तथा विश्लेषण*. शुभम पब्लिशर्स।
- ❖ सिंह, रमेश, *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ वर्मा, संजीव. *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ सिंघानिया, नितिन. *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ मिश्रा, एस. के. व पुरी, वी. के. *भारतीय अर्थव्यवस्था का परिचय*. हिमालय पब्लिकेशन।

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BA II Year, Sem. III
History of Economic Thoughts
Theory (Core Course)

Programme/Class BA Economics	Year: Second	Semester: III
Subject: Economics		
Course Code: ECO301T	Course Title: History of Economic Thoughts	
Course outcomes:		
<ul style="list-style-type: none"> ● To learn and discuss, at an advanced undergraduate level, how the economic thought has evolved over time. ● Introducing students to the critical comparison of the contributions of the main schools of economics. ● To introduce & highlight before the students about Indian Economic Thinkers and their valuable contribution in the field of Economics. ● The classical, the marginalize revolution and its application to the theories of general and partial equilibrium. ● The current macroeconomic debate between the neo-classical and the Keynesian school. 		
Credits: 4	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Kautilya, Dada Bhai Naoroji, RC Dutt, Dr. BR Ambedkar, Dr. Ram Manohar Lohia, Gandhian Economics, Pt. DeenDayalUpadhyay, JK Mehta, AK Sen, J. Bhagwati.	15
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.	15
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, Economic Ideas of J.B. Say, J.S. Mill.	15
IV	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, Marginalist: Gossen, Walras and Fisher.	15

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Suggested Readings:

1. Bhatia, H.L: History of Economic Thought, Vikash Publishing House.
2. Black house, 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.

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BA II Year Sem III ECONOMICS
Contemporary Issues in Indian Economy-III

Programme/Class BA Economics	Year: Second	Semester: III
Subject: Multidisciplinary Course (MDC-III)		
Course Code: ECO302MDC-III	Course Title: Contemporary Issues in Indian Economy - III	
<p>Course outcomes: After completing this course, students will be able to:</p> <ul style="list-style-type: none"> ❖ Examine major current economic issues and policy debates in India. ❖ Assess India's approach to sustainability, green energy, and environmental protection. ❖ Analyze the role of digital transformation in India's development journey. ❖ Discuss India's long-term development vision and its global positioning. ❖ Critically engage with recent economic reforms, data, and policy initiatives. 		
Credits: 3	Multidisciplinary Course (MDC-III)	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Current Policy Issues and Economic Reforms Post-COVID economic recovery and policy responses. Privatization, disinvestment, and fiscal management challenges. Agriculture reforms, food security, and minimum support price debate. Federal finance and centre-state relations. Recent flagship initiatives: Atmanirbhar Bharat, PM Gati Shakti, National Logistics Policy.	15
II	Sustainability, Environment, and Green Growth Environmental challenges and economics of climate change. Renewable energy transition and green finance. India's performance on Sustainable Development Goals (SDGs). Circular economy and sustainable urbanization. India's commitments under COP and Paris Agreements.	15
III	Digital Transformation and India @100 Digital India, India Stack, FinTech, and e-Governance. Start-up ecosystem, innovation policy, and AI-based transformation. Data economy, cyber security, and digital divide. Vision for AmritKaal and Viksit Bharat@2047. Role of youth, innovation, and technology in future growth.	15

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Suggested Readings:

- ❖ **Ramesh Singh** – *Indian Economy*, McGraw Hill.
- ❖ **Uma Kapila** – *Indian Economy: Performance and Policies*
- ❖ **Singhania, Nitin.** *Indian Economy*. McGraw Hill.
- ❖ **Economic Survey of India** (Latest Edition)
- ❖ **Union Budget Documents** (Latest)
- ❖ **NITI Aayog Reports** and *SDG India Index*
- ❖ Periodicals: *Yojana, Kurukshetra, EPW*
- ❖ Official Sources: *PIB, PRS India, RBI Bulletin, NABARD Reports*
- ❖ लाल, एस. एन एवं लाल, एस. के. *भारतीय अर्थव्यवस्था सर्वेक्षण तथा विश्लेषण*. शुभम पब्लिशर्स।
- ❖ सिंह, रमेश, *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ वर्मा, संजीव. *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ सिंघानिया, नितिन. *भारतीय अर्थव्यवस्था*. McGraw Hill Education
- ❖ मिश्रा, एस. के. व पुरी, वी. के. *भारतीय अर्थव्यवस्था का परिचय*. हिमालय पब्लिकेशन।

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BA II Year Sem-IV
Money and Banking
Core Course

Programme/Class BA Economics	Year: Second	Semester: IV
Subject: Economics		
Course Code: ECO401T	Course Title: Money and Banking	
Course outcomes:		
❖ This course introduces students to the conceptual and practical operations of the Money, banking, financial markets and institutions.		
❖ The course is intended to provide an in-depth understanding of the operational issues of capital and money market network along with its regulatory framework.		
Credits: 3	Multidisciplinary Course (MDC-III)	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Demand for Money Money: Kinds, Functions and Significance, Monetary Standards: Metallic Standard, Gold Standard and Paper Standard, Value of money, Measurement of changes in the value of money, Demand for Money: The Classical Approach, Keynesian Approach.	10
II	Supply of Money Supply of Money: Definitions—Determinants of Money Supply—High Powered Money and Money Multiplier—Indian Currency system.	5
III	Commercial Banking Commercial banking: Nature; structure; functions: The process of credit creation-purpose and limitations, Pre-requisites of a sound commercial banking system; Liabilities and assets of Banks.ATM - Internet Banking - Core banking; A Critical Appraisal of the Progress of Commercial Banking after Nationalization; Recent Reforms in Banking Sector in India.	15
IV	Central Banking Role of central banks in developed and developing countries; Functions of a central bank; Role and functions of the Reserve Bank of India; methods of credit control: Quantitative-bank rate, repo rate, open market operations, variable reserve ratio and selective methods; Objectives and limitations of monetary policy; NPA's , Recent changes in monetary policy of India.	15

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Text Books

1. Gupta, S.B. (1995), Monetary Economics: Institutions, Theory and Policy, S. Chand & Co. New Delhi.
2. Hajela, T.N., (2009) Money and Banking, Ane Books Pvt Ltd., New Delhi
3. RR Paul, Monetary Economics, Kalyani Publishers

Suggested Readings

1. Chandler L.V., and S.M. Goldfeld (1977), The Economics of Money and Banking, Harper&Row, New York.
2. Ghosh and Ghosh, Fundamentals of Monetary Economics, Himalaya Publishing House
3. Sundharam KPM, Banking: Theory, Law and Practice, Sultan Chand and Sons, New Delhi

Web References

- <http://heecontent.upsdc.gov.in/>,
<https://epgp.inflibnet.ac.in/>,
<https://swayam.gov.in/>

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BA II Year SemIV
Public Finance
Core Course

Programme/Class BA Economics	Year: Second	Semester: IV
Subject: Economics		
Course Code: ECO402T	Course Title: Public Finance	
Course outcomes: <ul style="list-style-type: none"> ● Understand the role of Government in the Economy ● Understand the sources of finance both public and private ● Demonstrate the role of government to correct market failures and possible advantage of public financing. ● Understand the possible burden, benefits and distribution of various types of taxes among various classes of people, know the general trend and impact on general welfare and arouse them to suggest good and bad tax system. 		
Credits: 3	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Role of the Government in the Economy. Nature and Scope of Public Finance: Meaning and scope of Public Finance; Distinction between Private and Public Finance; Public Goods Vs. Private Goods; The Principle of Maximum Social Advantage; Market Failure;	15
II	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.	15
III	Public Revenue, Sources of Public Revenue. Taxation: Sources of Public Revenue; Taxation — Meaning, Canons and Classification of Taxes; Division of Tax Burden — The Benefit and Ability-To-Pay Approaches; Impact and Incidence of Taxes; Effects of Taxation. Public Debt: Causes of borrowings, types, sources, effects and burden of public debt.	15
IV	Fiscal policy: Components, Instruments, Objectives. Role of Fiscal Policy in Developed and Developing Countries, Budget Structure of the Government of India, State Budget- Sources of Revenues and Expenditures. Major Tax Reforms in India. Fiscal Federalism in India: Union-State Fiscal Relations, Federal Fiscal Imbalances and the Role of Finance Commission. Finances of Local Bodies.	15

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

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.
- ❖ Gupta, Janak Raj (2011): Public Economics in India Theory and Practice, Atlantic.
- ❖ 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.
- ❖ Johansen, Life (1965) : Public Economics, Chicago: Rand McNally.
- ❖ 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.
- ❖ Paul, R.R (2011): Money, Banking & Exchange , Kalyani Publishers, Delhi.
- ❖ Shome Parthasarathi (2002): India's Fiscal Matters, Oxford University Press, New Delhi.
- ❖ Uppal, R.K (2011): Money, Banking and Finance in India- Evolution & Present Structure New Century Publications.

