



JECRC<sup>TM</sup>  
UNIVERSITY  
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**BOARD OF STUDY: B.A ECONOMICS**

**FOR ACADEMIC SESSION 2025-26**

**JAIPUR SCHOOL OF ECONOMICS BOARD OF STUDY: B.A. ECONOMICS  
HONOURS FOR ACADEMIC SESSION: 2025-26**

**Programme Description**

The principle aims and objectives of the BA Economics programme are:

- To give students a thorough understanding of Economic concepts added with analytical methods of Economics.
- To provide and adapt curricula that prepares our graduates for employment and further study as economists.
- To provide the students with the opportunity to pursue courses that emphasise quantitative and theoretical aspects of Economics.
- To give the students an exposure of corporate functioning/professional world through summer internship programme and term papers.

**Vision of the Department of Economics**

The Department of Economics aims at imparting theoretical and applied knowledge of economics, conducting research on socio-economic problems at regional and national level for inclusive development as well as to develop critical and behavioral skills.

**The Mission of the Department of Economics**

- To offer innovative and analytical knowledge and skills to students by training them in the ideas of modern economics.
- To conduct both basic and applied research in economics that pushes forward the frontier of knowledge in the field.

<b>FIRST SEMESTER</b>									
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>	
<b>MAJOR COURSES</b>									
<b>BEC039D</b>	Basic Microeconomics	4	0	0	4	0	0	4	
<b>BEC040D</b>	Basic Macroeconomics	4	0	0	4	0	0	4	
<b>MINOR</b>									
	Minor 1	4	0	0	4	0	0	4	
<b>AEC COURSES</b>									
<b>DEN001C</b>	Communication Skills	2	0	0	2	0	0	2	
<b>VALUED ADDED COURSES</b>									
<b>DCH010A</b>	Environment Education	2	0	0	2	0	0	2	
<b>SEC COURSES</b>									
<b>DCO021A</b>	Digital, Data, AI Literacy	0	0	4	0	0	2	2	
	<b>Total</b>								<b>18</b>

<b>SECOND SEMESTER</b>								
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>
<b>MAJOR COURSES</b>								
<b>BEC041D</b>	Advanced Microeconomics	4	0	0	4	0	0	4
<b>BEC042D</b>	Advanced Macroeconomics	4	0	0	4	0	0	4
<b>MINOR</b>								
	Minor 2	4	0	0	4	0	0	4
<b>AEC COURSES</b>								
<b>DEN002A</b>	Professional Skills	2	0	0	2	0	0	2
<b>SEC COURSES</b>								
	Advance Excel	0	0	4	0	0	2	2
<b>VALUED ADDED COURSES</b>								
	Inculcation of Human Values and Professional Ethics in Higher Education Institutions	2	0	0	2	0	0	2
<b>MULTIDISCIPLINARY</b>								
<b>DEC002A</b>	Economics for Engineers	3	0	0	3	0	0	3
	<b>Total</b>							<b>21</b>

<b>THIRD SEMESTER</b>								
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>
<b>MAJOR COURSES</b>								
<b>BEC062A</b>	Analysis of Indian Economy	4	0	0	4	0	0	4
<b>BEC044D</b>	Statistical Methods Using Excel and SPSS	3	1	0	3	1	0	4
<b>MINOR</b>								
	Minor 3	4	0	0	4	0	0	4
<b>SEC COURSES</b>								
	Prompt Engineering (Generative AI) Program Specific	0	0	4	2	0	0	2
	EDP	0	0	2	0	0	1	1
<b>VALUED ADDED COURSES</b>								
	Any of IKS Basic Courses	2	0	0	2	0	0	2
<b>MULTIDISCIPLINARY</b>								
<b>BEC045C</b>	Sustainable Development and Economy	3	0	0	3	0	0	3
<b>AEC</b>								
	Leadership and Management skill	2	0	0	2	0	0	2
	<b>Total</b>							<b>22</b>

