

**John Wilson Education Society's**

**Wilson College (Autonomous)**

Chowpatty, Mumbai-400007  
RE-ACCREDITED 'A' grade by NAAC

*Affiliated to the*  
**UNIVERSITY OF MUMBAI**



**Syllabus for T.Y**

**Program: BA**

**Program Code: WUAECO (ECONOMICS)**

**Under Autonomous Choice Based Credit System  
(CBCS) with effect from the  
Academic year 2024-2025**

## PROGRAMME SPECIFIC OUTCOME (PSOs)

**A student completing a Bachelor's Degree in Arts program will be able to:**

### **PO-1: Knowledge**

Learners will be able to demonstrate comprehensive knowledge and understanding of the various disciplines in social sciences.

Learners shall be able to build a strong foundation in academics through active participation so that they would be able to address various social issues.

### **PO-2: Problem Solving, Critical thinking and Analytical skills**

Learners shall develop competencies to solve unfamiliar problems based on the knowledge they have acquired.

### **PO-3: Lifelong Learning**

Learners will acquire knowledge and skills necessary for participating in learning activities throughout life.

Learners would be able to foster the spirit of self-motivation within themselves and recognize their personal interests and goals.

### **PO-4: Communication Skills**

Learners would be able to express their thoughts and ideas effectively in written and oral form.

Learners would be able to confidently present one's views/complex information in a clear and concise manner which is understandable to all.

### **PO-5: Cooperation/ Teamwork**

Learners would be encouraged to learn from each other by working together as a team and respecting differences in opinion.

Learners would be able to evolve into global citizens in a rapidly globalized world.

### **PO-6: Reflective Thinking**

Learners will become more self aware so that they are reflective of both self and society.

### **PO-7: Environmental Consciousness and Sustainability**

Learners would be able to evaluate the potentials and impact of scientific and technological innovations on the environment.

Learners would be able to unravel sustainable solutions to social problems.

### **PO-8: Moral and Ethical Awareness**

Learners would be able to inculcate moral/ethical values in their day to day lives.



Learners shall be more aware of the unethical practices in academics and in various aspects of life.

**PO-9: Research Related Skills**

Learners would be encouraged to identify their areas of interest and undertake research so as to contribute to the greater good of society.

**PO-10: Information/ Digital Literacy**

Learners would be able to acquire the ability to use techniques, skills and modern information technology tools at their study and work place.

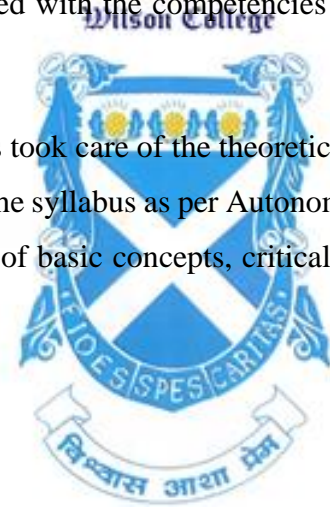


## PREAMBLE:

With the introduction of the Choice Based Credit System by the esteemed University from the academic year 2016-2017, in keeping with the T.Y.B.A Economics Revised Syllabus Sem V and Sem VI (6 papers) with effect from the Academic Year 2021-2022 and the academic autonomy conferred on our institution in 2021-2022, the existing syllabus of T.Y.B.A. Economics is restructured under Autonomy according to the CBCS system for its implementation from 2024-2025.

Keeping in mind the vision and mission of the college, the syllabus aims to provide holistic education to students so that they are well equipped with the competencies that are necessary to meet professional challenges as global citizens.

While earlier revisions of the syllabus took care of the theoretical knowledge of Economics, the present revision is related to restructuring of the syllabus as per Autonomy. The present revised syllabus has laid more emphasis on the understanding of basic concepts, critical thinking, problem solving, experiential learning and value-based education.



**PROGRAM OUTLINE 2024-2025**

<b>YEAR</b>	<b>SEM</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDITS</b>
<b>TY</b>	<b>V</b>	<b>WUAECO501</b>	<b>Advanced Microeconomic Theory</b>	<b>4</b>
	<b>V</b>	<b>WUAECO502</b>	<b>Economics of Growth and Development</b>	<b>4</b>
	<b>V</b>	<b>WUAECO503</b>	<b>Industrial and Labour Economics</b>	<b>3</b>
	<b>V</b>	<b>WUAECO5A4</b>	<b>Elementary Mathematics and Statistics for Economic Analysis</b>	<b>4</b>
			<b>OR</b>	
	<b>V</b>	<b>WUAECO5B4</b>	<b>Introduction to Research Methodology</b>	<b>4</b>
	<b>V</b>	<b>WUAECO5A5</b>	<b>Quantitative Economics</b>	<b>4</b>
			<b>OR</b>	
	<b>V</b>	<b>WUAECO5B5</b>	<b>Environmental Economics: Theory and Policy</b>	<b>4</b>
	<b>V</b>	<b>WUAECO506</b>	<b>History of Economic Thought</b>	<b>3</b>

<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: Advanced Microeconomic Theory</b>		<b>Course Code: WUAECO501</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<b>Students will be able to;</b>					
<p><b>LO-1:</b> Understand the working of firms under the oligopoly markets.</p> <p><b>LO-2:</b> Apply the strategies of decision making under the game theory.</p> <p><b>LO-3:</b> Understand the idea of general equilibrium and welfare economics.</p> <p><b>LO-4:</b> Understand the pricing in the factor markets.</p> <p><b>LO-5:</b> Apply the idea of information economics and analyse the problem of asymmetric information.</p>					
<b>Course Outcomes:</b>					
<b>After completing this course, students will be able to;</b>					
<p><b>CO-1:</b> Discuss the pricing of commodities under the oligopoly market structure.</p> <p><b>CO-2:</b> Evaluate the strategies for decision making in game theory.</p> <p><b>CO-3:</b> Evaluate the efficiency of resource allocation in an economy.</p> <p><b>CO-4:</b> Discuss the concept of Pareto optimality in the allocation of scarce resources.</p> <p><b>CO-5:</b> Explain the pricing of different factors of production.</p> <p><b>CO-6:</b> Evaluate the role of labour unions in the wage setting.</p> <p><b>CO-7:</b> Analyze the role of information in economic decision making.</p> <p><b>CO-8:</b> Analyse the various forms of asymmetric information in the economy.</p>					

## DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	4 Credits/ 48 Lectures
<b>I</b>		<b>The Oligopoly Market</b>	<b>13</b>
	1.1	Meaning and Features of Oligopoly	
	1.2	Price Rigidity and Paul Sweezy's Model of Kinked Demand Curve <i>Wilson College</i>	
	1.3	Collusive Oligopoly Models: Cartel (Centralised and Market Sharing) and Price Leadership	
	1.4	Classical Theory of Oligopoly: Cournot Model	
	1.5	Game Theory: Prisoner's Dilemma, Nash Equilibrium, and Dominant Strategy Equilibrium	
<b>II</b>		<b>An Introduction to General Equilibrium and Welfare Economics</b>	<b>11</b>
	2.1	Concept of General Equilibrium and Walrasian General Equilibrium Model	
	2.2	The concept of Pareto Optimality: The Marginal Conditions for Pareto Optimal Resource Allocation; Perfect Competition and Pareto Optimality	
	2.3	Arrow's Impossibility Theorem	
<b>III</b>		<b>Theory of Factor Pricing</b>	<b>13</b>
	3.1	Marginal Productivity Theory of Distribution	
	3.2	Theories of Rent: Ricardian, Modern and Quasi Rent	
	3.3	Wage Determination under Collective Bargaining and Bilateral Monopoly	
	3.4	Loanable Funds Theory of Interest	
	3.5	Risk, Uncertainty and Innovation	

<b>IV</b>		<b>Information Economics</b>	<b>11</b>
	4.1	Economics of Search: Search Cost	
	4.2	Review of Asymmetric Information in the Market for Lemons and Insurance; The problem of Adverse Selection: Market Signaling and Moral Hazard	
	4.3	The Principal-Agent Problem	

**References:**

1. A. Koutsoyiannis (2015), 2nd Edition, Modern Microeconomics, 2nd edition, Palgrave Macmillan.
2. H. L. Ahuja (2022), 21st Edition, Advanced Economic Theory, S.Chand Publishing.
3. Mankiw N. Gregory (2022), 8th Edition, Principles of Microeconomics, Cengage Learning.
4. Salvatore D. (2008) , 5th Edition, Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
5. Varian Hal R. (2010), 8th Edition, Intermediate Microeconomics: A Modern Approach, East-West Press, New Delhi.