Suggested Continuous Evaluation Methods:

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

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

BA 3rd Year, Vth Semester
Economics of Growth and Development
Core Course (Theory)

Programme/Class BA Economics	Year: Third	Semester: V
Subject: Economics		
Course Code: ECO501T	Course Title: Economics of Growth and Development	
<p>Course outcomes: Students should be able to comprehend/understand</p> <ul style="list-style-type: none"> ● Economic Development: Meaning, Measurements and Indicators of Economic Development ● Issues and challenges in economic development and Planning. ● Measurements and Indicators of Development ● Issues of Intra-Generational and Inter-Generational Equity ● The factors and variable of economic development. ● International factors facilitate and impede economic development. 		
Credits: 3	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Economic Development: Meaning, Measurements and Indicators of Economic Development - PQLI, HDI, GDI, GII, GHI, GMPI, Gross Happiness Index, Global Peace Index, happy Planet Index, Sustainable Development Goals	15
II	Issues of Intra-Generational and Inter-Generational Equity, Factors affecting Economic Growth and Economic Development, Types of Recovery in Economy V,Z,U shaped Recovery	15
III	Mobilization of Resources for Development, Saving Investment Capital Formation and Capital Output Ratio, Technological Progress, Underdeveloped Countries, Problems and Issues of Growth and Development. State interference in Economic Activities. Development and Non-Governmental Organization.	15
IV	Strategy for Development, Economic Development and Stages of Growth Measures for Development - Augmentation of Savings, Investment Strategy, Capital Accumulation. Surplus Labour as a Source of Capital Formation- Lewis and Nurkse. Economic Development and Disparity of Income.	15

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

Suggested Readings:

- ❖ Barro, Robert J and Xavier Sala-i- Martin, Economic Growth, The MIT Press, Cambridge, Latest Edition.
- ❖ Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.
- ❖ Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007
- ❖ Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.
- ❖ Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)
- ❖ Hayami, Yujiro&Godo, Yoshihisa (2005) : Development Economics: From the Poverty to the Wealth of Nations, Oxford University Press.
- ❖ Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005
- ❖ Jhingan ,M.L (2013): Economics of Development and Planning, Vrinda Publications, NewDelhi.
- ❖ Jhingan ,M.L (2013): VikasKaArthshastraAwamNiyojan, Vrinda Publications, NewDelhi.
- ❖ Lal ,S.N (2012):Vikas, Niyojan Awam Paryavaran, Shiva Publishing House,Allahabad.
- ❖ Lekhi, R.K (2013): Economics of Development and Planning, Kalyani Publishers, New Delhi.
- ❖ Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.
- ❖ Mishra,S.K&Puri,V.K (2012): Economics of Development and Planning, Himalaya Publishers, Mumbai.
- ❖ Ray Debraj, Development Economics, Oxford University Press, Latest Edition.
- ❖ Singh, Kartar&Shishodia (2007): Environmental Economics: Theory andApplications, SageIndia.
- ❖ Singh,S.R(2012):EnvironmentalEconomics,APHPublishingCorporation,Delhi.
- ❖ Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
- ❖ Taneja,M.L&Myer,R.M (2011): Arthshastra Ki YojnayeAwamVistaar, Visha PublishingCom pany,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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Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

BA 3rd Year, Sem. V
Environmental Economics
Core Course
(Theory)

Programme/Class BA Economics	Year: Third	Semester: V
Subject: Economics		
Course Code: ECO502T	Course Title: Environmental Economics	
Course outcomes: <ul style="list-style-type: none"> ❖ To explain key concepts and theories of environmental economics, including market failure, externalities, and public goods. ❖ To analyze the relationship between economic development and environmental sustainability using relevant economic models. ❖ To evaluate the effectiveness of various environmental policies and instruments such as taxes, subsidies, and tradable permits. ❖ To apply cost–benefit analysis and valuation techniques to assess environmental projects and policies. ❖ To examine national and global environmental issues—such as climate change, pollution, and natural resource depletion—from an economic perspective. ❖ To propose sustainable economic solutions and policy recommendations for managing environmental challenges. 		
Credits: 3	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-0		
Unit	Topics	No. of Lectures
I	Introduction to Environmental Economics, Key Environmental issues and problems, relation between Economic activities, Development and Environment, Piguvian Tax and Subsidies, Implementation of Environmental policies at India and International level, Tradable permits.	15
II	Meaning of Environmental valuation- need, methods, applications and difficulty measuring environmental valuation.	10
III	Key issues of sustainable development: concepts, measurement, perspectives from Indian experience, Ecology, Ecosystem, Biodiversity , Eco-Labeling, Eco-Efficiency, Green GDP, India constitution and Environment, Role of Judiciary in environmental protection & conservation.	10
IV	Externalities, public goods, private goods, merit goods, Coase's theorem and property rights, market failure, causes and solutions, Environmental management, Trade and Environment in WTO regime.	10

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

Suggested Readings

- Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
- Eugene,T (2005): Environmental Economics, Vrinda publications, Delhi.
- Jhingan, M.L& Sharma, C.K (2009) :Environmental Economics Theory Mgt & Policy, 10 Vrinda publications, Delhi.
- 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.
- Tripathi, Daya Shanker : Paryavaran Addhyayan, Motilal Banarasidass Pvt Ltd.
- Bhattacharya, Rabindra Nath (2002): Environmental Economics- An Indian Perspective, Oxford University Press.
- Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press.
- Stephen (2011): Environmental Economics: A Very Short Introduction. Oxford University Press.

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Department of Economics
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BA Economics (Four Year UG under NEP)

BA 3rd Year, Sem. V
Elementary Statistics
Minor Course

Programme/Class BA Economics	Year: Third	Semester: V
Subject: Economics		
Course Code: ECO503T	Course Title: Elementary Statistics (Minor)	
Course outcomes: <ul style="list-style-type: none"> • Students shall be able to comprehend the basic concepts of Statistics. • Students shall be able to comprehend the basic concepts of Universe, Population, Sample, Data as used in Statistics. • Students shall be able to comprehend the concept of Questionnaire. • Students shall be able to comprehend and differentiate between Questionnaire & Interview Schedule. • Students shall be able to prepare a simple questionnaire and collect information /data as and classify serialise, tabulate and represent the data. 		
Credits: 4	Minor Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Concept & Definition of Statistics. Concept of Universe, Population, Sample and Data. Types of Data. Questionnaire, Types of questionnaire. Characteristics of a good questionnaire. Interview Schedule. Survey.	6
II	Methods of Data Collections-Census & Sampling. Advantages & Limitation of Census & Sampling Methods of Data Collection.	6
III	Classification, Seriation and Tabulation of Data. Diagrammatic & Graphic representation of Data.	6
IV	Measures of Central Tendency: Concepts, Properties & Methods.	10
V	Measures of Dispersion: Concepts, Properties & Methods	10
VI	Correlation and Regression: Concepts, Properties & Methods	10

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Essential Readings:

- Das, N. (2017): Statistical Methods. McGraw Hill Education. ISBN-10, 9780070083271, ISBN-13, 978-978-0070083271.
- Elhance.D.N. VeenaElhance&B.M.Aggarwal (2018): Fundamentals of Statistics. KitabMehal. ISBN-10, 8122505139, ISBN-13, 978-8122505139
- Gupta, S.C (2014): Fundamental of Applied Statistics. Sultan Chand & Sons. ISBN-10, 8180547051, ISBN-13, 978-8180547058
- Gupta, S.P (2017): Statistical Methods. Sultan Chand & Sons. ISBN-10, 9351610284, ISBN-13, 978-978-9351610281.
- गुप्ता, बी.एन. (२०२१-२२): सांख्यिकी. SBPD Publications. ASIN : B07XGRBXQ1
- शर्मा, राजेंद्र (२०२०): सांख्यिकीकेसिद्धांत. देवीअहिल्याप्रकाशन . ASIN : B08DFZWVRK
- शुक्ल, एस.एम, एस. पी. सहाय (२०१८) : सांख्यिकीविश्लेषण. साहित्यभवनपब्लिकेशनASIN : 935173109XISBN-13, 978-9351731092
- शुक्ल, एस.एम. (२०१९): सांख्यिकीकेसिद्धांत. साहित्यभवनपब्लिकेशनASIN : B07R5P3M96
- **Additional Readings:**
- Privitera, Gregory J. (2023): Statistics for the Behavioral Sciences. SAGE Publication. ISBN-10 : 1544362811 ISBN-13 : 978-1544362816
- Richard, [I.Levin](#) , [H Siddiqui Masood](#) , [S.Rubin David](#) , [Rastogi Sanjay](#) (2017): Statistics for Management. Pearson Education. ISBN-10, 8184957491, ISBN-13, 978-8184957495

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

BA 3rd Year, Sem. VI
International Economics
Core Course
(Theory)

Programme/Class BA Economics	Year: Third	Semester: VI
Subject: Economics		
Course Code: ECO601T	Course Title: International Economics	
Course Learning Outcomes:		
<ul style="list-style-type: none"> ● Students should be able to understand and explain the concept, need, significance and scope of international economics. ● Students should be familiar with the approaches of international trade. ● Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups. 		
Credits: 4	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Need, Significance and Scope of International Economics. Early Trade Theory- Mercantilism; The Classical Theories of Trade -Adam Smith, David Ricardo; Opportunity Cost Approach; Terms of Trade- Meaning and Concepts, Factors affecting Terms of Trade; Mill's Reciprocal Demand Analysis.	15
II	Free Trade and Protection-Meaning of Free Trade, Arguments For and Against Free Trade, Meaning of Protection, Arguments for Protection- Economic and Non-Economic Arguments; Protection and Less Developed Countries.	15
III	Theories and Forms of Economics Integration-Meaning & Benefits; Forms of Economic Integration- Custom Union: Production and Consumption Effects of Customs Union; Problems Involved in the Formation of Customs Union; Political Economy of Protection; SAFTA, BRICS, IBSA.	15
IV	Balance of Payments-Concepts ; Adjustment Mechanisms of Balance of Payments- Adjustment Through Variations in Exchange Rates, Devaluation and Balance of Payments Adjustment, The Elasticity Approach, Marshall- Lerner Condition.	15

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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.
- Krugnan, Paul. R & obstfeld, Maurice (2008): International Economics, Pearson.
- Lal, S.N (2012): Antarrastriya Arthshastra, Shiva Publishing House, Allahabad.
- Mannur, H.G (2001): International Economics, Vikash Publishing House Pvt. Ltd.
- Salvatore, Dominick (2012): International Economics: Trade & Finance, Wiley Publishers.
- Sinha, V.C., Sinha, Pushpa & Sinha, Vivek (2011): Antarrastriya Vyapar Avam Vitt, Mayur Publications.
- Vaishya, M.C. & Singh, Sudama (2006): International Economics, Oxford & IBH Publishing House, Delhi.