<b>FOURTH SEMESTER</b>								
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>
<b>MAJOR COURSES</b>								
<b>BEC046C</b>	Development Economics	3	0	0	3	0	0	3
<b>BEC047C</b>	Basic Econometrics	3	1	0	3	1	0	4
<b>BEC066A</b>	Sustainable Development Goals	3	0	0	3	0	0	3
<b>MINOR</b>								
	Minor 4	4	0	0	4	0	0	4
<b>SEC COURSES</b>								
	R with Python	0	0	4	0	0	2	2
<b>VALUED ADDED COURSES</b>								
	Any of the IKS Elective Courses	2	0	0	2	0	0	2
<b>AEC Course</b>								
	Universal Human Value	2	0	0	2	0	0	2
	<b>Total</b>							<b>20</b>

<b>FIFTH SEMESTER</b>									
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>	
<b>MAJOR COURSES</b>									
<b>BEC049C</b>	International Economics	4	0	0	4	0	0	4	
<b>MAJOR DISCIPLINE ELECTIVE</b>									
	Major Discipline Elective	4	0	0	0	0	0	4	
	Major Discipline Elective	4	0	0	4	0	0	4	
	Major Discipline Elective	4	0	0	4	0	0	4	
<b>MINOR</b>									
	Minor 5	4	0	0	0	0	0	4	
	<b>Total</b>							<b>20</b>	

<b>SIXTH SEMESTER</b>								
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>
<b>CORE COURSES</b>								
<b>BEC053C</b>	Mathematical Economics	3	0	0	3	1	0	4
<b>BEC054C</b>	Economics of Health and Education	4	0	0	4	0	0	4
<b>MAJOR DISCIPLINE ELECTIVE</b>								
	Major Discipline Elective	4	0	0	4	0	0	4
<b>MINOR</b>								
	Minor 6	4	0	0	4	0	0	4
<b>MULTIDISCIPLINARY</b>								
<b>BEC051C</b>	Managerial Economics	3	3	0	0	0	0	<b>3</b>
	<b>Total</b>							<b>19</b>

<b>SEVENTH SEMESTER</b>								
<b>Course Code</b>	<b>Course Name</b>	<b>L (Hrs)</b>	<b>T (Hrs)</b>	<b>P (Hrs)</b>	<b>L (Credit)</b>	<b>T (Credit)</b>	<b>P (Credit)</b>	<b>C</b>
<b>CORE COURSES</b>								
<b>BEC057C</b>	Energy Economics	4	0	0	4	0	0	4
<b>BEC058D</b>	Research Methodology and Quantitative Techniques	3	0	2	3	0	1	4
<b>MAJOR DISCIPLINE ELECTIVE</b>								
	Major Discipline Elective	4	0	0	4	0	0	4
<b>MINOR</b>								
	Minor 7	4	0	0	4	0	0	4
	Minor 8	4	0	0	4	0	0	4
	<b>Total</b>							<b>20</b>

EIGHTH SEMESTER									
Course Code	Course Name	L (Hrs)	T (Hrs)	P (Hrs)	L (Credit)	T (Credit)	P (Credit)	C	
				<b>MAJOR DISCIPLINE ELECTIVE</b>					
	Major Discipline Elective	4	0	0	4	0	0	4	
	Major Discipline Elective	4	0	0	4	0	0	4	
<b>BEC061C</b>	Research Project/ Dissertation	0	0	24	0	0	12	12	
	<b>Total</b>								<b>20</b>
				<b>OR</b>					
	Industry Internship	0	0	20	0	0	20	20	

## **MAJOR DISCIPLINE ELECTIVES**

<b>Sr. no .</b>	<b>Tracks</b>	<b>Paper 1</b>	<b>Paper 2</b>	<b>Paper 3</b>	<b>Paper 4</b>	<b>Paper 5</b>	<b>Paper 6</b>	<b>Paper 7</b>
<b>Track 1</b>	Financial Economics	Economics Of Money And Banking	Behavioural Finance	Financial Markets And Instruments	International Finance	Anatomy Of Financial Crisis, Risk Management And Regulation	Corporate Governance	Corporate Finance
<b>Track 2</b>	Economics And Public Policy	Introductory Public Policy	Market Failures And Policy Interventions	Big Data And Public Policy	Public Policy Analysis	Public Policy Capstone	Public Finance	Impact Evaluation
<b>Track 3</b>	Contemporary Economics	Economics Of Infrastructure	Demography	Gender Economics	Environmental Economics	Industrial Economics	International Trade In Agriculture	Managerial Economics