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**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, Newspaper articles, EPW, Magazine contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*





<b>PROGRAM(s): T.Y.B.A.</b>			<b>SEMESTER: V</b>		
<b>Course: Economics of Growth and Development</b>			<b>Course Code: WUAECO502</b>		
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<p><b>Learning Objectives:</b></p> <p style="text-align: center;"><i>Wilson College</i></p>  <p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Distinguish between the concepts of economic growth and economic development</p> <p><b>LO-2:</b> Examine the development theories of economists such as Rostow, Rosenstein-Rodan, Libenstein, Arthur Lewis and Ragner Nurkse</p> <p><b>LO-3:</b> Evaluate the extent of poverty through the use of the poverty line, headcount index, poverty gap, Human Poverty Index and Multidimensional Poverty Index</p> <p><b>LO-4:</b> Appraise the role of planning and technology in the economy</p>					
<p><b>Course Outcomes:</b></p> <p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Examine the approaches and methods of measuring economic growth and economic development</p> <p><b>CO-2:</b> Critically analyze the transition from MDGs to SDGs</p> <p><b>CO-3:</b> Critically analyse the structural changes that take place during the development process through the developmental theories of the following economists-Rostow, Rosenstein-Rodan, Libenstein, Arthur Lewis and Ragner Nurkse</p> <p><b>CO-4:</b> Examine the role of investment in the economy through the Harrod-Domar Growth Model</p> <p><b>CO-5:</b> Evaluate and interpret the extent of poverty and inequality through their respective indicators</p> <p><b>CO-6:</b> Investigate the role of micro financial institutions and self-help groups in bringing about inclusive growth</p>					

**CO-7:** Estimate the cost of migration and urbanization on the economy

**CO-8:** Appraise the role of Economic Planning in the Development of an Economy

**DETAILED SYLLABUS**

Unit	Sub-Unit	Unit Title	4 Credits/ 48 Lectures
<b>I</b>		<b>Meaning of Economic Growth and Development</b>	<b>11</b>
	<b>1.1</b>	Concepts of Economic Growth and Development: Distinction between Economic Growth and Development	
	<b>1.2</b>	Concept of Human Development: H.D.I, G.D.I, Sen's Capabilities Approach	
	<b>1.3</b>	Transitioning from MDG's to SDG's: Challenges and the way forward	
<b>II</b>		<b>Theories of Economic Development</b>	<b>13</b>
	<b>2.1</b>	Rostow's Stages of Growth	
	<b>2.2</b>	Rosenstein-Rodan's Big Push Theory	
	<b>2.3</b>	Leibenstein's Critical Minimum Effort Thesis	
	<b>2.4</b>	Harrod - Domar Growth Model	
	<b>2.5</b>	Theories on disguised employment: Lewis Model of unlimited supply of labour, Ragner Nurkse's Theory of Disguised Unemployment	
<b>III</b>		<b>Structural Issues in the Development Process</b>	<b>13</b>
	<b>3.1</b>	Meaning and Measurement of Poverty and Inequality, Measures to eradicate poverty and Inequality	
	<b>3.2</b>	Migration & Urbanization	
	<b>3.3</b>	SHG and Microfinance	

<b>IV</b>		<b>Planning, Technology and Economic Development</b>	<b>11</b>
	<b>4.1</b>	Concept and Role of infrastructure in Economic Development	
	<b>4.2</b>	Role of technology in Economic Development, Schumacher's concepts of intermediate and appropriate technology, Green Technology	
	<b>4.3</b>	Role of Planning in Economic Development, Meaning and Types of Economic Planning	

### References:

1. Ahuja, H.L (2016), 1st Edition, Development Economics, S Chand Publishing
2. Balakrishnan, A.V. (2022), 3rd Edition, Economic Development in India (Policies, Reforms and Liberalization), G.K. Publications
3. Jhingan, M.L (2016), 41st Edition, The Economics of Development and Planning, Vrinda Publications, PLT, Delhi
4. Meier, Gerald M. and James E. Rauch (2005), 8th Edition, Leading Issues in Economic Development, New Delhi: Oxford Univ. Press
5. Thirlwall, A.P, Penélope Pacheco-López (2017), 10th Edition, Economics of Development: Theory and Evidence, Bloomsbury Academic
6. Todaro, Michael P. and Stephen C. Smith (2017), 12th Edition, Economic Development, Pearson, Delhi



### Additional Material and Types of Exercises:

*Contributions of Economists other than those covered in the syllabus, Human Development Reports, National Multidimensional Poverty Index (India), Research papers/Newspaper articles/ Case Studies wherever relevant, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment, YouTube videos etc.*

<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: Industrial and Labour Economics</b>		<b>Course Code: WUAECO503</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>2.5 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>3</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<b>Students will be able to;</b>					
<p><b>LO-1:</b> Understand the importance of industrial economics and appreciate its application at micro and macro level in economics.</p> <p><b>LO-2:</b> Understand the relevance of theories of industrial location.</p> <p><b>LO-3:</b> Understand the concept of measures of industrial productivity of firms.</p> <p><b>LO-4:</b> Understand the industrial development in India.</p>					
<b>Course Outcomes:</b>					
<b>After completing this course, students will be able to;</b>					
<p><b>CO-1:</b> Discuss the scope of Industrial economics at micro and macro level.</p> <p><b>CO-2:</b> Examine the role of different types of industrial profile in the development of the country.</p> <p><b>CO-3:</b> Evaluate the role of industrial location in economic development.</p> <p><b>CO-4:</b> Examine the problem of different types of regional imbalance.</p> <p><b>CO-5:</b> Measure the industrial productivity of firms.</p> <p><b>CO-6:</b> Analyze the problem of industrial sickness.</p> <p><b>CO-7:</b> Examine the industrial policies in India.</p> <p><b>CO-8:</b> Analyze the industrial trends in India.</p>					

## DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	3 Credits/ 36 Lectures
<b>I</b>		<b>Introduction</b>	<b>10</b>
	1.1	Meaning and Scope of Industrial Economics	
	1.2	Industrial Profile: Private sector; Cooperatives sector and Public Sector – Role , Performance and Problems; Growing relevance of Public Private Partnership (PPP) model	
	1.3	Role of agriculture in Industrial development	
	1.4	Industrial Combinations - Motives for Mergers and Acquisitions	
<b>II</b>		<b>Industrial Location and Problem of Regional Imbalance</b>	<b>10</b>
	2.1	Determinants of Industrial Location	
	2.2	Theories of Industrial Location - Weber and Sargent Florence	
	2.3	Dispersal and Decentralization of Industries	
	2.4	Problem of Regional Imbalance	
<b>III</b>		<b>Industrial Productivity and Industrial Sickness</b>	<b>8</b>
	3.1	Concept and Measurement of Industrial Productivity	
	3.2	Factors Affecting Industrial Productivity-Measures	
	3.3	Industrial Sickness - Causes, Effects and Remedial Measures	
	3.4	Rationalisation - Concept, Aspects and Impact	
<b>IV</b>		<b>Industrial Development in India</b>	<b>8</b>
	4.1	New Industrial Policy 1991	
	4.2	Disinvestment Policy	

	4.3	Small Scale Industries and Rural Industrialization	
	4.4	Recent Trends in India's Industrial Growth	
	4.5	Role of MNCs in the Indian Economy	
	4.6	Industrial Finance in India	
	4.7	National Manufacturing Policy, 2011	

**References:**

1. Barthwal R.R. (2021), 4th Edition, Industrial Economics, New Age International Publishers, New Delhi.
2. Datt R. and Sundaram K.P.M. (2024), 73rd Edition, Indian Economy, S.Chand & Co., New Delhi.
3. Mishra S.K. and Puri V.K.(2023), 41st Edition, Indian Economy, Himalaya Publishing House, Mumbai.
4. Ranjana Seth, Industrial Economics, Ane Books Pvt. Ltd., New Delhi.