Suggested Continuous Evaluation Methods:

Assignment/test/Quiz(MCQ)/Seminar/Presenatations/Researchorientationofstudents

Suggested equivalent online:

Swayam

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BA Economics (Four Year UG under NEP)

BA 3rd Year, Sem. VI
Indian Economy & Economy of Uttar Pradesh
Core Course
(Theory)

Programme/Class BA Economics	Year: Third	Semester: VI
Subject: Economics		
Course Code: ECO602T	Course Title: Indian Economy & Economy of Uttar Pradesh	
<p>Course outcomes: Students will be able to understand/Comprehend</p> <ul style="list-style-type: none"> ● Structure and Features of Indian Economy ● Resource mobilization for Development, ● Dynamics of Agricultural and Industrial Sector in Indian Economy ● Introduction to flagship programs in India ● Planning in India: Objectives and Strategy of Planning about ● Rural development of Uttar Pradesh over the period of time. ● Industrial development in India and in Uttar Pradesh. 		
Credits: 4	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L- 4/w		
Unit	Topics	No. of Lectures
I	Structure and Features of Indian Economy: Indian economy as a Developing Economy. Comparative Development of Indian States.	12
II	Agricultural Sector: Institutional Reforms, Technological change in Agriculture, Terms of Trade between Agriculture and Industry; The Industrial Sector: Industrial Policy; Small, Medium and Large-scale Sector, Economic Reforms in India.	12
III	Planning in India: Objectives and Strategy of Planning; Success story of Indian Plans; Strategy of Inclusive Growth, Resource mobilization for Development, NITI Ayog: Introduction to flagship programs, Star-Up, Skill India, Atal Innovation Mission, AtmaNirbhar Bharat.	12
IV	Sectoral growth pattern in Uttar Pradesh; Economic growth in Uttar Pradesh and Indian economy: A comparison; Infrastructural development of Uttar Pradesh. Pattern of land-holding and irrigation; production and productivity in agriculture.	12
V	Industrial Policy in Uttar Pradesh Major industries in Uttar Pradesh, Pattern of Industrial Development in Uttar Pradesh,. Micro, Small, Medium Enterprises (MSMEs) in Uttar Pradesh. One Product One District (OPOD), OSOP. Defense Corridor, U.P Investor's Summit, Pradhan Mantri Yuva Udyami Yojna.	12

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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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Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)
BA 3rd Year, Sem. VI
Research Methods in Social Sciences
Minor Course OWN/Other Faculty (Theory)

Programme/Class BA Economics	Year: Third	Semester: VI
Subject: Economics		
Course Code: ECO603T	Course Title: Research Methods in Social Sciences	
Course outcomes: <ul style="list-style-type: none"> ● The students should be familiar with basic concepts of research and research methodology. ● To acquaint students with the tools of research methodology. ● To enable the students to develop a questionnaire/interview schedule. ● To inculcate among students ability to comprehend the concept research question and hypothesis. ● To gain an appreciation for the value of economic reasoning and research, but to also recognize the limitations of its application. ● To apply economic theory to real world situations and to utilize economic theory to frame analysis of research questions. 		
Credits: 4	Minor Course OWN/Other Faculty	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Research - Concept, meaning, definition and objectives. Steps in Research Process. Types of Research. Characteristics & criteria of a good research. Introduction to Seminar, Conference, Workshop, Symposium	12
II	Research Problem: Concept and need, Identification of Research problem, defining and delimiting Research problem. Review of Literature: Meaning, objectives, sources and process of Review of Literature, Research Gap	12
III	Research Questions and Hypothesis: meaning & characteristics of good Hypothesis. Research question and formulation of hypotheses, Types of Errors.	12
IV	Research Design: Concepts, meaning, types, need and features. Sampling- Types of samples, Steps in Sampling process, Data types, Tools of Data Collection- Questionnaire & Interview Schedule, Observation, etc.	12
V	Data Analysis: Processing & classification, tabulation and presentation of data, Software's of Data Analysis (MS Excel, SPSS, R-Studio, STATA), Hypothesis Testing using statistical tests like (t-test, Z-test, Correlation, Regression, ANOVA, Chi-square test, etc.) Role of technology and Artificial Intelligence in research. Ethics in Research, Plagiarism, various referencing styles in research.	12

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BA Economics (Four Year UG under NEP)

Suggested Readings:

- ❖ Field, Andey. (2024). Discovering Statistics Using IBM SPSS.
- ❖ Dhanshekhran, Computer Applications in Economics.
- ❖ Ahuja, Ram (2003): Samajik Sarvekshan Avam Anusandhan. Rawat Publication. ISBN-10-817033750X and ISBN-13- 978-8170337508
- ❖ Ahuja, Ram (2001): Research Methods. Rawat Publication. ISBN-10-8170336538
- ❖ Chandra, Vinod S.S & S. Anand Hareendran (2018): Research Methodology. Pearson. ISBN:978-93-528-6351-8
- ❖ Creswell, John W (2012): Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Sage. ISBN:978-321-0748-4(PB)
- ❖ Fadia, B.L(2018): Shodh Paddhati. Sahitya Bhawan Publications. ISBN-10 -9351733114
- ❖ Flick, Uwe (2012): An Introduction to Qualitative Research. Sage. ISBN:978-81-321-0568-8(PB)
- ❖ Greenlaw, S., Doing Economics: A Guide to Understanding and Carrying Out Economics Research, Houghton Mifflin.
- ❖ Koli. L.N (2014): Research Methodology (Hindi) Y K Publishers. ISBN-13-978-8185070919
- ❖ Kothari, C.R: Research Methodology (Methods and Techniques) (Hindi & English), New Age Publisher.
- ❖ Kumar, R. (2011). Research Methodology: a step-by-step guide for beginners (3rd edition). London, UK: TJ International Ltd, Padstow, Cornwall.
- ❖ Lewin, Cathy and Bridget Smekh (2011): Theory and Methods in Social Research. Sage. ISBN: 978-81-321-1000-2(PB)
- ❖ Salvade, Sidram (2012): Research Methodology (Hindi). Raj Publications. ISBN-10-8189471619 and ISBN-13- 978-8189471613
- ❖ Sharma, Virendra Prakash (2015): Research Methodology (Hindi). Panchsheel Prakashan.
- ❖ Singh, Y. K. (2006). Fundamental of Research Methodology and Statistics. New Delhi. New International (P) Limited, Publishers.

Suggested equivalent online :

UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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Department of Economics
Syllabus
BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
Advanced Microeconomic Theory
Core Course
(Theory)

Programme/Class BA Economics	Year: Four	Semester: VII
Subject: Economics		
Course Code: ECO701T	Course Title: Advanced Microeconomic Theory	
<p>Course Objectives: This course aims to provide a deep understanding of microeconomic theories related to consumer behavior, production, market structures, general equilibrium, and welfare economics. It equips students with analytical tools for studying economic decision-making and market outcomes</p>		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Consumer Theory and Demand Analysis Utility Maximization and Consumer Preferences, Indifference Curve Analysis and Budget Constraints, Ordinal vs. Cardinal Utility Theory, Hicksian and Slutsky Approaches to Demand Analysis, Revealed Preference Theory.	15
II	Production, Cost, and Market Structures Production Functions: Short-run and Long-run Analysis, Cobb-Douglas and CES Production Functions, Cost Functions: Short-run vs. Long-run Costs, Perfect Competition: Price and Output Determination, Monopoly, Monopolistic Competition, and Oligopoly, Game Theory: Nash Equilibrium, Prisoner's Dilemma, and Strategic Behavior.	15
III	General Equilibrium and Welfare Economics Partial vs. General Equilibrium Analysis, Walrasian Equilibrium and Stability, Efficiency in Exchange and Production (Pareto Efficiency), Fundamental Theorems of Welfare Economics, Market Failures: Asymmetric Information and Adverse Selection.	15
IV	Advanced Topics in Microeconomics Contract Theory and Principal-Agent Problem, Search and Matching Models in Labor Markets, Economics of Information and Market Signaling, Behavioral Economics and Prospect Theory, Recent Advances in Micro-economic Theory.	15

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BA Economics (Four Year UG under NEP)

Suggested Readings:

- Arrow, K.J., & Hahn, F.H. (1971). General Competitive Analysis. Holden-Day.
- Jehle, G.A., & Reny, P.J. (2011). Advanced Microeconomic Theory. Pearson.
- Kreps, D.M. (1990). A Course in Microeconomic Theory. Princeton University Press.
- Myerson, R. (1991). Game Theory: Analysis of Conflict. Harvard University Press.
- Nicholson, W., & Snyder, C. (2016). Microeconomic Theory: Basic Principles and Extensions. Cengage Learning.
- Shapiro, C., & Varian, H. (1998). Information Rules: A Strategic Guide to the Network Economy. Harvard Business School Press.
- Thaler, R.H. (2015). Misbehaving: The Making of Behavioral Economics. W.W. Norton.
- Varian, H.R. (2014). Intermediate Microeconomics: A Modern Approach. W.W. Norton.

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BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
(Theory) Core Course

Paper Name: Quantitative Methods in Economics-I

Programme/Class BA Economics	Year: Four	Semester: VII
Subject: Economics		
Course Code: ECO702T	Course Title: Quantitative Methods in Economics- I	
<p>Course Objectives</p> <ul style="list-style-type: none"> ➤ To develop analytical and quantitative reasoning skills for social science, commerce, and humanities students. ➤ To enable students to use mathematical and statistical tools for decision-making and research. ➤ To build competence in data interpretation, basic modelling, and problem-solving using quantitative techniques. <p>Course Learning Outcomes: Students shall be able to comprehend the basic concepts of Quantitative Methods in Economics. Students shall be able to comprehend the basic concepts of Number System, Relations & Functions in Economics. Students shall be able to comprehend the concept of Sets and its application in Economics. Students shall be able to comprehend the concept of Matrices and its application in Economics. Students shall be able to comprehend the concept of Differential Calculus: Economic Applications of Derivative Elasticities, Maxima and Minima applications and their applications in Economics. Students shall be able to prepare a simple questionnaire and collect information /data as and classify serialise, tabulate and represent the data.</p>		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Introduction to Quantitative Methods Meaning, nature, and scope of quantitative methods; Importance in economics, business, and social sciences; Data types: qualitative and quantitative; Variables, constants, parameters & Data sources: primary and secondary. The Number System: Introduction, The natural numbers, Integers, Rational numbers, Irrational numbers. Relations and Functions: Introduction, types of relations & functions. Composition of Functions and Invertible Function.	10
II	Sets: Introduction, Definition of a Set, Sets and their Representations, the Empty Set, Finite & Infinite Sets, Equal Sets, Subsets, Universal Set, Venn Diagram, Basic Operations on Sets, Complement of a Set.	12
III	Matrices: Introduction, Matrix, Types of Matrix, Operations on Matrices, Transpose of Matrix, Symmetric and Skew Symmetric Matrices, Invertible Matrices.	12
IV	Differential Calculus: Economic Applications of Derivative Elasticities, Maxima and Minima applications.	14

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Essential Readings:

Chitale, [Rajeet](#) (2018): Statistical and Quantitative Methods. Nirali Prakashan. ASIN : B07LG72157

Saha. Suranjan and Sampat Mukherjee (2002): Quantitative Methods. New Central Book Agency ISBN-10, 8173811210

Segovia. J. E Trinidad & [Miguel Ángel Sánchez-Granero](#) (2021): Quantitative Methods for Economics and Finance. Mdpi AG. ISBN-10, 3036501967