## **MINOR PAPERS**

Minor 1- Basic Microeconomics

Code- BEC039D

Minor 2- Advanced Microeconomics

Code- BEC041D

Minor 3- Analysis of Indian Economy

Code- BEC062A

Minor 4- Development Economics

Code- BEC046C

Minor 5- International Economics

Code- BEC049C

Minor 6- Economics of Health and Education

Code- BEC054C

Minor 7- Energy Economics

Code- BEC057C

Minor 8- Behavioural Finance

Code- BEC056C

## **MULTIDISCIPLINARY PAPERS**

1. ECONOMICS FOR ENGINEERS
2. SUSTAINABLE DEVELOPMENT AND ECONOMY
3. POLITICAL ECONOMY

Note: The topic of the project has to be selected before the end of fifth semester.

L	Number of Lecture hrs/week
P	Number of Practical hrs/week
T	Number of Tutorial hrs/week
C	Number of Credits.
*	These courses are offered by Department of Economics, School of Humanities and Social Sciences as Open Elective.

## **CREDIT SUMMARY**

Semester <b>I</b>	Semester <b>II</b>	Semester <b>III</b>	Semester <b>IV</b>	Semester <b>V</b>	Semester <b>VI</b>	Semester <b>VII</b>	Semester <b>VIII</b>	Total <b>Credits</b>
18	21	22	20	20	19	20	20	160

### **Programme Outcomes (POs):**

**PO1 Domain knowledge:** Apply the knowledge of domain subjects, science, computer fundamentals, and humanities & social science specialization to the solution of complex individual & social problems.

**PO2 Critical Thinking:** Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

**PO3 Problem Analysis:** Stimulate into adopting an enquiring attitude towards the problems encountered, developing solutions & appreciation of the different contexts

**PO4 Design/development of solutions:** Design solutions for complex psychological, economic, political & social problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO5 Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO6 Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern IT tools including prediction and modelling to complex activities with an understanding of the limitations.

**PO7 Environment and sustainability:** Understand the impact of the professional solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8 Ethics:** Recognize the diversity and complexity of ethical dilemmas in the real world, and educate oneself to base one's actions on responsibility, and respect for human rights

**PO9 Multidisciplinary approach:** To develop multidisciplinary perspective in reference to historical, social, psychological, economic, political & cultural context.

**PO10 Effective Communication:** Articulate ideas and perspectives, by developing and enhancing the communicative skills of listening, speaking, reading, and writing in interpersonal and interactive contexts, in print and in electronic media, for various audiences and purposes.

**PO11 Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO12 Self-directed and Life-long Learning:** Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological change.

## **PROGRAMME SPECIFIC OUTCOMES FOR B.A. (HONS) ECONOMICS**

**PSO-1:** Develops strong competencies in under graduate level students in broad fields of Economics and its interactive environment.

**PSO-2:** Acquainting with collection, organization, tabulation and analysis of empirical data and ability to use basic mathematical and statistical tools to solve realistic economic problems

**PSO-3:** Develops ability to deal with basic and applied econometric tools and methods used in economics. Acquainting with statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models.

**PSO-4:** Develops the ability to analyse, synthesize and disseminate large amount of complex and disparate information.

**PSO-5:** Acquainting with basic issues and prospective suggestions relating to the Indian economy and learn the basic concept of monetary analysis and financial marketing in Indian financial markets.

# **SEMESTER I**

**PAPER 1**  
**BEC039D: BASIC MICROECONOMICS**

**Course Objectives**

1. To understand the basic concepts and principles related to micro economics.
2. To understand that about the allocation of scarce resources and their trade-offs.
3. To lay emphasis and follow on the microeconomic concepts that can be applied to real life situations.
4. To analysis the different concepts of price and output determination in different types of market.
5. To enhance the analytical and problem-solving abilities of students through the practical application of the subject concepts.