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**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: Elementary Mathematics and Statistics for Economic Analysis</b>		<b>Course Code: WUAECO5A4</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<b>Students will be able to;</b>					
LO-1: Understand the microeconomic applications of equations and graphs					
LO-2: Develop an understanding of elementary probability theory					
LO-3: Solve linear equations with the help of matrices, input-output analysis and LPP					
LO-4: Solve sums using the measures of central tendency and dispersion					
<b>Course Outcomes:</b>					
<b>After completing this course, students will be able to;</b>					
CO-1: Analyse the microeconomic applications of equations and graphs					
CO-2: Apply the rules of differentiation to various areas of economic analysis					
CO-3: Obtain solutions in linear algebra through the use of matrices, input-output analysis and LPP					
CO-4: Apply the different methods of primary data and secondary data collection					
CO-5: Interpret the measures of central tendency and dispersion					
CO-6: Discuss the different concepts related to elementary probability theory					
CO-7: Distinguish between discrete (Binomial distribution) and continuous (Normal distribution) distributions					
CO-8: Appraise the Standard Normal Distribution					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Equations, Graphs and Derivatives</b>	<b>13</b>
	<b>1.1</b>	Linear and non-linear relationships in economic analysis	
	<b>1.2</b>	Economic applications of equations and graphs: market demand and supply models, taxes, subsidies, consumption and investment	
	<b>1.3</b>	Derivatives, Rules of Differentiation, Higher order derivatives, Increasing and decreasing functions, Necessary and sufficient conditions for maxima and minima Optimization of economic function	
<b>II</b>		<b>Linear Algebra</b>	<b>11</b>
	<b>2.1</b>	Matrices and basic operations on matrices, Rank of a matrix, Inverse of a matrix, Cramer's rule and its application to the IS-LM model	
	<b>2.2</b>	Input-Output Analysis and policy implications	
	<b>2.3</b>	Linear Programming Problem: Formulation and graphical solution	
<b>III</b>		<b>Descriptive Statistics and graphing techniques for presenting data</b>	<b>11</b>
	<b>3.1</b>	Concept of primary and secondary data along with tabulation and graphs	
	<b>3.2</b>	Measures of central tendency, Measures of Dispersion	
	<b>3.3</b>	Measures of Skewness and Kurtosis	
<b>IV</b>		<b>Elementary Probability Theory</b>	<b>13</b>
	<b>4.1</b>	Probability concepts, Concept of a Random Variable	
	<b>4.2</b>	Discrete Random Variables: Bernoulli Distribution, Binomial Distribution	



	<b>4.3</b>	Continuous Random Variable: Normal Distribution, Standard Normal Distribution, The Standard Normal Curve: Finding Areas when scores are known	
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**References:**

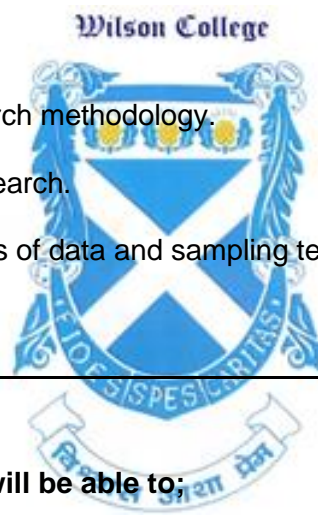
1. Chiang A. C, Wainwright, Kevin (2017), 4th Edition, McGraw Hill Education (India) Private Limited
2. Dowling Edward T (2004), Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi
3. Gupta S.P (2014), 3rd Edition, Statistical Methods, S. Chand, New Delhi
4. Patra S.C (2010), 1st Edition, Mathematical Techniques for Economic Analysis, Himalaya Publishing House
5. Sancheti D.C. and V.K. Kapoor (2014), 7th Edition, Statistics-Theory, Methods and Applications, S. Chand, New Delhi

**Additional Material and Types of Exercises:**

*Contributions of Mathematicians to the field of Economics. Assessing the practical applicability of a mathematical measure (central tendency/dispersion). Discussions, quizzes, graph work, YouTube videos, employing the use of excel to represent data efficiently etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: Introduction to Research Methodology</b>		<b>Course Code: WUAECO5B4</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Understand the importance of research methodology.</p> <p><b>LO-2:</b> Study the process of conducting research.</p> <p><b>LO-3:</b> Study and apply the different sources of data and sampling techniques.</p> <p><b>LO-4:</b> Represent data in a systematic way.</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Apply different types of research in social sciences.</p> <p><b>CO-2:</b> Examine the limitations of Social Science Research.</p> <p><b>CO-3:</b> Apply the process/ stages of research in social sciences.</p> <p><b>CO-4:</b> Evaluate the importance of web search as one of the important means in the research process.</p> <p><b>CO-5:</b> Apply the different methods of primary data and secondary data in research.</p> <p><b>CO-6:</b> Explain the concept of sampling techniques in research.</p> <p><b>CO-7:</b> Apply basic statistical tools for data analysis in research.</p> <p><b>CO-8:</b> Discuss the importance of data processing in the research</p>					



**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Introduction to Research</b>	<b>10</b>
	1.1	Meaning, scope, basic assumptions, features, and importance of social science research	
	1.2	Objectives and types of research; Basic, Applied, Pure, Descriptive, Analytical, and Empirical research	
	1.3	Limitations and difficulties in social science research	
<b>II</b>		<b>Formulation of Problem in Social Science Research</b>	<b>10</b>
	2.1	Research process: Identification, selection and formulation of research problem-Sources of research problem - Criteria of a good research problem- Review of literature-Formulation of hypothesis- Research design: Definition, Concepts, and types- Data Collection and analysis- Interpretation and report writing	
	2.2	Use of web search in the research process.	
<b>III</b>		<b>Types of Data: Primary and Secondary</b>	<b>14</b>
	3.1	Types of Data: Primary data and its collection methods: Observation method- Interview Technique - Design of schedule and questionnaire - Survey method and Field visits - Secondary data: Meaning- advantages- sources- relevance and limitations of secondary data	
	3.2	Sampling Techniques: Census and sample survey- Essentials of a good sampling - Advantages and limitations of sampling	
	3.3	Types of sampling: Random sampling and Non-random sampling-Sampling and Non-Sampling errors.	
<b>IV</b>		<b>Representation and Analysis of Data</b>	<b>14</b>
	4.1	Classification, Tabulation and Graphical presentation of socio-economic data	
	4.2	Need and importance of data analysis	

	4.3	Statistical analytical tools: Measures of Central Tendency - Measures of Variation : Absolute and relative measures - Quartile deviation, standard deviation, coefficient of variation- Skewness: Meaning and measurement (Karl Pearson and Bowley's methods)	
	4.4	Preliminaries of computer applications in data organization and data processing.	

**References:**

1. Dawson, Catherine (2019), 5th Edition, Practical research methods, UBS Publishers, New Delhi.
2. Ghosh, B.N. (2015), Scientific methods and social research, Sterling Publishers Pvt. Ltd, New Delhi.
3. Gupta S P, (2023), 46th Edition, Statistical methods, Sultan Chand and Sons, New Delhi.
4. Kothari R.C. (2019), 4th Edition, Research methodology, methods and techniques, New Age International Publishers, New Delhi.
5. Krishnaswamy O.R.(2010), Methodology of research in social sciences, Himalaya publishing House, Mumbai.
6. Ts Wilkinson PI Bhandarkar, (2016). Methodology and Techniques of Social Research, Himalaya Publishing House, Mumbai.

**Additional Material and Types of Exercises:**

*Various data sources; format of sample research papers, articles, journals; research ethics and data analysis not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



<b>PROGRAM(s): T.Y.B.A.</b>			<b>SEMESTER: V</b>		
<b>Course: Quantitative Economics</b>			<b>Course Code: WUAECO5A5</b>		
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Understand basic concepts related to set theory</p> <p><b>LO-2:</b> Represent mathematical equations in a concise manner and solve sums on Matrices.</p> <p><b>LO-3:</b> Solve sums using the rules of differentiation</p> <p><b>LO-4:</b> Apply the rules of integral calculus in solving sums on definite and indefinite integrals</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Conduct basic operations on sets</p> <p><b>CO-2:</b> Analyse the microeconomic applications of equations and graphs</p> <p><b>CO-3:</b> Apply the rules of differentiation to various areas of economic analysis</p> <p><b>CO-4:</b> Utilize the techniques and applications of partial derivatives in the economic analysis of multivariable functions</p> <p><b>CO-5:</b> Distinguish between the concept of a derivative and an integral</p> <p><b>CO-6:</b> Apply the rules of integral calculus in solving sums on definite and indefinite integrals</p> <p><b>CO-7:</b> Solve sums using basic operations of matrices</p> <p><b>CO-8:</b> Apply matrix algebra to solve problems on IS-LM, input-output</p>					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Set Theory, functions and Graphs</b>	<b>11</b>
	<b>1.1</b>	Set concepts, basic set operations	
	<b>1.2</b>	Functions and Graphs, Algebraic and Non- Algebraic Functions, slope and intercept of a straight line, graphing quadratic functions	
	<b>1.3</b>	Economic Applications: Demand and supply functions, Savings & Investment functions, Consumption function	
<b>II</b>		<b>Derivatives and its Applications</b>	<b>13</b>
	<b>2.1</b>	Derivative of function, Rules of differentiation	
	<b>2.2</b>	Partial derivatives, First and Second orders, Total differentiation, Maxima and minima of two or more than two variables	
	<b>2.3</b>	Applications in Economics: Constrained and unconstrained optimization, Cost minimisation, Profit maximisation, Optimization of utility and production functions	
<b>III</b>		<b>Integration and its Applications</b>	<b>13</b>
	<b>3.1</b>	Basic Rules of Integration	
	<b>3.2</b>	Definite and Indefinite integrals	
	<b>3.3</b>	Economic applications of definite and indefinite integrals	
<b>IV</b>		<b>Matrix Algebra</b>	<b>11</b>
	<b>4.1</b>	Meaning and types of Matrices, Matrix Operations (upto 3 x 3): Addition, Subtraction, Multiplication	
	<b>4.2</b>	Transpose of matrix- Inverse of a Square Matrix- Rank of a matrix- Adjoint of a matrix, Determinants- Minors and Cofactors, Solution to equations by Cramer's Rule, Simultaneous linear equations,	
	<b>4.3</b>	Applications in economics:IS-LM, Input -Output model	