Veerachamy. R., (2017): Quantitative Methods for Economics. New Age International Publishers. ISBN-9788122423891,

Additional Readings:

Privitera, Gregory J. (2023): Statistics for the Behavioral Sciences. SAGE Publication. ISBN-10 : 1544362811
ISBN-13 : 978-1544362816

Richard, [I. Levin](#) , [H Siddiqui Masood](#) , [S. Rubin David](#) , [Rastogi Sanjay](#) (2017): Statistics for Management. Pearson Education. ISBN-10, 8184957491, ISBN-13, 978-8184957495

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BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
(Theory) Core Course

Paper Name: Environmental Economic Analysis

Programme/Class BA Economics	Year: Fourth	Semester: VII
Subject: Economics		
Course Code: ECO703T	Course Title: Environmental Economic Analysis	
<p>Course Learning Outcomes:</p> <ul style="list-style-type: none"> ● Students will come to know about the relevance of Environmental Economics ● Students will also come to know how market allocate goods and how sometimes market fails to allocate environmental resources optimally ● Students will come to know how sustainable development of the economy can be attained ● Students come to know about market failure, corrective measures for market failure ● This paper gives an idea how to regulate pollutants that travel across country boundaries ● This paper clarifies how environmental regulations affect trade flows ● This paper also propagates idea of people's participation for conservation and protection of Environmental Resources ● students will understand the causes and victims of environmental pollution like poverty, population explosion, and overuse of resources, careless or unscientific dump/management of wastes ● this paper suggests appropriate measures to correct environmental degradation, aware of those ingredients such as healthy climate, quality of human beings, domestic and other natural habitats and biodiversity levels, productivity and productions, sustainability, etc are all influenced by environment 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	<p>Introduction: Nature, Scope and Methodological Issues in Environmental Economics; Relation between development and Environmental stress; Environmental Kuznets Curve, Economy-Ecology-Environment Interaction; Material Balance principle, Environment and Economics System, Ecology- Meaning, Scope and Ecological Factors, Ecosystem -Meaning and Components.</p>	12

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II	Economics of Exhaustible Resources: Hotelling's rule; Market structure and optimal extraction policy; Common property resource management; Sustainable Development, Indicators of Sustainable Development, Equity and Sustainable Development, Measuring Sustainable Development, Green GDP, Social Limits to Growth Model.	12
III	Environmental Externalities and Public Goods: Positive and Negative Externality, Public and Private Goods, Concept of Market failure, Pigouvian solution, Carbon Tax, Coase's Theorem, Grass Root Movements (Chipko Movement, Save silent valley movement, Narmada BachaoAndolan, Appiko Movement, Biodiversity-Meaning, Stratification and Importance, Carbon Footprint.	12
IV	Environmental Valuation: Meaning and Need for Environmental Valuation, Use Values, Non-Use Values, option values, Methods and approaches to environmental valuation- Direct methods, Contingent valuation method, Trade off games method, costless choice method ,Travel cost method, Hedonic pricing method, Preventive expenditure method, wage differential approach, cost based methods, Social cost benefit analysis.	12
V	Impact of different factors on Environment and various Environmental Issues: Different types of Pollution , Population and Environment, Poverty and Environment, Trade and Environment in WTO regime, Eco-labeling, Economics of climate change- meaning, causes and solution, Ozone depletion and climate change; Global Warming and greenhouse Effect, Rio and other conference, Protocols and Treaties relating to climate change and Environmental Degradation, Ozone Depletion.	12

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BA Economics (Four Year UG under NEP)

Suggested Readings:

- Anderson. David. A: Environmental Economics and Natural resource, Routledge, 2010
- Bhattacharya.R.N: Environmental Economics, Oxford University Press, 2002
- C.field.Barry: Environmental Economics- An Introduction, McGraw Hill Education, 2012
- Ganesamurthy.V.S: Environmental Economics in India, New Century Publications, 2020
- Haab and Huang: Preference data for Environmental Valuation, Routledge, 1st Edition
- Haab and White head: Environmental and Natural resource economics, Greenwood, 2014
- Hanley.N, Shogren, B. White: Introduction to Environmental Economics, MacMillan Press Ltd, 1997
- Jhingan.M.L, Sharma.Chandra.K: Environmental Economics (Theory, Management and Policy), Vrinda, 2nd Edition
- Joshi.M.V: Theories and approaches of Environmental Economics, Atlantic, 2005
- Kaithal.A.K, Kumar.S: Environmental Economics, Prakashan Kendra Lucknow,2020
- Karpagam.M: Environmental Economics, Sterling Publishers Pvt. Ltd, 2019
- Kolstad.C.D: Environmental Economics, OUP USA, 1999
- Palmer.J.A: Environmental Education in 21st Century, Routledge, 1998
- Sankar.U: Environmental Economics,Oxford India, 2001
- Singh.Katarand Shishodia.A: Environmental Economics- Theory and Applications, Sage India, 2007
- Tietenberg. Tomand Lewis.L: Environmental and natural resource economics, Routledge, 11th Edition

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BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
Public Economics
Core Course
(Theory)

Programme/Class BA Economics	Year: Four	Semester: VII
Subject: Economics		
Course Code: ECO704T	Course Title: Public Economics	
Course Objectives: Through this course students should be able to <ul style="list-style-type: none"> • Advanced theories of Public Finance • Identify the market failure and provision of public goods, role of government in the economy, • Concepts and Theories of Public Goods. • Major Sources of Public Revenue; • Know the sources of revenue and heads of expenditure, causes of debt and fiscal deficit. • Comprehend the budgetary provision and structure of Union and State budget. • Principles Determining Federal Division of Revenue and expenditure • Analyse the fiscal federalism and causes of regional imbalances. • Get an insight of Indian Public Finance. 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Public Finance: Evolution and Development of Public Finance. Subject matter and scope of Public Finance. The Principles of maximum social advantage. Changing Dimensions: The need for Government Activities in an Economy. Public Sector and Allocation of Resources. Provision of Public Goods: Concepts and Theories of Public Goods Allocation.	12
II	Public Expenditure: Meaning and scope of Public Expenditure Analysis of growth in Public Expenditure – Wagner hypothesis and Peacock Hypothesis. Evolution of the positive Theory of Public expenditure; Classification and effects of Public Expenditure. Meaning and Fundamentals of Cost Benefit Analysis	12

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III	<p>Public Revenue: Major Sources of Public Revenue; Tax Definition and Characteristics Principles and Canons of Taxation Objectives of Taxation, requirements of a good tax structure -Canon of Taxation. Ability to pay approach in taxation. Impact and Incidence of taxes. Tax shifting and tax Evasion. Modern Theories of incidence and Musgrave's concept of incidence. Effects of taxes on work efforts, savings, investment, and growth. Trade-off between equity and efficiency. Public Debt: Causes of Borrowings, Types, Sources, Effect and Burden of Public Debt. Growth of internal and external public debt in India. Methods and Management for Redemption of Public Debt.</p>	15
IV	<p>Fiscal policy and its implications: Fiscal policy: traditional and modern views on fiscal policy. Instruments of fiscal policy; Fiscal policy for stabilization-automatic vs. discretionary stabilization. Fiscal policy and economic development. Objectives of fiscal policy-full employment, anti-inflation, economic growth, redistribution of income and wealth. Government Budget: Concept, role and types of Budget. Traditional and zero-Base Budgeting. Deficit Financing.</p>	12
V	<p>Indian Public Finance: Analysis of Central and State government budgets: lack of flexibility in Central and State budgets, shrinking size of development finance through budgets. Indian tax System, (Direct, Indirect and Non Tax Income),. Meaning of GST, Indirect Tax Prior GST; GST Implementation In India; Registration in GST Process of Registration in GST .Sources of income of State and Local Bodies. Government Expenditure – Central And state</p>	12
VI	<p>Fiscal Federalism: Principles Determining Federal Division of Revenue and expenditure, Vertical and Horizontal Imbalances, Transfer Mechanism in India, Role of Finance & Planning Commissions, Sharing of Taxes, Non-tax Revenues and Grants Finance Commission and Planning Commission. Centre State financial relations in India. Resource Transfer from Union to States.</p>	12

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
Department of Economics
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BA Economics (Four Year UG under NEP)

Suggested Readings:

- Atkinson A. B., and Stiglitz J. E. Lectures on Public Economics, Tata McGraw Hill, New York.1980.
- Ayyar, R.V.V.:Public policymaking in India ,Pearson New Delhi 2009
- BagchiAmaresh:Readings in Public Finance, Oxford University Press.2005.
- Bhatia H.L.;Public finance ;Vikas Publishing House.2018. 29th Edition
- Buchanan, J.M. :The Public Finances, Richard D.li-win, Homewood.1970.
- Dalton Hugh: Principles of Public Finance , Allied Publisher .2012
- Dalton, Huge :Principles of Public Finance, Routledge and KeganPaulLtd., London.1971.
- Dye. T. R.: Understanding public policy, Pearson Education ,New Delhi: 2017.15th ed.
- Endley K.K., Sundram K.P.M, Aggarwal R.C. ; LokArthsahastraevamLokVitt ;RatanPrakashanMandir
- Gerston, L.N. Public policymaking in a democratic society: A guide to civic engagement. DC: Routledge ,Wahington. 2014.
- Ghosh Amber, GhoshChandana ;Public Finance; PHI Learning Private limited.2014
- Gupta JanakRaj :Public Economics in India: Theory and Practice, Atlantic Publisher .2007.
- Gupta, D. K.. Analyzing public policy: Concepts, tools, and techniques. Sage. Hill London.2010.
- HajelaT.N. :RajaswakeSiddhant ,Ane Books.2010.
- Jha, R. :Modern Public Economics, Routledge, London. 1998.
- Kennedy M Maria John : Public Finance ,PHI Learning Private Limited ,2012
- LekhiR.K. ;lokvitt ;KalyaniPublishers.Ludhiana
- Musgrave, R.A. and MusgraveP.B. :Public Finance in Theory and Practice,Tata McGraw Hill.(2008),9th Edition
- PanthJ.C. :Rajasav ,Lakshmi Narayan 2012. 16th Edition
- Salvatore Domnick.Principles of Micro Economics. Oxford university Press,5th Edition
- Sapru, R. K. Public policy: Formulation, implementation and evaluation. Sterling , New Delhi: 2013.
- Singh S.K.: Public Finance ;S Chand.New Delhi.