<b>UNIT I</b>	Scope and method of economics; the economic problem: scarcity and choice; the concept of opportunity cost; Introduction Basic Economic Problems; science of economics; institutions for allocating resources; the basic competitive model; prices, property rights and profits; incentives and information; rationing; positive versus normative analysis The scientific method; the role of assumptions; models and mathematics; why economists sometimes disagree; science of economics; institutions for allocating resources; the basic competitive model; prices, property rights and profits; incentives and information; rationing; positive versus normative analysis; Equilibrium – Partial & General, Stable & Unstable; Static, Comparative static & Dynamic analysis.
<b>UNIT II</b>	Consumer theory- Preference; utility; budget constraint; consumption and income/price changes; indifference curve; properties of indifference curves; consumer's optimum choice; income and substitution effect: Normal, Inferior and Giffen Goods (Hicksian Approach); Slutsky equation; choice under risk and intertemporal choice; revealed preference.
<b>UNIT III</b>	Production and costs-Theory of Production, Production with one variable input: Total, average and marginal product curves; Law of returns to variable factor-Stages of Production; Production with two variable inputs: Isoquants and Iso-cost; Producer's equilibrium; Expansion Path; Ridge Lines; Law of Returns to scale; short run and long run costs; cost curves in the short run and long run.

<b>UNIT IV</b>	Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.
<b>UNIT V</b>	Market Structure-Theory of Firm I ,Equilibrium of the firm: TR - TC approach and MR - MC approach; Perfect competition: Determination of price and output in the short and long run; Monopoly: Determination of price and output in the short and long run.

### **Course Outcomes**

1. Student will be acquainted with the methodology and approach of Microeconomics.
2. Student will learn the principles of micro economic theory.
3. Student will understand the behaviour of an economic agent, namely a consumer and a producer.
4. Student will be able to think like economists.
5. Student will be able to apply microeconomic concepts and analytical tools to interpret market outcomes, evaluate policy impacts, and understand resource allocation in real-world scenarios.

### **MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<i>Course Outcome</i>		Program Outcome												Program Specific Outcome			
	P O 1	PO 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2												3				
CO2		1		1													
CO3			1							2	1		1				
CO4			2										1				
CO5		2	2							3	2				3		

**3 = Highly Related; 2 = Medium; 1 = Low**

Essential Readings:

H.L. Ahuja, Micro Economic Theory, S. Chand & Company, New Delhi.

*I.* Seth, M.L., Micro Economics, Laxmi Narayan Agarwal, Agra.

**Reference Books:**

1. Gould J.P. and C.F. Ferguson, Micro Economic Theory, All India Traveler Book Sellers, Delhi.
2. N. Gregory Mankiw, Principles of Microeconomics (5th ed.), 2009, South-Western (Cengage Learning).
3. Koutsoyiannis, A. (1999), Modern Microeconomics, Macmillan.
4. Varian, H.R. (2000), Intermediate Microeconomics: A Modern Approach, East west Press, New Delhi.
5. Lipsey, R.G. (Latest edition), An Introduction to positive Economics

**PAPER 2**  
**BEC040D: BASIC MACROECONOMICS**

**Course Objective**

1. To introduce to the students the basic principles of macroeconomic theory.
2. To enable the students to understand the characteristics of major macroeconomic variables.
3. To make the students aware of the basic theoretical framework underlying the field of Macroeconomics.
4. To equip students to analyse the dynamic interactions between the major macroeconomic variables.
5. Apply macroeconomic models and analytical tools to evaluate real-world economic policies and interpret their implications for growth, employment, and stability.

<b>UNIT I</b>	Introduction to macroeconomics and national income accounting- Basic issues studied in macroeconomics: Measurement of gross domestic product; income, expenditure and the circular flow of income; real versus nominal GDP; National Income and welfare.
<b>UNIT II</b>	Classical Economics: Say's Law; Determination of Equilibrium output and employment in simple Classical Model; Classical model involving Savings and Investment; Classical theory of Interest rate; Keynes attack on the Classical Model.
<b>UNIT III</b>	Keynesian Economics: Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers; Keynesian Consumption Function; Keynesian Investment Function.
<b>UNIT IV</b>	Concept of Multiplier & Accelerator: Multiplier – Meaning & Working; Static & Dynamic Multiplier; Concept of Tax Multiplier, Government Expenditure Multiplier & Balanced, Budget Multiplier; Accelerator – Meaning & Operation; Super Multiplier.
<b>UNIT V</b>	Trade Cycles: Trade Cycles – Definition & Phases; Theories of Trade Cycles – Hicks, Samuelson and Kaldor; Measures to control trade cycles.