**References:**

1. Chiang A. C, Wainwright, Kevin (2017), 4th Edition, McGraw Hill Education (India) Private Limited
2. Dowling Edward T (2004), Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi
3. Gupta S.P (2014), 3rd Edition, Statistical Methods, S. Chand, New Delhi
4. Patra S.C (2010), 1st Edition, Mathematical Techniques for Economic Analysis, Himalaya Publishing House
5. Sancheti D.C. and V.K. Kapoor (2014), 7th Edition, Statistics-Theory, Methods and Applications, S. Chand, New Delhi

**Additional Material and Types of Exercises:**

*Contributions of Mathematicians to the field of Economics (Input-Output Table). Assessing the practical applicability of a mathematical measure (Marginal and Total values). Discussions, quizzes, graph work, YouTube videos etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: Environmental Economics: Theory and Policy</b>		<b>Course Code: WUAECO5B5</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Understand the interrelationship between economics and environment.</p> <p><b>LO-2:</b> Study the different environmental tools and policies in regulating economic activity.</p> <p><b>LO-3:</b> Study the importance of environmental valuation.</p> <p><b>LO-4:</b> Explain the relationship between trade and environment.</p> <p><b>LO-5:</b> Address the global environmental concerns.</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Evaluate the relationship between environment and economic development and associate the importance of negotiation for the settlement of disputes.</p> <p><b>CO-2:</b> Analyze the actions for Sustainable Development.</p> <p><b>CO-3:</b> Evaluate the different criteria for environmental policies.</p> <p><b>CO-4:</b> Analyze the implications of different tools for environmental policy.</p> <p><b>CO-5:</b> Evaluate a market based approach in the valuation of environmental resources.</p> <p><b>CO-6:</b> Discuss different non-market based approaches in the valuation of environmental resources.</p> <p><b>CO-7:</b> Discuss the relation between trade and the environment.</p> <p><b>CO-8:</b> Discuss international environmental agreements towards the economic development of the country.</p>					



**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Introduction to Environmental Economics</b>	<b>12</b>
	1.1	Environmental Economics: Nature, Significance and Scope; Environment and the economy; Environmental Kuznets Curve	
	1.2	Common resources, externalities and property rights; Coase Theorem	
	1.3	Rio Declaration and Agenda 21 programme of action for sustainable development	
<b>II</b>		<b>The Design and Implementation of Environmental Policy</b>	<b>13</b>
	2.1	Criteria for evaluating environmental policies	
	2.2	Tools of Environmental Policy: Standards, Pigovian taxes/effluent fees, quotas/tradable permits	
	2.3	Choice between taxes and quotas; Environmental Policy: Regulation and Implementation	
<b>III</b>		<b>Measuring Benefits of Environmental Improvements</b>	<b>13</b>
	3.1	Economic value of Environment: Use and Non-use values	
	3.2	Market Based Method of Environmental goods	
	3.3	Non-market based method of Environmental goods; Contingent Valuation Method; Travel Cost Method; Hedonic Price Method	
<b>IV</b>		<b>Global Environmental Issues</b>	<b>10</b>
	4.1	Trade and environment- Overview of trans-boundary environmental problems	
	4.2	Global Warming - Climate Change - Energy Crisis	
	4.3	Challenges of urbanization - International environmental agreements (like G-20)	


**References:**

1. Barry Field and Martha k Field (2017), Environmental Economics, McGraw Hill International Edition.
2. Bennear, Lori Snyder, and Cary Coglianese (2004), Evaluating Environmental Policies, KSG Faculty Research Working Paper Series RWP04-049,USA
3. Charles Kolstad (2012), 2nd Edition, Intermediate Environmental Economics, Oxford University Press, New York.
4. Hanley Nick, Shogren Jason and White Ben (2019), 3rd Edition, Introduction to Environmental Economics, Oxford University Press.
5. Mickwitz, Per. (2003), A Framework for Evaluating Environmental Policy Instruments Context and Key Concepts. Evaluation.
6. Smith Stephen (2011), 1st edition, Environmental Economics: A very Short Introduction, Oxford University Press, New York.

**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: V</b>			
<b>Course: History of Economic Thought</b>		<b>Course Code: WUAECO506</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>2.5 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>3</b>	<b>40</b>	<b>60</b>
<p><b>Learning Objectives:</b></p> <p style="text-align: center;"><i>Wilson College</i></p>  <p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Discuss the works of the celebrated classical economists</p> <p><b>LO-2:</b> Elaborate on the works of the celebrated economists of the marginalist school</p> <p><b>LO-3:</b> Critique the works of John Maynard Keynes</p> <p><b>LO-4:</b> Appraise the works of the post Keynesian economists</p>					
<p><b>Course Outcomes:</b></p> <p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Trace the development of economic thought and identify how the economic thought of one historical period has contributed to the development of economic thought in a subsequent period</p> <p><b>CO-2:</b> Critically examine the works of the celebrated Classical Economists namely Adam Smith, David Ricardo and Karl Marx</p> <p><b>CO-3:</b> Critically examine the works of the celebrated economists of the Marginalist School of Thought namely Alfred Marshall, Joseph Schumpeter and Arthur Pigou</p> <p><b>CO-4:</b> Critically examine the works of John Maynard Keynes</p> <p><b>CO-5:</b> Critique the accountability of governments in economies as put forth by Keynes</p> <p><b>CO-6:</b> Critically examine the works of the celebrated Post Keynesian economists namely Friedrich Hayek, Franco Modigliani and Milton Friedman</p> <p><b>CO-7:</b> Critically examine the dynamics of Mankiw's New Keynesian Model</p> <p><b>CO-8:</b> Appraise the development of economic theory as a result of the evolution of economic thought</p>					

## DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	3 Credits/ 36 Lectures
<b>I</b>		<b>Classical Economics</b>	<b>10</b>
	<b>1.1</b>	Mercantilism and Physiocracy	
	<b>1.2</b>	Adam Smith: Liberalism, Division of Labour, Labour Theory of Value	
	<b>1.3</b>	David Ricardo: Rent Theory, Wage Theory, Theory of Value	
	<b>1.4</b>	Karl Marx: Surplus Value, Materialistic Interpretation of History, Scientific Socialism	
<b>II</b>		<b>Neo-Classical Economics</b>	<b>8</b>
	<b>2.1</b>	Alfred Marshall: Thought on Value, Representative Firm, Consumer's Surplus, Internal and External Economies, Quasi Rent	
	<b>2.2</b>	Schumpeter: Economic Development And Innovation	
	<b>2.3</b>	Pigou :Welfare Economics	
<b>III</b>		<b>Keynesian Ideas</b>	<b>10</b>
	<b>3.1</b>	Employment Theory, Money, Wage Rigidity Model	
	<b>3.2</b>	Multiplier and accelerator and their interaction, theory of Trade Cycles	
	<b>3.3</b>	Role of Fiscal Policy, Keynesian Economics and Developing Countries	
<b>IV</b>		<b>Post-Keynesian Economics</b>	<b>8</b>
	<b>4.1</b>	Fredrich Hayek's Theory of Trade Cycle	
	<b>4.2</b>	Franco Modigliani's Life Cycle theory of Consumption	
	<b>4.3</b>	Milton Friedman: Theory of Demand for Money, Long-Run Philips Curve	

	4.4	Mankiw's New Keynesian Model	
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**References:**

1. Jhingan M.L, Girija M, Sasikala L (2011), 3rd Edition, History of Economic Thought, Vrinda Publications
2. Lokanathan V (2018), 10th Edition, A History of Economic Thought, S Chand and Company Limited
3. Paul R.R (2014), History of Economic Thought, Kalyani Publishers
4. Raikar J.S (1992), 2nd Edition, History of Economic Thought, Sheth Publishers
5. Roll E, Hunt E.K (2002), 5th Edition, The History of Economic Thought, Faber & Faber Publishers

**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, Book reviews/movie reviews of celebrated economists, Research papers/Newspaper articles/ Case Studies wherever relevant, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment, YouTube videos etc.*



## Modality of Assessment

### Theory Examination Pattern:

#### A. Internal Assessment- 40%- 40 Marks per paper

Sr. No.	Evaluation Type	Marks
1.	Written Objective Examination	20
2.	Assignment/ Case study/ field visit report/ presentation/ project	20
	<b>Total</b>	<b>40</b>

#### B. External Examination- 60%- 60 Marks per paper

##### Semester End Theory Examination:

1. Duration - These examinations shall be of two hours duration.

2. Theory question paper pattern:

- a. There shall be four questions each of 15 marks one on each unit.
- b. In each main question, there shall be two sub questions. In each of these sub questions any one of two questions have to be answered.
- c. All questions shall be compulsory with internal choice within the questions.