Suggested Continuous Evaluation Methods: Internal Assessment of 25 marks shall be divided into 10 marks for Assignment based presentation + 15 marks for written test comprising MCQs (Four MCQs of one mark each, all compulsory), short answer (Three of 3 marks each of which 2 to be attempted) and long answer type questions (Two question to be given of which one needs to be given, each of the two of 5 marks).....

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BA Economics (Four Year UG under NEP)

Course prerequisites: To study this course, a student must have had the subject in class/UG/ certificate/diploma. As per the NEP of the Government of India/Government of Uttar Pradesh

Suggested equivalent online courses: UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
Computer Applications in Economics
(Theory) Minor Course OWN/Other Faculty

Programme/Class BA Economics	Year: Four	Semester: VII
Subject: Economics		
Course Code: ECO705T	Course Title: Computer Applications in Economics	
Course Objectives:		
<ul style="list-style-type: none"> ● The students are equipped with the understanding of the computer fundamentals, application of the storage devices and the factors that affect the computer performance. ● The students learn and understand the various facets of modern information technology, AI, Internet and Email services and how to protect the data on the Internet. ● The students get a prior understanding of various Operating Systems and will be able to learn the basics of Microsoft Word, make PowerPoint presentations application of Microsoft Excel in preparing spreadsheet with entering and tabulating data for research work. ● The students become well versed with the Basic Functions of Excel in using Descriptive Statistics, Analyzing Data and Obtaining Results. ● To comprehend the various Software Operations and Orientation with different softwares used in statistics and undergo a comparative Study of all softwares. ● The students learn the basic ethical Issues in computing and Research. 		
Credits: 4	Minor Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 3-0-1		
Unit	Topics	No. of Lectures
I	Fundamentals of Computer: Characteristics and components of computer; Storage Devices; Factors influencing PC Performance.	10
II	Modern Information Technology: Basic ideas of LAN, MAN, WAN, PAN, CAN, WWW, Internet and Email services; Internet technologies; Data protection on Internet, Cyber Security	8
III	Introduction to Operating System: Microsoft Word; creating, editing, formatting a document. PowerPoint presentation, Converting a word Document into various Formats	10
IV	Microsoft Excel; Basic Functions of Excel; Descriptive Statistics, Analysing Data and Obtaining Results.	12
V	Ethical Issues in computing and Research- privacy, use of Intellectual Property rights, Artificial Intelligence, use of digital technology in education and employment, governance and social development.	10

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Suggested Readings:

- ❖ Field, Andey. (2024). Discovering Statistics Using IBM SPSS.
- ❖ Dhanshekhran, Computer Applications in Economics.
- ❖ Ahuja, Ram (2003): Samajik Sarvekshan Avam Anusandhan. Rawat Publication. ISBN-10-817033750X and ISBN-13- 978-8170337508
- ❖ Ahuja, Ram (2001): Research Methods. Rawat Publication. ISBN-10-8170336538
- ❖ Chandra, Vinod S.S & S. Anand Hareendran (2018): Research Methodology. Pearson. ISBN:978-93-528-6351-8
- ❖ Creswell, John W (2012): Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Sage. ISBN:978-321-0748-4(PB)
- ❖ Fadia, B.L(2018): Shodh Paddhati. Sahitya Bhawan Publications. ISBN-10 -9351733114
- ❖ Flick, Uwe (2012): An Introduction to Qualitative Research. Sage. ISBN:978-81-321-0568-8(PB)
- ❖ Greenlaw, S., Doing Economics: A Guide to Understanding and Carrying Out Economics Research, Houghton Mifflin.
- ❖ Koli. L.N (2014): Research Methodology (Hindi) Y K Publishers. ISBN-13-978-8185070919
- ❖ Kothari, C.R: Research Methodology (Methods and Techniques) (Hindi & English), New Age Publisher.
- ❖ Kumar, R. (2011). Research Methodology: a step-by-step guide for beginners (3rd edition). London, UK: TJ International Ltd, Padstow, Cornwall.
- ❖ Lewin, Cathy and Bridget Smekh (2011): Theory and Methods in Social Research. Sage. ISBN: 978-81-321-1000-2(PB)
- ❖ Salvade, Sidram (2012): Research Methodology (Hindi). Raj Publications. ISBN-10-8189471619 and ISBN-13- 978-8189471613
- ❖ Sharma, Virendra Prakash (2015): Research Methodology (Hindi). Panchsheel Prakashan.
- ❖ Singh, Y. K. (2006). Fundamental of Research Methodology and Statistics. New Delhi. New International (P) Limited, Publishers.

Suggested equivalent online :

UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VIII
ADVANCED MACROECONOMICS
Core Course

Programme/Class BA Economics	Year: Four	Semester: VIII
Subject: Economics		
Course Code: ECO801T	Course Title: ADVANCED MACROECONOMICS	
Course Objectives: This course provides an in-depth understanding of macroeconomic theories, including income determination, economic fluctuations, monetary and fiscal policies, and long-term economic growth. It integrates classical, Keynesian, and modern macroeconomic approaches.		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	National Income, Employment, and Theories of Output Determination National Income Accounting: Concepts and Measurement, Circular Flow of Income in Three, and Four Sector Models, Classical Theory of Employment and Say's Law, Keynesian Theory of Employment and Effective Demand, Post-Keynesian Theories: Kalecki and Kaldor.	15
II	Consumption, Investment, and Business Cycles Consumption Theories: Absolute Income, Relative Income, Permanent Income, and Life Cycle Hypotheses, Investment Theories: Marginal Efficiency of Capital and Tobin's q-Theory, Business Cycles: Keynesian, Monetarist, and Real Business Cycle Theories, Phillips Curve: Inflation Unemployment Trade-off.	15
III	Money, Inflation, and Macroeconomic Policies Classical and Keynesian Theories of Money, Monetarist and Post-Keynesian Views on Money Supply, Theories of Inflation: Demand-Pull and Cost-Push Inflation, Rational Expectations and Lucas Critique, Role of Monetary and Fiscal Policies in Economic Stabilization.	15
IV	Economic Growth, Development, and Open Economy Macroeconomics Harrod-Domar Growth Model, Solow Growth Model and Endogenous Growth Theories, Role of Technological Change in Economic Growth, Exchange Rate Theories: Fixed vs. Flexible Exchange Rates, Balance of Payments, IS-LM-BP Model, and Open Economy Macroeconomics	15

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Suggested Readings:

- Blanchard, O. (2021). *Macroeconomics*. Pearson.
- Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics*. McGraw-Hill.
- Friedman, M. (1957). *A Theory of the Consumption Function*. Princeton University Press.
- Froyen, R.T. (2013). *Macroeconomics: Theories and Policies*. Pearson.
- Krugman, P.R., & Obstfeld, M. (2017). *International Economics: Theory and Policy*. Pearson.
- Laidler, D. (1997). *The Demand for Money: Theories, Evidence, and Problems*. HarperCollins.
- Mankiw, N.G. (2022). *Macroeconomics*. Worth Publishers.
- Mishkin, F.S. (2019). *The Economics of Money, Banking, and Financial Markets*. Pearson.
- Romer, D. (2018). *Advanced Macroeconomics*. McGraw-Hill.
- Woodford, M. (2003). *Interest and Prices: Foundations of a Theory of Monetary Policy*. Princeton University Press.

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Syllabus
BA Economics (Four Year UG under NEP)

BA 4th Year, Sem. VII
(Theory) Core Course

Paper Name: Quantitative Methods in Economics-II

Programme/Class BA Economics	Year: Four	Semester: VIII
Subject: Economics		
Course Code: ECO802T	Course Title: Quantitative Methods in Economics- II	
<p>Course Objectives</p> <ul style="list-style-type: none"> ➤ To develop analytical and quantitative reasoning skills for social science, commerce, and humanities students. ➤ To enable students to use mathematical and statistical tools for decision-making and research. ➤ To build competence in data interpretation, basic modelling, and problem-solving using quantitative techniques. <p>Course Learning Outcomes: By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> ▪ Apply mathematical and statistical concepts to real-life problems. ▪ Use quantitative data to support decision-making and policy formulation. ▪ Understand and interpret numerical information effectively. ▪ Employ software tools (like Excel) for quantitative analysis. 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Data Collection and Presentation Methods of data collection: survey, observation, interview, questionnaire; Classification and tabulation of data; Frequency distribution and Graphical and diagrammatic presentation: bar, pie, histogram, ogive.	10
II	Measures of Central Tendency Mean, median, mode (simple and weighted); Applications and limitations; Geometric and harmonic means and Comparative analysis of different averages.	12
III	Measures of Dispersion and Skewness Range, quartile deviation, mean deviation, standard deviation, variance; Coefficient of variation; Skewness: Karl Pearson's and Bowley's measures and Interpretation in real data contexts.	12

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IV	Introduction to Quantitative Software and Data Interpretation Basics of data analysis using Excel; Data entry, formula application, and chart generation; Interpretation of data tables and graphs; Case studies and practical assignments	14
Essential Readings: <ul style="list-style-type: none">➤ Gupta, S.C. & Kapoor, V.K. – Fundamentals of Mathematical Statistics, Sultan Chand & Sons➤ Levin, R.I. & Rubin, D.S. – Statistics for Management, Pearson Education➤ Elhance, D.N. – Fundamentals of Statistics, Kitab Mahal➤ Nagar, A.L. & Das, R.K. – Basic Statistics, Oxford University Press➤ Anderson, Sweeney & Williams – Statistics for Business and Economics, Cengage		

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BA Economics (Four Year UG under NEP)

B.A 4th year, Sem. VIII
Core Course (Theory)
International Economics: Theory & Policy