## Course Outcomes

Student will

1. Be aware with the mainstream approaches to the study of macroeconomics.
2. Be able to distinguish between the various approaches and the merits and critiques of each of them.
3. Acquire the ability to understand the dynamic interactions between the macroeconomic variables and their impact on the economy.
4. Demonstrate the knowledge of different concepts in contemporary macro issues.
5. Apply macroeconomic models and analytical tools to evaluate real-world economic policies and interpret their implications for growth, employment, and stability.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome													Program Specific Outcome				
	P O 1	PO 2	PO 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2												3					
CO2		3		2														
CO3								1		2	1			2				
CO4			2											1				
CO5		3	3		2				2						1	2		

**3 = Highly Related; 2 = Medium; 1 = Low**

## Essential Readings:

1. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
2. Vaish, M.C., Macro Economics, Wishwa Prakashan.
3. Ahuja, H.L., Macro Economic Analysis, S. Chan

**4. Reference Books:**

1. Ackley, G. (1976), Macroeconomics: Theory and Policy, Macmillan Publishing Company, New York.
2. Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.
3. Rastogi, S. and S. Aiyar (1997), National Income and Accounting, Lotus Books.
4. Froyen R., Macro Economics, Pearson Education.
5. Fatianni M., Salvatore D., and Hagen JU (1997), “Macro Economic Policies in Open Economy”, Green Wood press.

## **SEMESTER II**

**PAPER 3**  
**BEC041D: ADVANCED MICROECONOMICS**

**Course Objectives:**

1. To understand the over view of microeconomic concepts and theory.
2. To illustrate the process of determination of equilibrium price and output in different market situations.
3. To understand and recognize the concepts used in factor pricing.
4. To understand the application of the macroeconomic theory to analyse the implication of the macroeconomic policies.
5. To develop analytical reasoning and decision-making skills by applying microeconomic principles to real-world problems and policy analysis.

<b>UNIT I</b>	Theory of Firm II:  Monopoly: Creation of monopoly; Price and output determination under Monopoly; Price discrimination; Monopoly and Inefficiency; Regulation of Monopoly  Monopolistic competition: determination of price and output in the short- and long- run, excess capacity  Oligopoly: Basic concept of non-collusive and collusive oligopoly, Paul M. Sweezy model of kinked demand curve, sales maximisation model.
<b>UNIT II</b>	Factor Pricing I: Marginal Productivity Theory of Distribution; Concepts of Factor Productivity; Factor pricing in perfectly competitive markets; Factor pricing in imperfectly competitive markets.
<b>UNIT III</b>	Factor Pricing II- Wages: wage determination, Role of trade Union and Collective bargaining, wage differentials, Concept of Minimum wages  Interest: Classical & Keynesian Theories.  Rent: Ricardian theory of rent; Modern theory of rent; quasi rent.  Profit: Innovation, risk and uncertainty theories. Theories of Interest.
<b>UNIT IV</b>	Equilibrium and efficiency under pure exchange and production; overall efficiency and welfare economics; New welfare economics; Social Welfare Function, First and Second

	Theorem of Welfare economics; Theory of second best; Arrow's Impossibility Theorem.
<b>UNIT V</b>	Externalities; public goods and markets with asymmetric information.

## Course Outcomes

Student will

1. Be able to recognize the microeconomic concepts like cost and revenue concepts.
2. Learn the determination of equilibrium price and output in various market situations.
3. Be able to state marginal productivity theory of distribution, different theories of interest, profits and rent.
4. Apply the microeconomic concepts to analyse the various issues at macro level.
5. Develop analytical and evaluative skills to apply microeconomic principles in policy formulation and real-world market analysis.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<i>Course Outcome</i>	Program Outcome													Program Specific Outcome				
	P O 1	PO 2	PO 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2		3										3					
CO2		2												2				
CO3				2	1							1						
CO4						1										2		
CO5	2	2						2					1			3		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. H.L. Ahuja, Micro Economic Theory, S. Chand & Company, New Delhi.
2. Seth, M.L., Micro Economics, Laxmi Narayan Agarwal, Agra.