Question	Options	Marks	Questions Based on
Q.1.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit I
Q.2.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit II
Q.3.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit III
Q.4	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit IV
	<b>TOTAL</b>	<b>60</b>	

**PROGRAM OUTLINE 2024-2025**

YEAR	SEM	COURSE CODE	COURSE TITLE	CREDITS
TY	VI	WUAECO601	Advanced Macroeconomic Theory	4
	VI	WUAECO602	International Economics	4
	VI	WUAECO603	Indian Financial System	3
	VI	WUAECO6A4	Mathematics for Economic Analysis	4
			OR	
	VI	WUAECO6B4	Basic Statistical tools and Methods for Research	4
	VI	WUAECO6A5	Basic Econometrics	4
			OR	
	VI	WUAECO6B5	Environmental Economics and Policies	4
	VI	WUAECO606	International Banking and Finance	3

<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: VI</b>			
<b>Course: Advanced Macroeconomic Theory</b>		<b>Course Code: WUAECO601</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<b>Students will be able to;</b>					
<p><b>LO-1:</b> Understand the relationship between wages, prices, and unemployment.</p> <p><b>LO-2:</b> Analyze the different phases of trade cycles.</p> <p><b>LO-3:</b> Explain the exchange rate system in the economy.</p> <p><b>LO-4:</b> Understand the problem of global economic crisis and the role of international multilateral organizations.</p>					
<b>Course Outcomes:</b>					
<b>After completing this course, students will be able to;</b>					
<p><b>CO-1:</b> Explain the determination of equilibrium of AD-AS model and price in labour market.</p> <p><b>CO-2:</b> Discuss the concept of inflation expectations.</p> <p><b>CO-3:</b> Explain the different phases of the Trade cycle and Macroeconomic Policies in controlling the fluctuations of the trade cycle.</p> <p><b>CO-4:</b> Explain trade cycles from different dimensions using theories of trade cycles .</p> <p><b>CO-5:</b> Explain the systems of exchange rate and balance of payments.</p> <p><b>CO-6:</b> Evaluate the problem of currency crises.</p> <p><b>CO-7:</b> Discuss the evolution of system of currency</p> <p><b>CO-8:</b> Analyze the problem of Global Economic Crisis and the role of International Multilateral Organizations in the development of the global economy.</p>					



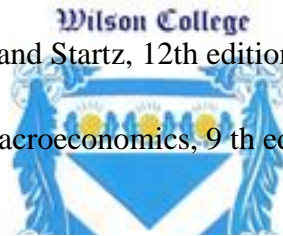
## DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	4 Credits/ 48 Lectures
<b>I</b>		<b>Post Keynesian Synthesis</b>	<b>13</b>
	1.1	Derivation of Aggregate Demand Curve with IS-LM - Aggregate Supply Curve - Determination of Equilibrium National Income and Price Level under Aggregate Demand and Aggregate Supply Model	
	1.2	Extension of IS-LM Model with Labour Market and Flexible Prices	
	1.3	Natural Rate of Unemployment- Long run Philips Curve - Friedman's Expectation Model - Tobin's Modified Phillips Curve	
	1.4	Adaptive Expectations and Rational Expectations	
<b>II</b>		<b>Trade Cycles</b>	<b>13</b>
	2.1	Meaning- Nature- Features and Types of Trade Cycles - Phases of Trade Cycles	
	2.2	Theories of Trade Cycles- Hawtrey's, Kaldor, Paul Samuelson and Hicks	
	2.3	Measures to Control Trade Cycles	
<b>III</b>		<b>Exchange Rate Regimes and Currency Crises</b>	<b>12</b>
	3.1	Managed Exchange Rate- Advantage and Disadvantage	
	3.2	Policy of Managed Flexibility: Adjustable Peg System, Crawling Peg System	
	3.3	Managed Floating System: Clean and Dirty Float System	
	3.4	Balance of Payment and Exchange Rate - Is Balance of Payments Always in Balance?	
	3.5	Convertibility of Currency - Currency Crisis-Causes, Impact and Measures	
<b>IV</b>		<b>International Monetary System</b>	<b>10</b>

	4.1	Rise and Fall of International Gold Standard Bretton Woods System and Breakdown of the Bretton Woods System Monetary System after the Collapse of Bretton Woods System	
	4.2	Features, Effects and Importance of Euro- Currency Market	
	4.3	Causes and Consequences of Global Economic Crisis Impact of Global Recession on the Indian Economy	
	4.4	Asia Infrastructure Investment Bank (AIIB) - New Development Bank (NDB): Asian Development Bank (ADB)	

**References:**

1. Abel A. B. B. S. Bernanke and D. Croushore, Macroeconomics, 10th edition, Pearson, 2019.
2. Ahuja H. L., Macroeconomics theory and Policy, 20th edition, S. Chand and company Ltd, 2015.
3. Dwivedi D.N., Macroeconomics theory and Policy, 5 th edition, Mcgraw -Hill Publication company Ltd. Delhi, 2018.
4. Dornbusch Rudiger, Fischer, Stanley and Startz, 12th edition Edition), Macroeconomics Delhi: Mcgraw -Hill Publication, 2018.
5. N. Gregory Mankiw, Principles of Macroeconomics, 9 th edition, Cengage Learning, 2020.



**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



<b>PROGRAM(s): T.Y.B.A.</b>			<b>SEMESTER: VI</b>		
<b>Course: International Economics</b>			<b>Course Code: WUAECO602</b>		
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<p><b>Learning Objectives:</b></p> <p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Discuss the importance of International Trade</p> <p><b>LO-2:</b> Distinguish between the traditional and modern theories of international trade</p> <p><b>LO-3:</b> Appraise the role of International Economic Institutions: IMF, WB, WT and the role of Economic Integration: ASEAN, European Union (EU), NAFTA and SAARC</p> <p><b>LO-4:</b> Sketch offer curves to demonstrate reciprocal demand</p>					
<p><b>Course Outcomes:</b></p> <p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Examine the scope and subject matter of international trade</p> <p><b>CO-2:</b> Critically examine traditional and modern theories of international trade</p> <p><b>CO-3:</b> Explain the open economy through the Balance of Payment (BOP) approach and Purchasing Power Parity (PPP) theory</p> <p><b>CO-4:</b> Sketch the offer curves of trading partners showing reciprocal demand and the benefits derived from trade</p> <p><b>CO-5:</b> Examine the concept of balance of payment in an open economy</p> <p><b>CO-6:</b> Explain the functioning of the foreign exchange market and the determination of exchange rate</p> <p><b>CO-7:</b> Critically analyse the dynamic role played by the foreign exchange market</p> <p><b>CO-8:</b> Critically examine the role of International Economic Institutions: IMF, WB, WT and the role of Economic Integration: ASEAN, European Union (EU), NAFTA and SAARC</p>					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Introduction to Trade Theories</b>	<b>13</b>
	<b>1.1</b>	Meaning, scope and importance of International Trade, Difference between Internal and International Trade	
	<b>1.2</b>	Adam Smith's Theory of International Trade, Ricardian theory of comparative cost difference	
	<b>1.3</b>	Heckscher- Ohlin Theory, Leontief's Paradox	
	<b>1.4</b>	Krugman's Model	
<b>II</b>		<b>Balance of Trade and Balance of Payments</b>	<b>13</b>
	<b>2.1</b>	Meaning and difference between Balance of Trade (BOT) and Balance of Payment (BOP)	
	<b>2.2</b>	Concepts of Terms of Trade: Net barter, Gross barter and Income terms of trade	
	<b>2.3</b>	Purchasing Power Parity theory: Absolute and Relative	
	<b>2.4</b>	JS Mill's Law of Reciprocal demand, Marshall-Edgeworth Offer curves	
	<b>2.5</b>	Gains from trade: Case for and against Free Trade and Protection policy	
<b>III</b>		<b>Foreign Exchange Market</b>	<b>12</b>
	<b>3.1</b>	Meaning and Functions of Foreign Exchange Market, Exchange rate determination, Factors influencing foreign exchange rate	
	<b>3.2</b>	System of Managed Flexibility	
	<b>3.3</b>	Components of foreign exchange reserves	
	<b>3.4</b>	Foreign Aid Vs Foreign Trade	

	3.5	FDI and MNCs	
<b>IV</b>		<b>International Economic Institutions and Economic Integration</b>	<b>10</b>
	4.1	IMF, WB: Role functions and objectives	
	4.2	WTO: Functions and Agreements with respect to TRIPS, TRIMS, GATS, AoA	
	4.3	Forms and objectives of Economic Integration, Trade Blocs: ASEAN, European Union (EU), NAFTA and SAARC	