Programme/Class BA Economics	Year: Fourth	Semester: VIII
Subject: Economics		
Course Code: ECO803T	Course Title: International Economics: Theory & Policy	
Course Learning Outcomes: <ul style="list-style-type: none"> ● Students should be able to explain the concept, need, significance and scope of international economics in policy perspective. ● Students should be familiar with and are able to explain the economic integration at the global level and the formation of groups. ● Students are familiar with the international organizations and their objectives. Students should be able to analyse the importance and relevance of these international organizations. 		
Credits: 4	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Heckscher-Ohlin Theorem, The Leontief Paradox, Post- Heckscher-Ohlin Theories of Trade- Technological Gap Model, Export Pessimism, Immiserising Growth; Gains from Trade- Meaning and Types, Factors Determining Gains from Trade.	15
II	International Financial Institutions- IMF, WORLD BANK, ADB; GATT, WTO- TRIPS & TRIMS, WTO and India; UNCTAD, North-South Trade Dialogue, South- South Cooperation; Globalization; FDI.	15
III	Quantitative Restrictions: Quota-Meaning, objectives, Types and Effects of Import Quotas; Tariffs- Meaning Types and Effects of Tariffs; Non- Tariff Barriers- Meaning, Classification and Types.	15
IV	Foreign Exchange- Meaning and Instruments, Exchange Rate Determination, Mint Par Parity theory, Purchasing Power Parity Theory, Hedging, Foreign Exchange Rate Policy- Fixed, Flexible & Multiple Exchange Rate System; Convertibility of Rupee in Current Account and Capital Account, Move Towards Capital Account Convertibility; Global Financial Crisis.	15

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BA Economics (Four Year UG under NEP)

Suggested Readings:

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

Suggested Continuous Evaluation Methods:

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

Suggested equivalent online:

Swayam

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BA Economics (Four Year UG under NEP)

B.A 4th year, Sem. VIII
Core Course (Theory)
Industrial Economics

Programme/Class BA Economics	Year: Four	Semester: VIII
Subject: Economics		
Course Code: ECO804T	Course Title: Industrial Economics	
Course Learning Outcomes: Through this course students should be able to: <ul style="list-style-type: none"> • Importance of Industrial Growth & Industrial Policies in India • Industrialization and issues related to Indian Industries • Acquire the knowledge about the structure and types and challenges of Industries. • Importance of industrial growth and industrial policies in India. • Get an insight into recent trends In Industrial sector. • Importance of Micro Small and Medium Enterprises • Get an Insight of recent trends in Industrial sector. • Need, types and Sources of finance Sources of Industrial Finance. 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Introduction: Meaning, Need, and Significance of Industrial Economics. Importance of Industrial Growth, Industrial Policies in India: Features of Industrial Policy 1991, Department for Promotion of Industry and Internal Trade. Index of Industrial Protection, Core Industries.	15
II	Industrial Finance: Need, types and Sources of finance Sources of Industrial Finance- owned, external and components of funds, Nature, volume and types, - IDBI, IFCI, SIDBI, Commercial Banks, Structured Finance Group, etc. Financial Statements, ratio analysis, Cost benefit analysis. Investment decision: nature and types of investment decision.	15
III	Importance of Micro Small and Medium Enterprises, Classification of Industries, Loan Portal to enable Easy Access to Credit foe MSME's, Mandatory Public Procurement, Ease of Doing Business, Atma-Nirbhar Bharat Abhiyan and MSME.	15
IV	Public Sector In India, Price determination in Public Sector Undertakings, Index of Industrial Production, Infrastructure Sector in India: Issues and Policies. Major infrastructure sector: Power, Transport, Telecom Sector.	15

Dr. Shakuntala Misra National Rehabilitation University, Lucknow, UP
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BA Economics (Four Year UG under NEP)

Suggested Readings:

- Ahluwalia, I. J.: Productivity and Growth in Indian Manufacturing, Oxford University Press, New Delhi. 1991.
- Ahluwalia, I. J. :Industrial Growth in India - Stagnation since Mid-sixties, Oxford University Press, New Delhi. 1985.
- BarthwalR.R. :IndustrialEconomics.An Introductory text book ,New Age International Publishers. New Delhi. 2004. 2nd edition.
- Bhatia H.L.;Public finance ;Vikas Publishing House.2018. 29th Edition
- Cherumilaum F. :Industrial Economy of India .Himalaya Publishing house, New Delhi.
- Ferguson, Paul R. and Glenys J. Ferguson: Industrial Economics - Issues and Perspectives, Macmillan, London. 1994.
- Gupta Shivbhushan: Industrial Economics(in Hindi).SahityaBhawan Publication.
- KulshresthaR.S. : Industrial Economics ,SahityaBhawan Publication.
- Mishra Ranjan: Industrial Economics and Management Principles, LaxmiPublication . New Delhi.2008
- Seth Ranjana :Industrial Economics ,Ane Books ,New Delhi. 2010.
- Sinha V,C. :AudhyogicArthshastra.LokBhartiPrakashan .2009
- Srivastava, M.P. :Problems of Accountability of Public Enterprises in India, Uppal Publishing House, New Delhi.1987.
- Staley, E & Morse R.: Modern Small Industry for Developing Countries, McGraw Hill Book Company. 1965.
- Tirole, J. : The Theory of Industrial Organization, Prentice - Hall. 1996.
- Vepa R. K. :Modern Small Industry in India, Sage Publications. 1988.

Suggested Continuous Evaluation Methods: Internal Assessment of 25 marks shall be divided into 10 marks for Assignment based presentation + 15 marks for written test comprising MCQs (Four MCQs of one mark each, all compulsory), short answer (Three of 3 marks each of which 2 to be attempted) and long answer type questions (Two question to be given of which one needs to be given, each of the two of 5 marks).

Course pre requisites: To study this course, a student must have had the subject...in class/UG/certificate/diploma. As per the NEP of the Government of India/Government of Uttar Pradesh

Suggested equivalent online courses: UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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BA IV Year, Sem. VIII
(Theory) Minor Course OWN/Other Faculty
Demography

Programme/Class BA Economics	Year: Four	Semester: VIII
Subject: Economics		
Course Code: ECO805T	Course Title: Demography	
Course Learning Outcomes: <ul style="list-style-type: none"> ● Understand the core demographic variables, and how these variables influence Population growth ● Use demographic tools in understanding public health issues, knowledge, attitude and practice. ● Students will be familiar with the source of data available for demographic research. ● The student will also be able to produce Population projection and interpret the information gathered by the different demographic methods. 		
Credits: 4	Minor Course OWN/Other Faculty	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Demography-meaning, scope and importance, components of population growth and their interdependence, Theories of population - pre Malthusian Theories of population, optimum theories, Demographic Transition, socio-cultural and economic theories of population, biological theories.	10
II	Fertility, Nuptiality, Mortality- Fertility, meaning, rates, factors, Trends, Economic approaches to fertility. Nuptiality- meaning analysis of marital status, mean age. Mortality-concept, rates, factors, Trend, Life Table: construction and uses.	10
III	Population projection-Meaning, Types and method of population projection, Migration and urbanization in India, Meaning and scope of migration, internal and International Migration, Theories of Migration and causes, Consequences of Migration, Environment and Health.	12

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IV	Structure of population-meaning, patterns and trend, Age and sex structure-meaning determinants, patterns, trend ,effect and implication, population pyramid-meaning and types of population pyramid, Demographic dividend, Demographic window, population explosion	13
V	Demographic profile in India- source of Demographic data, census 2011, Growth and distribution of population in India, fertility pattern mortality rates and death rate, Life expectancy, rural urban area, literacy rates, density, migration trend in India. Population policy-meaning and importance, policies influencing fertility, mortality and migration, New Population policy in India , various family welfare programs in India and government schemes	15

Suggested Readings:

- ❖ Bhende, ASHA and Tara Kanitker, Principle of population Studies, Himalayan publishing House Mumbai (1988).
- ❖ Bras, H.L, The Nature of Demography. Princeton university press, (2008).
- ❖ Srivastav, s.c & S.srivastava. Studies in Demography. Anmol Publishers New Delhi (2004).
- ❖ Singh, JP. Studies in social Demography M.D publication, New Delhi.
- ❖ Bose, A, India Basic Demographic statistics, B.R publishing corporation, New Delhi,1996
- ❖ Dave, P & Mehta, P. Mental Health and Aging women: important correlates: Gyan publishing House.
- ❖ Ishwar, M: Ageing and Human Development Global Perspective: New Delhi Rawat pin 2001.
- ❖ Srinivasan, k and A. Shariff, India: Towards population and Demographic Goals, Oxford University press New Delhi (1998).
- ❖ Sen, R.p: Demographic Change and Levels of Living, Days Publishing House New Delhi (1988).
- ❖ Chobey, P.k: Population policy in India, ISBN-8173913935, Kaniska Publishers (2001).
- ❖ United Nation: The Determinants and Consequences of population .Trend, Vol1.
- ❖ Srinivasan, K, Population Concern in India: Shifting Trends, Policies and programs, ISBN-9789353286347, Sage bash publication (2019).
- ❖ Majumdar, P.k, India Demography: Changing Demographic scenario in India, ISBN-978-9388272513, Global Publication Pvt. Ltd., (2020).
- ❖ Sharma, Seema Demographic Transition in India, ISBN – 9788179105146. Aaviskar Publishers Jaipur (2016).
- ❖ Sharma, A. k, Population and Society, Concept Publication ISBN-9688180698187.
- ❖ Ramkumar, Technical Demography, ISBN-9780852267431, New Age International (P) Ltd 2006. India 2021.
- ❖ Bose, Ashish, Beyond Demography B.R Publication ISBN-9788176465656.
- ❖ Rath SP, Demography of India: Challenges and Dynamics of Indian Population census ISBN -9783659341946, Lambert Academic Publication.