**Reference Books:**

3. Gould J.P. and C.F. Ferguson, Micro Economic Theory, All India Traveler Book Sellers, Delhi.
4. Koutsoyiannis, A. (1999), Modern Microeconomics, Macmillan.
5. Varian, H.R. (2000), Intermediate Microeconomics: A Modern Approach, Eastwest Press, New Delhi.
6. Lipsey, R.G. (Latest edition), An Introduction to positive Economics.

## **PAPER 4**

### **BEC042D: ADVANCED MACROECONOMICS**

#### **Course Objectives**

1. To learn and understand the formal modelling of macroeconomic theory in terms of analytical tools.
2. To recognise the various alternative theories of output and employment.
3. To introduce the students to various theoretical issues related to an open economy.
4. To understand and learn the macroeconomic policies.
5. To develop analytical reasoning and decision-making skills by applying microeconomic principles to real-world problems and policy analysis.

<b>UNIT I</b>	Aggregate Demand and Aggregate Supply Curves Derivation of aggregate demand and aggregate and supply curves; interaction of aggregate demand and supply.
<b>UNIT II</b>	Inflation, Unemployment and Expectations Phillips curve; adaptive and rational expectations; policy ineffectiveness debate.
<b>UNIT III</b>	Consumption hypotheses - absolute, relative, life-cycle and permanent income hypotheses. Classical, Keynesian and Post- Keynesian theories of determination of income and output. Phillips curve Controversy, Post Keynesian Theories of demand for Money: Baumol, Tobin, Friedman, Patinkin and Real balance effect. Investment function: Neoclassical theory, Accelerator theory, Tobin's Q theory.
<b>UNIT IV</b>	Open Economy Models Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity; asset market approach; Dornbusch's overshooting model; monetary approach to balance of payments; international financial markets.
<b>UNIT V</b>	Economic Growth Harrod-Domar model; Solow model; golden rule; technological progress and elements of endogenous growth.

## Course Outcomes

Student will

1. Learn the formal modelling of macroeconomic theory.
2. Be acquainted with various theories of output and employment.
3. Be able to relate various theoretical issues to open economy.
4. Recognize and relate to the implications of macroeconomic policies.
5. Apply macroeconomic theories and models to interpret global economic trends and assess the effectiveness of fiscal and monetary policy interventions.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	P O 1	PO 2	PO 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2		3										3				
CO2									2								
CO3				2							1	1					
CO4									2							1	2
CO5		2	2	3					2								2

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
2. Vaish, M.C., Macro Economics, Wishwa Prakashan.
3. Ahuja, H.L., Macro Economic Analysis, S. Chand.

**Reference Books:**

1. Dornbusch, R., Fischer, S., & Startz, R. (2015). Macroeconomics. (11th ed.). McGraw Hill Education. Froyen, R. (2014).
2. Macroeconomics: Theories and Policies (10th ed.). Pearson Education. Mankiw, N. G. (2015).
3. Macroeconomics (9th ed.). USA: Worth Publishers. McConnell, C. R., & Brue, S. L. (2011).
4. Macroeconomics, Principles, Problems and Policies. New York: McGraw Hill Inc. Snowden, B. & Vane, H. R. (2005). Modern Macroeconomics: Its Origins, Development and Current State. United Kingdom: Edward Elgar Publishing.

# **SEMESTER III**

**PAPER 5**  
**BEC062A: OVERVIEW OF INDIAN ECONOMY**

**Course Objective**

1. To provide an understanding of the structure and evolution of the Indian economy in the pre- and post-independence periods.
2. To analyze sectoral developments in agriculture, industry, and services and their role in shaping India's economic growth.
3. To evaluate the major policy reforms and their impact on trade, poverty, employment, and income distribution in India.
4. To familiarize students with key economic challenges such as poverty, inequality, and unemployment and the policy responses to them.
5. To develop the ability to apply theoretical and empirical tools to assess the performance, opportunities, and challenges of the Indian economy in a global context.