**References:**

1. Desai S.S.M, Bhalerao N (2008), 1st Edition, International Economics, Himalaya Publishing House
2. Jhingan M.L (2009), 6th Edition, International Economics, Vrinda Publications
3. Krugman R Paul, Maurice Obstfeld (2009), 8th Edition, International Economics Theory and Policy, Pearson
4. Salvatore, Dominick (2008), 8th Edition, International Economics, Wiley India
5. Sodersten, Bo and Geoffery Reed (2006), 3rd Edition, International Economics, Palgrave Macmillan

**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, Websites of the IMF, WTO and WB, Monthly RBI Bulletins, Trade Blocs: Regional Comprehensive Economic Partnership (RCEP), United States-Mexico-Canada Agreement (USMCA), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), African Continental Free Trade Area (AfCFTA), World Economic Forum (WEF) Reports, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment, YouTube videos etc.*

<b>PROGRAM(s): T.Y.B.A.</b>			<b>SEMESTER: VI</b>		
<b>Course: Indian Financial System</b>			<b>Course Code: WUAECO603</b>		
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>2.5 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>3</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Identify the various components of the Indian Financial System</p> <p><b>LO-2:</b> Distinguish between the money market and the debt market</p> <p><b>LO-3:</b> Appraise the role of the capital market in the development of the financial sector of the economy</p> <p><b>LO-4:</b> Understand the types of derivative contracts</p> <p><b>LO-5:</b> Explain the significance of financial services such as Insurance, Mutual Funds, Merchant Banking and Credit Rating</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Describe the various components of the Indian Financial System- Institutions, Markets, Instruments and Services</p> <p><b>CO-2:</b> Appraise the structure and working of the Money Market and the Debt Market in India</p> <p><b>CO-3:</b> Discuss the structure of the Capital Market in India</p> <p><b>CO-4:</b> Appraise the structure and working of the Primary Market and Secondary Market in India</p> <p><b>CO-5:</b> Define and differentiate between various types of financial derivatives- forwards, futures, options, swaps</p> <p><b>CO-6:</b> Discuss the mechanics of the derivative market including clearing, settlement and margin requirements</p> <p><b>CO-7:</b> Explain the pricing of futures and options</p> <p><b>CO-8:</b> Discuss the need and significance of financial services such as Insurance, Mutual Funds, Merchant Banking and Credit Rating</p>					

## DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	3 Credits/ 36 Lectures
<b>I</b>		<b>Money Market and Debt Market</b>	<b>8</b>
	<b>1.1</b>	Money market: meaning, features and functions, Structure (dichotomous & heterogeneous), participants and instruments in the Indian money market	
	<b>1.2</b>	Debt market: meaning & functions, Segments, Participants & instruments in debt market, Role of intermediaries and the government in the debt market	
	<b>1.3</b>	Reforms and recent trends in the Indian Money and Debt Markets	
<b>II</b>		<b>Capital market</b>	<b>10</b>
	<b>2.1</b>	Capital market: meaning, role and factors affecting growth of capital market - Structure of capital market- New issues or primary market: features, participants & intermediaries - Overview of issue mechanisms or methods of raising primary issues	
	<b>2.2</b>	Secondary market: features, participants & intermediaries - Listing of securities: types, advantages, requisites of listing - Basic mechanism of trading in securities - DEMAT- introduction to major stock exchanges in India: BSE, NSE and OTCEI	
	<b>2.3</b>	Reforms: Primary segment of Indian capital market & role of SEBI. Secondary segment of Indian capital market.	
<b>III</b>		<b>Derivatives Market</b>	<b>10</b>
	<b>3.1</b>	Derivatives: Need and significance - Participants in derivative markets	
	<b>3.2</b>	Types of derivatives (a. based on the underlying entity- financial, commodity, foreign currency, credit & interest rates and b. based on instruments- forwards, futures, options, swaps)	
	<b>3.3</b>	Pricing of derivatives: futures pricing, cost-of-carry	

		model, options pricing	
	<b>3.4</b>	Derivative markets in India: evolution & growth, NCDEX, MCX, regulation of derivatives trading in India.	
<b>IV</b>		<b>Financial Services in India</b>	<b>8</b>
	<b>4.1</b>	Insurance: meaning, types, evolution and growth, E-portal for insurance policies, IRDA and PFRDA	
	<b>4.2</b>	Mutual Funds: meaning, composition, advantages, types of schemes-Evolution & growth, AMFI	
	<b>4.3</b>	Merchant banking: Evolution & growth, scope and recent developments in India	
	<b>4.4</b>	Credit rating: meaning, role and significance, agencies	

**References:**

1. Bhole L. M. (2008), 6th Edition, Financial Institutions and Markets: Structure, Growth and Innovation, Tata McGrawHill, New Delhi
2. Hull J.C, Basu S (2016), 9th Edition, Options, Futures and other Derivatives, Pearson Education India
3. Khan M. Y. (2019), 10th Edition, Financial Services, McGraw Hill, New Delhi
4. Machiraju H.R. (2018), 5th Edition, Indian Financial System, Vikas Publishing House
5. Pathak B. (2018), 5th Edition, Indian Financial System, Pearson Education India



**Additional Material and Types of Exercises:**

*Analysis of Prospectus of companies, Annual Reports of Companies, Credit Rating rules and regulations, LIC and GIC websites, Stock Markets: NSE, BSE, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment, YouTube videos etc.*



<b>PROGRAM(s): T.Y.B.A.</b>			<b>SEMESTER: VI</b>		
<b>Course: Mathematics for Economic Analysis</b>			<b>Course Code: WUAECO6A4</b>		
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>

**Learning Objectives:**

**Students will be able to;**

- LO-1:** Optimize multivariable functions using partial derivatives
- LO-2:** Solve sums on integral calculus
- LO-3:** Evaluate the different methods of studying correlation
- LO-4:** Fit a trend line using the method of Least Squares and Moving Averages
- LO-5:** Discuss the different types of index numbers and their uses



**Course Outcomes:**

**After completing this course, students will be able to;**

- CO-1:** Utilize the techniques and applications of partial derivatives in the economic analysis of multivariable functions
- CO-2:** Apply the rules of integration in solving sums on present value, consumer surplus, producer surplus and the learning curve
- CO-3:** Distinguish between the concepts of correlation and regression
- CO-4:** Examine the components of a time series
- CO-5:** Fit a trend line using the method of Least Squares and Moving Averages
- CO-6:** Appraise the different types of index numbers and their uses
- CO-7:** Examine the different methods of sampling: Probability and Non-Probability Sampling

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Techniques and applications of partial derivatives</b>	<b>13</b>
	<b>1.1</b>	Partial derivatives - Second order partial derivatives - Optimization of multivariable functions-Constrained optimization with Lagrange multiplier and its economic interpretation, Cobb- Douglas production function	
	<b>1.2</b>	Applications of Partial Derivatives: Price, Income and Cross elasticity of demand	
	<b>1.3</b>	Homogeneous production functions and returns to scale	
<b>II</b>		<b>Integral Calculus</b>	<b>12</b>
	<b>2.1</b>	Integration and Definite integral	
	<b>2.2</b>	Economic applications- Present value of cash flows (present value of a sum to be received in future and present value of a stream of future income) Consumers and Producers Surplus, Learning Curve	
<b>III</b>		<b>Correlation and Regression Analysis</b>	<b>13</b>
	<b>3.1</b>	The meaning and significance of Correlation, Correlation and Causation, Measurement of Correlation: Graphical (Scatter Plot), Mathematical (Karl Pearson's coefficient of correlation, Spearman's rank correlation coefficient)	
	<b>3.2</b>	Simple regression analysis, Method of Least Squares and Regression Lines and Regression Coefficients	
	<b>3.3</b>	Components of time series, estimation and forecasting of a trend by the Least Squares Method, Moving Averages	
<b>IV</b>		<b>Index Numbers and Sampling Methods</b>	<b>10</b>
	<b>4.1</b>	Simple and composite index numbers, Construction and uses of index numbers, Laspeyre's, Paasche's and Fisher's Index numbers	

	<b>4.2</b>	Applications: Cost of living index numbers (CPI) -real income – wholesale price index numbers (WPI), Splicing of index numbers	
	<b>4.3</b>	Sampling -Principal steps in a sample survey, methods of sampling, the role of sampling theory.	