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Suggested equivalent online :

UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India
Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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BA Economics (Four Year UG under NEP)
B.A 4th year, Sem. VII
Core Course (Theory)
Mathematics for Economics

Programme/Class BA Economics	Year: Fourth	Semester: VII
Subject: Economics		
Course Code: ECO702R	Course Title: Mathematics For Economics	
Course Learning Objectives: This course provides the essential mathematical framework underpinning undergraduate economic theory. While we will utilize various economic models, their purpose is not to be studied for their own sake, but rather to serve as practical illustrations for mastering the general application of mathematical methods in economics. The aim of this paper is to equip students with the fundamental mathematical tools necessary for undergraduate economic analysis. We will use specific economic models primarily as examples to demonstrate how to effectively apply these mathematical techniques to economic theory in general.		
Credits: 4		Core Course
Max. Marks: 25+75		Min. Passing Marks: 40
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Basic Concepts Basic Concepts: Variables, Sets and set operations; Series and Progression, Equations, Identities, Systems of Equations, Application of Straight Line System, Slope of the Line, Basic Trigonometry Identities. Indices and Factorization, Equilibrium	15
II	Functions And Limits Types of functions- constant, polynomial, rational, exponential, logarithmic; functions and their properties; Graphs and graphs of functions; Limit and continuity of functions; Limit theorems, Role of Mathematical Techniques in Economic Analysis.	15
III	Matrices & Determinants Matrices: concept, types, matrix algebra, transpose of a matrix, rank of a matrix, Determinants: concept, properties, solving problems using properties of determinants inverse of a matrix, solution to a system of equations - Cramer's rule and its economic application	15
IV	Basics of Calculus Rules of Differentiation of a Function; First order derivative and its application in Economics; Slope and elasticity of demand, Determination of Marginal revenue, marginal cost and marginal product; Second order derivative and its application in Economics, Point of inflexion, Concavity and convexity of curve, Maxima and Minima, Inter-relationships among Total, Marginal and Average Cost and Revenues; Constrained Optimization Problem; Integration of a Function, Consumer's and Producer's Surplus	15

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Text books:

1. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.
2. Allen, R.G.D (2006): Mathematical Analysis For Economists, Macmillan And Company Limited
3. Mehta and Madnani: Mathematics for Economists, New Delhi: Sultan Chand Company
4. Agarwal, D.R. (2009): Mathematics for Economics, Vrinda Publications, Delhi.
5. Bhardwaj, R.S (2006): Mathematics for Economics and Business, Excel Books.
6. Sharma, J.K (2007) : Business Mathematics , Ane Books Pvt.Ltd.
7. Yamane, Taro (2007) : Mathematics For Economists : An Elementary Survey , PHI
8. Learning.
9. Rosser, Mike (2003) : Basic Mathematics for Economists , Routledge.
10. Agarwal, D.R. "Prarambhik Ganitiya Arthshastra (Hindi)", Vrinda Publications, Delhi.
11. Mishra, J.P. "Ganiteeya Arthshastra", Pratiyogita Sahitya.
12. Seth, M.L., "Arthshastramei Prarambhik Ganit", Laxmi Narayan Publications, Agra.

Suggested Readings:

1. T. Yamane (2012): Mathematics for Economists, Prentice-Hall of India
2. K. Sydsaeter and P. J. Hammond (2002): Mathematics for Economic Analysis, Pearson Educational Asia

Web References

<http://heecontent.upsdc.gov.in/>

<https://epgp.inflibnet.ac.in/>

<https://swayam.gov.in/>

<https://udrc.lkouniv.ac.in/Department/DepartmentDetail/StudyMaterial?dept=5>

<https://www.coursera.org/in>

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Syllabus
BA Economics (Four Year UG under NEP)
BA 4th Year, Sem VII
Statistical Applications in Economics
Core Course

Programme/Class BA Economics	Year: Four	Semester: VII
Subject: Economics		
Course Code: ECO703R	Course Title: Statistical Applications in Economics	
<p>Course Objectives: To explain students with basic and applied statistical tools in economics. To enable data-based reasoning and evidence-based policy analysis. To integrate quantitative skills with socio-economic issues relevant to India. To inspire the use of ICT, open datasets, and statistical software.</p> <p>Course Learning Outcomes Thoughtful of descriptive and inferential statistical tools. Application of statistical techniques to economic data and policy. Development of critical, analytical, and problem-solving skills. Practical training in data handling using real-world datasets (e.g., NSSO, RBI, CSO, UN).</p>		
Credits: 4	Core Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-2		
Unit	Topics	No. of Lectures
I	<p>Introduction to Statistics in Economics Meaning, scope, and importance of statistics in economics; Nature and limitations of statistics; Relationship between statistics, economics, and data science- Types of data: primary, secondary, cross-sectional, time-series, panel and Sources of economic data: NSSO, CSO, RBI, World Bank, IMF</p>	12
II	<p>Data Collection and Presentation Methods of data collection (survey, census, sampling techniques); Questionnaire design and field survey methods- Tabulation and classification of data; Diagrammatic and graphical presentation (bar, pie, histogram, frequency polygon) and Use of ICT tools for data visualization (Excel, STATA basics, SPSS introduction)</p>	12
III	<p>Measures of Applications in Economics Applications in economics: income, consumption, wages, employment; growth rates, index numbers and interpretation in economic data; Case study: estimating consumption function using sample data</p>	12
IV	<p>Applications of Statistics in Indian Economy Poverty measurement and inequality indices (Lorenz curve, Gini coefficient); Employment, unemployment, and labor statistics; Agricultural and industrial production statistics and National income estimation and GDP measurement and Case studies: NSSO surveys, SECC data, Census</p>	12

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V	<p>Practical/Skill Component as per New Education Policy Skill Orientation Statistical software use: Excel, Evies/SPSS basics; Hands-on analysis of Indian economic data (NSSO, RBI, MOSPI datasets)</p> <p>Project work: Example: “Statistical Analysis of Inflation Trends in India” Example: “Regression Analysis of Education and Income in Rural India” Example: “Index Number Construction for Price Changes in Local Market”</p>	12
<p>References</p> <p>Gupta, S.C. & Kapoor, V.K. (2020). Fundamentals of Applied Statistics. Sultan Chand & Sons. Goon, A.M., Gupta, M.K., & Dasgupta, B. (2014). Fundamentals of Statistics, Vol. I & II. World Press. Elhance, D.N. (2016). Fundamentals of Statistics. Kitab Mahal. Croxtton, F.E., & Cowden, D.J. (2009). Applied General Statistics. Prentice Hall. Gupta, S.P. (2018). Statistical Methods. Sultan Chand & Sons. Natrella, M.G. (2010). Statistical Methods for Data Analysis. Wiley. Karmel, P.H., & Polasek, M. (2011). Applied Statistics for Economists. Pitman. Government of India: NSSO, CSO, MOSPI reports. RBI: Handbook of Statistics on Indian Economy. World Bank Data: World Development Indicators. UNDP: Human Development Reports.</p>		

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BA Economics (Four Year UG under NEP)

B.A 4th year, Sem. VII
Core Course (Theory)
Elementary Econometrics

Programme/Class BA Economics	Year: Fourth	Semester: VII
Subject: Economics		
Course Code: ECO704R	Course Title: Elementary Econometrics	
Course Learning Outcomes: <ul style="list-style-type: none"> ❖ Students comprehend the concept of Econometrics, the basic concepts used in Econometrics. ❖ Students comprehend the relationship between econometrics, mathematics and statistics. ❖ Students comprehend the Methodology of Econometrics. ❖ Students comprehend the Estimator and Estimation. Theory of Estimation. ❖ Students comprehend Hypothesis, Types of Error and Level of Significance. Power of Test. Major Steps in Hypothesis Testing. ❖ Students comprehend Simple Linear Regression Model. ❖ Students are able to comprehend and make use of the different concepts taught. 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Definition, scope, goals, divisions and limitations of Econometrics. Relationship between econometrics, mathematics and statistics.	15
II	Methodology of Econometrics. Meaning of Statistical Inference. Meaning, concept and types of Sampling. Estimator and Estimation. Theory of Estimation. Properties of Estimator. Properties of Estimator in Small & Large Samples.	15
III	Meaning of Hypothesis, Types of Error and Level of Significance. Power of Test. Major Steps in Hypothesis Testing.	15
IV	Simple Linear Regression Model: Introduction, Stochastic and Non-Stochastic Relations. Reasons for the Inclusion of Random variable. Assumptions of Linear Stochastic Regression Model.	15

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Suggested Books/study Material List:

- ❖ Dougherty, Christopher (2007), Introduction to Econometrics, Oxford University Press, New Delhi.
- ❖ Greene, William H. (2003): Econometric Analysis, 5th Edition, Pearson Education, Inc., New Jersey.
- ❖ Gujarati D. Basic Econometrics, Tata Mc Graw Hill, New Delh
- ❖ Gujarati, D. N., "Econometrics by Example", Red Globe Press, 2nd Ed, 2014
- ❖ Johnston and Dinardo, Econometric Methods, Mc Graw Hill.
- ❖ Johnston, J. (1991), Econometric Methods, McGraw Hill Book Co., London.
- ❖ Koutsoyiannis (2004), Theory of Econometrics, Palgrave.
- ❖ Maddala, G.S.(1997), Econometrics, McGraw Hill, New York.
- ❖ Madnani, G.M.K (2008), Introduction to Econometrics: Principles and Applications, Oxford and IBH Publishing Co.Pvt. Ltd., New Delhi.
- ❖ Marno Verbeek, 2017, "A Guide to Modern Econometrics", John Wiley & Sons, Ltd, 5th Edition
- ❖ Nachane Dilip M. (2010), Econometrics: Theoretical Foundations and Empirical Perspectives, Oxford University Press, New Delhi
- ❖ Ramanathan Ramu, (2002), Introductory Econometrics with Applications, Thomson, South-Western.
- ❖ Speigal, M. R. Theory and Problems of Statistics, McGraw Hill Book, London
- ❖ Stock, James H., and Mark W. Watson (2007), Introduction to Econometrics, 2/E, Pearson
- ❖ Studenmund, A H: Using Econometrics, Pearson
- ❖ Wooldridg, Jeffrey M.:Introductory Econometrics: A Modern. Approach, Cengage Learning.
- ❖ मदनानी, जी.एम. के. वकैलाशचन्द्रनायमा: अर्थमिति : अवधारणाएवंविधियों ! कल्याणीपब्लिशर्स !
- ❖ श्रीवास्तव , बी . एलवअनिलगुप्ता: गणितात्मकअर्थशास्त्रतथाअर्थमितिकेमूल-तत्व ! प्रगतिप्रकाशन , मेरठ6.

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Syllabus
BA Economics (Four Year UG under NEP)
B.A 4th year, Sem. VII
Minor Course (Theory)
Economics of Infrastructure

Programme/Class BA Economics	Year: Fourth	Semester: VII
Subject: Economics		
Course Code: ECO705R	Course Title: Economics of Infrastructure	
Course Learning Outcomes:		
<ul style="list-style-type: none"> ❖ The objective of the course is how infrastructure projects influence the overall health of the economy. ❖ The student would be able to discuss the hurdles faced in building and managing infrastructure effectively. ❖ The student would be able to analyze the specific roles of physical, social and economic infrastructure in the Indian context. 		
Credits: 4	Minor Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Scope of Infrastructure Infrastructure-Development Linkages; Role of infrastructure in economic development Infrastructure as Public Good – Issues in non-excludability and non rivalrous consumption; Nature of Public Utilities; The Peak-Load, Off-Load Problem; Issues in Privatisation of Infrastructure. Infrastructure Finance; Public-Private Partnership (PPP); Models and Examples in PPP; Regional Performance of Infrastructure;	12
II	Physical Infrastructure Transportation: Railways, Roadways, Airways and Waterways: Progress, Pricing; Technological Advancement and Challenges. New policies/programmes related to each mode of transportation Communication: Tele-density, Mobile and Internet, Social Media; Growth of IT-ITES.	12

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III	<p>Economic Infrastructure Energy, Electricity and Special Economic/Investment Zones: Power Generation, Distribution and Pricing; Privatisation of Electricity; Coverage; Alternative (Renewable and Unconventional) Sources of Energy, including Nuclear, Solar and Wind Energy; Energy Conservation; Problems and Potential of SEZs, Export Processing Zones (EPZs) and Special Investment Region (SIR). Banking and Financial Services: Spread and Performance of Banking Services; Technology Interface of Financial Services; Financial Inclusion Initiatives. Challenges for Infrastructure Development, Economic Model for Infrastructure Development, Infrastructure Development in India.</p>	12
IV	<p>Social Infrastructure Health Services: Medical Facilities; State and Provision of Health; Drinking Water and Sanitation; Centrally Sponsored Schemes in Health, Drinking Water and Sanitation; Issues in Privatisation of Health Services. Education: Concept and Scope of Human Resource Development; Economics of Education: Education and Economic Growth: Progress on Universalisation of Primary Education; Performance of Secondary, Technical, Professional and Higher Education; Right to Education and Discrimination.</p>	15
V	<p>Defence Budgeting Defence Budgeting in India after 1947. Nature of Modern war and peace economy. Mobilisation of Resources for Defence: Domestic and Foreign resources, Methods of mobilisation, Economic Warfare in modern times. Challenges and Opportunities in the Indian Defence Sector. Reforms in Defence Sector in India.</p>	12

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Reading List

- Indian Council of Social Science Research (ICSSR). Economics of Infrastructure, Vol IV. New Delhi.
- National Council of Applied Economic Research (1996). India infrastructure report: policy implications for growth and welfare. New Delhi, NCAER.
- Parikh, K.S. (Ed.). India Development Reports. Oxford University Press, New Delhi.
- Button, K. (2010). Transport Economics. Edward Elgar.
- Coto-Millan, P. & Inglada, V. (Eds.). (2007). Essays on Transport Economics. Physica Verlag (Springer).
- Cowie, J. (2009). The Economics of Transport: A Theoretical and Applied Perspective. Routledge.
- A.N. Agarwal/MK Agarwal- Indian Economy
- Manoj Kumar Agarwal- Uttar Pradesh ka Arthik Vikas
- Rudra Dutt and KPM Sundaram- Indian Economy
- Sanjeev Kumar-The State of Indian Agriculture, Sage Publications
- Uma Kapila- Indian Economy Suggested Readings
- Government of India- Economic Survey
- Misra and Puri- Indian Economy

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BA 4th Year, Sem. VIII
Research Methodology
Core Course
(Theory)

Programme/Class BA Economics	Year: Four	Semester: VIII
Subject: Economics		
Course Code: ECO801R	Course Title: Research Methodology	
Course Objectives:		
<ul style="list-style-type: none"> ● The students should be familiar with basic concepts of research and research methodology. ● To acquaint students with the tools of research methodology. ● To enable the students to develop a questionnaire/interview schedule. ● To inculcate among students ability to comprehend the concept research question and hypothesis. ● To gain an appreciation for the value of economic reasoning and research, but to also recognize the limitations of its application. ● To apply economic theory to real world situations and to utilize economic theory to frame analysis of research questions. 		
Credits: 4	Core Course	
Max. Marks: 25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-2		
Unit	Topics	No. of Lectures
I	Research - Concept, meaning, definition and objectives. Steps in Research Process. Types of Research. Characteristics & criteria of a good research. Introduction to Seminar, Conference, Workshop, Symposium, etc.	12
II	Research Problem: Concept and need, Identification of Research problem, defining and delimiting Research problem. Review of Literature: Meaning, objectives, sources and process of Review of Literature, Research Gap	12
III	Research Questions and Hypothesis: Variables and their linkages, characteristics of good Hypothesis. Research question and formulation of hypotheses - directional and non-directional hypotheses, Basis for hypothesis. Types of Errors.	12
IV	Research Design: Concepts, meaning, types, need and features. Sampling- Types of samples, Steps in Sampling process, Data types, Tools of Data Collection- Questionnaire & Interview Schedule, Observation, etc.	12
V	Data Analysis: Processing & classification, tabulation and presentation of data, Software's of Data Analysis (MS Excel, SPSS, R-Studio, STATA, etc.), Hypothesis Testing using statistical tests like; t-test, Z-test, Correlation, Regression, ANOVA, Chi-square test, Time series analysis etc.	15
VI	Role of technology in research- Artificial Intelligence and automation, Ethics in Research, Plagiarism, Bibliography, various referencing styles in research.	12

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Suggested Readings:

- ❖ Field, Andey. (2024). Discovering Statistics Using IBM SPSS.
- ❖ Dhanshekhran, Computer Applications in Economics.
- ❖ Ahuja, Ram (2003): Samajik Sarvekshan Avam Anusandhan. Rawat Publication. ISBN-10-817033750X and ISBN-13- 978-8170337508
- ❖ Ahuja, Ram (2001): Research Methods. Rawat Publication. ISBN-10-8170336538
- ❖ Chandra, Vinod S.S & S. Anand Hareendran (2018): Research Methodology. Pearson. ISBN:978-93-528-6351-8
- ❖ Creswell, John W (2012): Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Sage. ISBN:978-321-0748-4(PB)
- ❖ Fadia, B.L(2018): Shodh Paddhati. Sahitya Bhawan Publications. ISBN-10 -9351733114
- ❖ Flick, Uwe (2012): An Introduction to Qualitative Research. Sage. ISBN:978-81-321-0568-8(PB)
- ❖ Greenlaw, S., Doing Economics: A Guide to Understanding and Carrying Out Economics Research, Houghton Mifflin.
- ❖ Koli. L.N (2014): Research Methodology (Hindi) Y K Publishers. ISBN-13-978-8185070919
- ❖ Kothari, C.R: Research Methodology (Methods and Techniques) (Hindi & English), New Age Publisher.
- ❖ Kumar, R. (2011). Research Methodology: a step-by-step guide for beginners (3rd edition). London, UK: TJ International Ltd, Padstow, Cornwall.
- ❖ Lewin, Cathy and Bridget Smekh (2011): Theory and Methods in Social Research. Sage. ISBN: 978-81-321-1000-2(PB)
- ❖ Salvade, Sidram (2012): Research Methodology (Hindi). Raj Publications. ISBN-10-8189471619 and ISBN-13- 978-8189471613
- ❖ Sharma, Virendra Prakash (2015): Research Methodology (Hindi). Panchsheel Prakashan.
- ❖ Singh, Y. K. (2006). Fundamental of Research Methodology and Statistics. New Delhi. New International (P) Limited, Publishers.

Suggested equivalent online :

UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.

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B.A 4th year, Sem. VII
Minor Course (Theory)
Resource Economics

Programme/Class BA Economics	Year: Fourth	Semester: VIII
Subject: Economics		
Course Code: ECO802R	Course Title: Resource Economics	
<p>Course Learning Outcomes: As a result of taking Resource Economics, students will be able to:</p> <ul style="list-style-type: none"> ❖ Students will come to know about the concept and idea of Resource Economics ❖ Students will learn to design regulation which corrects market failure and they will learn how to regulate pollutants that travel across country boundaries. ❖ The students will learn about Environmental impact assessment and how environmental regulations affect trade flows. ❖ They will understand the views of people with diverse perspectives on issues related to economics and natural resource economics. ❖ Analyze and explain the intuition and logic behind theories and concepts of sustainability from the perspective of economics and natural resource economics. 		
Credits: 4	Minor Course	
Max. Marks:25+75	Min. Passing Marks: 40	
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0		
Unit	Topics	No. of Lectures
I	Introduction to Resource Economics. The theory of Externality and Public Goods: Concepts, Market failure, Pigouvian Solution, Buchanan's Theory, Coase theorem and its critique, Pigouvian vs. Coasian solution; Detrimental externality and non-convexities in the production set.	15
II	Property rights; Collective action. Measurement of Environmental Values: Use values; Option value and non- use values. Techniques of Valuation: Market and Non- Market Valuation: Physical linkage methods; Abatement Cost Methods; Behaviour Linkage Method- Revealed and stated preference; Social Cost benefit Analysis.	15

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III	Environmental and Natural resource policy and strategies, Evolution of Environmental Policy, Economics of Environmental Policy Protection, Conservation Policy Instruments; Pigouvian Tax and Subsidies, Tradable permits and fees, Price vs. Quantity instruments, Mixed instruments, Monitoring and Enforcement Issues, India's Environmental Policy and Performance, International Environmental Policy, Environmental Planning and Management	15
IV	Optimal Decision-Making, Dynamically Optimal Decision-Making Over Time, Property Rights and Land, Non-renewable Resources, Dynamically Optimal Non-renewable Resource Extraction, Monopoly Production of Non-renewable Resources. Resource Markets, Demand, Supply, and Scarcity, Sustainability.	15
<p>Suggested Readings:</p> <ul style="list-style-type: none"> ❖ C.D. Kolstad: Environmental Economics. ❖ R.N. Bhattacharya: Environmental Economics. ❖ U. Sankar: Environmental Economics. ❖ N. Hanley, Shogren, B. White: Introduction to Environmental Economics. ❖ Haaband Whitehead: Environmental and Natural resource economics. ❖ Haband Huang: Preference data for Environmental valuation. ❖ Tom Tietenberg and Lynne Lewis: Environmental and Natural Resource Economics. ❖ David. A. Anderson: Environmental Economics and Natural Resource. ❖ Down to Earth, Science and Environment Fortnightly. ❖ Economic and Political Weekly. 		
<p>Suggested Continuous Evaluation Methods: Internal Assessment of 25 marks shall be divided into 10 marks for Assignment based presentation + 15 marks for written test comprising MCQs (Four MCQs of one mark each, all compulsory), short answer (Three of 3 marks each of which 2 to be attempted) and long answer type questions (Two question to be given of which one needs to be given, each of the two of 5 marks).</p>		
<p>Suggested Equivalent Online Courses: UGC-e-PG Pathshala of the Ministry of Human Resource Development, Government of India Programme like Swayam, or any Programme run by the Government of Uttar Pradesh etc.</p>		