**References:**

1. Chiang A. C, Wainwright, Kevin (2017), 4th Edition, McGraw Hill Education (India) Private Limited
2. Dowling Edward T (2004), Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi
3. Gupta S.P (2014), 3rd Edition, Statistical Methods, S. Chand, New Delhi
4. Patra S.C (2010), 1st Edition, Mathematical Techniques for Economic Analysis, Himalaya Publishing House
5. Sancheti D.C. and V.K. Kapoor (2014), 7th Edition, Statistics-Theory, Methods and Applications, S. Chand, New Delhi

**Additional Material and Types of Exercises:**

*Contributions of Mathematicians to the field of Economics. Assessing the practical applicability of a mathematical measure (Rate of change, Consumer and Producer Surplus). Discussions, quizzes, graph work, use of excel, YouTube videos etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: VI</b>			
<b>Course: Basic Statistical tools and methods for Research</b>		<b>Course Code: WUAECO6B4</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Analyze data and forecast variables using basic statistical techniques.</p> <p><b>LO-2:</b> Understand the concept of index numbers.</p> <p><b>LO-3:</b> Understand the basics of hypothesis testing in research.</p> <p><b>LO-4:</b> Understand the importance of ethics in conducting research.</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Analyze the degree of association between variables.</p> <p><b>CO-2:</b> Forecast economic variables using Regression Analysis and analyze time series data.</p> <p><b>CO-3:</b> Construct index numbers on base year.</p> <p><b>CO-4:</b> Calculate and interpret the relative changes in the prices and quantity of commodities with respect to the base year</p> <p><b>CO-5:</b> Discuss the importance of hypotheses in research.</p> <p><b>CO-6:</b> Explain the types of errors in the framing of hypotheses.</p> <p><b>CO-7:</b> Discuss the different types of research depending upon the nature of research.</p> <p><b>CO-8:</b> Discuss the steps involved in the preparation of reports.</p>					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Application of Statistics in Research</b>	<b>15</b>
	1.1	Methods of studying correlation- measurement of simple correlation: graphic method- Scatter diagram- Coefficient of correlation- Karl Pearson and rank correlation- Interpretation of $r = +1$ . $-1$	
	1.2	Linear regression analysis: Meaning, regression lines, regression equation, regression equation relationship between correlation and regression	
	1.3	Analysis of time series- Components- Trend analysis- Moving averages (3, 4 and 5 Yearly)- Method of least square	
<b>II</b>		<b>Index Number</b>	<b>13</b>
	2.1	Meaning and classification of index number - Problems encountered while constructing index numbers- Uses and limitation of index numbers	
	2.2	Methods of constructing index numbers:  (I) Simple index: i) Aggregate method ii) Simple average of Relative method  (II) Weighted index: Laspeyer's, Paache's, Fisher's and Marshall- Edgeworth	
	2.3	Base shifting, Deflating and Cost of living index number (CPI): Weighted average of Relative method - Aggregate Expenditure method- Chain based index	
<b>III</b>		<b>Hypothesis Formulation and Testing</b>	<b>10</b>
	3.1	Definition and functions of Hypothesis - Criteria of workable Hypothesis	


	3.2	Forms and sources of hypothesis- Concepts in testing of hypothesis: Universe / Population parameter and sample statistics	
	3.3	Types of hypotheses: Null and Alternative Hypotheses- Levels of significance-Critical region -Type I and Type II Errors -Student t- test	
<b>IV</b>		<b>Research Report Writing</b>	<b>10</b>
	4.1	Types of research reports: Technical, Popular, Interim, Summary, Article	
	4.2	Format of a research report Principles of writing the research report: Organization and style - Contents- Styles of reporting	
	4.3	Steps in drafting reports- Editing the final draft- Evaluating the final draft	
	4.4	Organization of the research report: Preliminaries, Contents of report, Structuring the report: Chapter format- Pagnation- Identification- Using quotations, Presenting footnotes- Abbreviations- Presentation of tables and figures- Referencing documentation-Use and format of appendices- Indexing - Bibliography, Appendices	

**References:**

1. Dawson, Catherine (2019), 5th Edition, Practical research methods, UBS Publishers, New Delhi.
2. Ghosh, B.N. (2015), Scientific methods and social research, Sterling Publishers Pvt. Ltd, New Delhi.
3. Gupta S P, (2023), 46th Edition, Statistical methods, Sultan Chand and Sons, New Delhi.
4. Kothari R.C. (2019), 4th Edition, Research methodology, methods and techniques, New Age International Publishers, New Delhi.
5. Krishnaswamy O.R.(2010), Methodology of research in social sciences, Himalaya publishing House, Mumbai.
6. Ts Wilkinson Pl Bhandarkar, (2016). Methodology and Techniques of Social Research, Himalaya Publishing House, Mumbai.

**Additional Material and Types of Exercises:**

*Various data sources; format of sample research papers, articles, journals; research ethics and data analysis not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*

<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: VI</b>			
<b>Course: Basic Econometrics</b>		<b>Course Code: WUAECO6A5</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>3.2 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>4</b>	<b>40</b>	<b>60</b>
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Differentiate between discrete and continuous random variables</p> <p><b>LO-2:</b> Solve sums using the Z, t, chi-square and F tests and realize their importance in drawing statistical inferences</p> <p><b>LO-3:</b> Assess the properties of the OLS estimators under the classical assumptions</p> <p><b>LO-4:</b> Discuss the failure of the classical assumptions namely multicollinearity, auto-correlation and heteroskedasticity</p>					
					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Explain the concept of a random variable</p> <p><b>CO-2:</b> Solve sums on discrete and continuous random variables using the Bernoulli distribution, the Binomial distribution, the Poisson distribution and the Normal distribution</p> <p><b>CO-3:</b> Calculate the degree of the relationship existing between the jointly distributed random variables through the use of the covariance and correlation</p> <p><b>CO-4:</b> Use the different types of distributions (Z, t, chi-square and F) in order to draw statistical inferences</p> <p><b>CO-5:</b> Analyse the classical assumptions of a two variable regression model under the method of Ordinary Least Squares</p> <p><b>CO-6:</b> Assess the properties of the OLS estimators under the classical assumptions</p>					

**CO-7:** Discuss the consequences of violation of the classical assumptions namely multicollinearity, auto-correlation and heteroskedasticity

**CO-8:** Examine the consequences of omitting variables from or including irrelevant variables into a regression model

### DETAILED SYLLABUS

Unit	Sub-Unit	Unit Title	4 Credits/ 48 Lectures
<b>I</b>		<b>Idea of a random variable &amp; Jointly Distributed Random Variables</b>	<b>13</b>
	<b>1.1</b>	Concept of a random variable: Expected values of a random variable - Variance of a random variable	
	<b>1.2</b>	Discrete random variables: Bernoulli, Binomial, Poisson - Continuous random variables: The normal distribution, Standard Normal distribution	
	<b>1.3</b>	Joint and marginal distributions for bivariate random variables - Conditional probability, Conditional mean and variance - Covariance and Correlation - Central limit theorem (without proof)	
<b>II</b>		<b>Elements of Hypothesis Testing</b>	<b>13</b>
	<b>2.1</b>	Concepts in Testing of Hypothesis : Universe / Population, parameter and statistic , Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and type II errors - Point and Interval Estimates	
	<b>2.2</b>	The Z distribution: testing for population mean when population variance is known	
	<b>2.3</b>	The Chi-Square distribution: testing for sample variance with known population variance	
	<b>2.4</b>	The F distribution: comparing sample variances	
	<b>2.5</b>	The t distribution: tests when population variance is unknown	
<b>III</b>		<b>Classical Linear Regression Model: Two Variable Case</b>	<b>11</b>



	<b>3.1</b>	Types of Data-Two variable regression model-The concept of the PRF-Classical assumptions of regression - Derivation of the OLS estimators and their variance	
	<b>3.2</b>	Properties of OLS estimators under classical assumptions, Gauss-Markov Theorem (without proof) – Tests of Hypothesis, confidence intervals for OLS estimators	
	<b>3.3</b>	Measures of goodness of fit: R square and its limitations, adjusted R square	
<b>IV</b>		<b>Violation of Classical Assumptions and Specification Analysis</b>	<b>11</b>
	<b>4.1</b>	Multicollinearity and its implications	
	<b>4.2</b>	Auto-correlation: Consequences and the Durbin- Watson test	
	<b>4.3</b>	Heteroskedasticity: Consequences and the Goldfeld - Quandt test	
	<b>4.4</b>	Specification Errors: Omission of a relevant variable, Inclusion of irrelevant variable	

**References:**

1. Borvankar P.V, (1989), 1st Edition, Econometrics (An Introductory Analysis), Sheth Publishers Pvt. Ltd.
2. Damodar N., Gujarati (2017), 5th Edition, Basic Econometrics. McGraw-Hill
3. Hatekar N. (2010), 1st Edition, Principles of Econometrics: An Introduction (Using R), Sage publications
4. Jeffrey M. Wooldridge (2009). Econometrics, Cengage Learning
5. Sancheti D.C. and V.K. Kapoor (2014), 7th Edition, Statistics-Theory, Methods and Applications, S. Chand, New Delhi

**Additional Material and Types of Exercises:**

*Assessing the practical applicability of the different tests of hypotheses. Appraisal of the importance of parsimonious models with an appropriate balance of theory and practicum. Discussions, quizzes, graph work, use of excel, YouTube videos etc.*

<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: VI</b>			
<b>Course: Environmental Economics and Policies</b>		<b>Course Code: WUAECO6B5</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
3.2 hours	N.A.	N.A	Wilson College 4	40	60
<b>Learning Objectives:</b>					
<p><b>Students will be able to;</b></p> <p>LO-1: Understand the problem of environmental degradation.</p> <p>LO-2: Understand the different environmental accounting techniques.</p> <p>LO-3: Analyze the importance of sustainable development goals.</p> <p>LO-4: Understand the various environmental laws in India.</p>					
<b>Course Outcomes:</b>					
<p><b>After completing this course, students will be able to;</b></p> <p>CO-1: Evaluate the relationship between economic activities and environmental degradation.</p> <p>CO-2: Discuss the different types of natural resources.</p> <p>CO-3: Explain the different environmental accounting standards for maintaining record of environmental resources.</p> <p>CO-4: Develop the need for green practices supporting economic growth.</p> <p>CO-5: Analyze the different indicators of SDGs and policies adopted by the Indian Government in attaining SDGs.</p> <p>CO-6: Evaluate the concept of Smart Cities Mission for the strategic development of the cities and the Sustainable practices adopted in the agricultural sector in India.</p> <p>CO-7: Discuss the environmental regulatory laws for the protection of environmental resources.</p> <p>CO-8: Develop the idea of the importance of environmental awareness among the citizens.</p>					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>4 Credits/ 48 Lectures</b>
<b>I</b>		<b>Environmental Concerns and Natural Resources</b>	<b>10</b>
	1.1	Concept and types of Environmental Degradation	
	1.2	Renewable and Non-renewable natural resources	
	1.3	Land, Air, Water and Noise Pollution: Causes, effects and measures <i>Wilson College</i>	
<b>II</b>		<b>Environmental Accounting</b>	<b>14</b>
	2.1	Accounting for environmental and natural resources: Meaning and importance	
	2.2	Environmental Accounting Standards: System of Environmental-Economic Accounting (SEEA) and Environmental and Natural Resources Accounting (ENRA); Integration of Environmental Accounts with System of National Accounts: Green GDP	
	2.3	Concept of Green Growth and its Indicators	
	2.4	Concepts of Green Consumer and Green Business	
<b>III</b>		<b>Sustainable Development and India</b>	<b>14</b>
	3.1	Concept, Characteristics and Dimensions of Sustainable Development;	
	3.2	Measures with special reference to India;	
	3.3	Smart Cities Mission in India	
	3.4	National Mission For Sustainable Agriculture (NMSA): Objectives, strategy and components	
<b>IV</b>		<b>Environmental Policy in India</b>	<b>10</b>
	4.1	Overview of laws to improve the environment in India	
	4.2	Central pollution Control Board	

	4.3	Pradhan Mantri Ujjwala Yojana (PMUY)	
	4.4	National Green Tribunal	
	4.5	Environmental Education in India	

**References:**

1. Barry Field and Martha k Field (2017), Environmental Economics, McGraw Hill International Edition.
2. Bhattacharya R.N. (Ed) (2002), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.
3. Charles Kolstad (2012), 2nd Edition, Intermediate Environmental Economics, Oxford University Press, New York.
4. Hanley Nick, Shogren Jason and White Ben (2003), 2nd Edition, Introduction to Environmental Economics, Oxford University Press.
5. Kaltschmitt, Martin, Streicher, Wolfgang, Wiese, Andreas, Renewable Energy: Technology, Economics and Environment, Springer, Germany, 2007.
6. V.S. Ganesamurthy (2009), Environmental Economics in India, New Century Publications, New Delhi, 2009

**Wilson College**

**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



<b>PROGRAM(s): T.Y.B.A.</b>		<b>SEMESTER: VI</b>			
<b>Course: International Banking and Finance</b>		<b>Course Code: WUAECO606</b>			
<b>Teaching Scheme</b>					<b>Evaluation Scheme</b>
<b>Lectures (Hours per week)</b>	<b>Practical (Hours per week)</b>	<b>Tutorial (Hours per week)</b>	<b>Credits</b>	<b>Continuous Assessment (CA)</b>	<b>Semester End Examination</b>
<b>2.5 hours</b>	<b>N.A.</b>	<b>N.A</b>	<b>3</b>	<b>40</b>	<b>60</b>
<p><b>Learning Objectives:</b></p> <p><b>Students will be able to;</b></p> <p><b>LO-1:</b> Understand the importance of international banking.</p> <p><b>LO-2:</b> Understand various forms of international banking.</p> <p><b>LO-3:</b> Explain various components of international financing.</p> <p><b>LO-4:</b> Understand the importance of risk management.</p>					
<p><b>Course Outcomes:</b></p> <p><b>After completing this course, students will be able to;</b></p> <p><b>CO-1:</b> Discuss the relevance of international banking in contemporary times.</p> <p><b>CO-2:</b> Explain the system of digital currency.</p> <p><b>CO-3:</b> Discuss different forms of international banking as a source of financing.</p> <p><b>CO-4:</b> Explain the process of facilitating cross-border transactions.</p> <p><b>CO-5:</b> Explain the components and process of International Bank financing .</p> <p><b>CO-6:</b> Discuss the facilities offered by lending institutions like L/C, Bank Guarantee.</p> <p><b>CO-7:</b> Explain the different types and methods of risk management.</p> <p><b>CO-8:</b> Discuss the types of derivatives of instruments for management of risks in portfolio.</p>					

**DETAILED SYLLABUS**

<b>Unit</b>	<b>Sub-Unit</b>	<b>Unit Title</b>	<b>3 Credits/ 36 Lectures</b>
<b>I</b>		<b>Introduction</b>	<b>9</b>
	1.1	Introduction to International banking	
	1.2	Reasons for growth of international banking-Recent trends in international banking	
	1.3	Emergence of Crypto currency -Advantages and disadvantages of Cryptocurrencies- Bitcoins- Central Bank Digital Currency (CBDC) by the Reserve Bank of India (RBI)	
<b>II</b>		<b>International Banking</b>	<b>9</b>
	2.1	Functions of international banking- Correspondent banking-- International Merchant banking - Offshore banking - International banking investment- Islamic banking	
	2.2	International payment system	
	2.3	NRI accounts	
	2.4	Foreign Trade Finance	<b>9</b>
<b>III</b>		<b>International Bank Financing</b>	
	3.1	Financing Export project	
	3.2	International Remittances	
	3.3	Letter of Credit; Bank guarantee	
	3.4	International lending operations	
	3.5	International Credit Rating agencies (CRAs)	
<b>IV</b>		<b>Risk Management</b>	<b>9</b>
	4.1	Risk management and Derivatives	

	4.2	Types of Risks: Transaction risk, Translation risk, Economic risk, Settlement risk	
	4.3	Arbitrage- Hedging-Internal and External hedging	
	4.4	Derivative instruments for Risk Management: Forwards- Futures--Swaps- Options.	

**References:**

1. Cheol S. Eun ET. AL. (2012), International Finance, McGraw Hill India.
2. Edition by IIBF, International Banking (2011), pan McMillan.
3. Hull John C (2022), 11th Edition, Options, Futures and other derivatives, Pearson Education.
4. Rajiv Srivastava (2014), International Finance, Oxford University Press, India.
5. S. AshokKumar, Global financial and Indian economy’ New Century Publications, New Delhi.
6. V.A. Avadhani (2017), 8th Edition, International Finance, Himalaya Publishing House.

**Additional Material and Types of Exercises:**

*Contributions of Economists other than those covered in the syllabus, contemporary issues in the economy and perspectives not covered in the syllabus for self-study through discussions, quizzes, short answers, summarisation, critique, reflection, comment etc.*



## Modality of Assessment

### Theory Examination Pattern:

#### A. Internal Assessment- 40%- 40 Marks per paper

Sr. No.	Evaluation Type	Marks
1.	Written Objective Examination	20
2.	Assignment/ Case study/ field visit report/ presentation/ project	20
	<b>Total</b>	<b>40</b>

#### B. External Examination- 60%- 60 Marks per paper

##### Semester End Theory Examination:

1. Duration - These examinations shall be of two hours duration.

2. Theory question paper pattern:

d. There shall be four questions each of 15 marks one on each unit.

e. In each main question, there shall be two sub questions. In each of these sub questions any one of two questions have to be answered.

f. All questions shall be compulsory with internal choice within the questions.

Question	Options	Marks	Questions Based on
Q.1.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit I
Q.2.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit II
Q.3.	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit III
Q.4	<b>Attempt the following:</b> (I) Answer any ONE out of TWO (II) Answer any ONE out of TWO	15 marks	Unit IV
	<b>TOTAL</b>	<b>60</b>	