<b>UNIT I</b>	<p>Structure of Indian Economy-Pre and Post-Independence</p> <ol style="list-style-type: none"><li>1. Evolution of the Indian Economy- Pre-independence economy, Post-independence economy, Prime Moving Force: Agriculture vs. Industry Planned and Mixed Economy, Economic reforms since independence</li><li>2. Planning and Role of Planning Commission- Concept of economic planning, Five year plans, Types of plans, Role of planning commission and its functions, Grassroot Planning, NITI Aayog and Its Functions, Inclusive Growth</li><li>3. Economic Reforms- Import-substitution to Export oriented growth, Major changes in the policy stance, State-Market relationship, Washington Consensus, The LPG-Liberalisation Privatisation Globalisation Reforms in India, New Economic Policy.</li><li>4. Indian Economy at the threshold of the 21st century- Growing macroeconomic imbalances by late 1980s, Balance of payments crisis, need for structural reform</li></ol>
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<b>UNIT II</b>	<p>Sectoral Analysis – Agriculture and Industry</p> <p><b>Agriculture</b></p> <ol style="list-style-type: none"> <li>1. Agricultural Policy Framework: Pricing, procurement, input subsidies</li> <li>2. Trends in Agricultural Growth: Production, productivity, crop diversification</li> <li>3. Agricultural Credit: Role of cooperative banks, NABARD, Kisan Credit Cards</li> <li>4. Labor and Employment in Agriculture: Nature of work, wage trends, feminization</li> <li>5. Market Reforms: APMC Acts, e-NAM, MSP system, contract farming, Green Revolution</li> <li>6. Land Reforms: Tenancy regulation, land ceiling, redistribution</li> <li>7. Regional Disparities: Inter-state variations in inputs, productivity, and growth.</li> </ol> <p><b>Industry</b></p> <ol style="list-style-type: none"> <li>1. Industrial Policy Evolution: 1948, 1956, 1977, and the 1991 New Industrial Policy</li> <li>2. Industrial Performance: Trends in production, employment, and contribution to GDP</li> <li>3. Public Sector Enterprises (PSEs): Role, performance, disinvestment issues</li> <li>4. Small-Scale and Cottage Industries: Employment generation, financial support, policy changes</li> <li>4. MSME: Its definition, Role in Missing Middle</li> <li>5. Labor Regulations and Reforms: Overview of key labor laws and recent labor codes,</li> <li>6. Foreign Investment (Pre-1991): FDI controls, technology transfers, MNCs participation.</li> </ol>
<b>UNIT III</b>	<p>Services and trade</p> <ol style="list-style-type: none"> <li>1. Foreign Trade Policy: Pre-1991 protectionism vs. post-1991 liberalization.</li> <li>2. India's Trade Composition and Direction: Exports, imports, trade balance.</li> <li>3. India and the WTO: Multilateral commitments, agriculture, TRIPS and</li> </ol>

	<p>services; <b>Exchange Rate Policy:</b> Evolution from fixed to market-determined exchange rates.</p> <p>4. <b>Foreign Capital Flows:</b> Evolution of FDI and FPI policies, sectoral caps and ease-of-doing business initiatives.</p>
<b>UNIT IV</b>	<p><b>Poverty, Inequality, and Unemployment</b></p> <p>1. <b>Poverty and measurement of Poverty:</b> Definition of Poverty, Tendulkar and Rangarajan Committees, debates on the poverty line, Trends of Poverty.</p> <p>2. <b>Inequality:</b> Inequality definitions, measurement of Inequality, Inter-temporal and regional analysis.</p> <p>3. <b>Unemployment:</b> Types, measurement (NSSO, PLFS), gender and rural-urban gaps, Employment Generation Programs-MGNREGA, PMEGP, Skill India Mission.</p> <p>4. <b>Structural Constraints:</b> Jobless growth, informal sector, demographic dividend.</p>
<b>UNIT V</b>	<p><b>Factors in development:</b> capital formation (physical and human); technology; institutions.</p> <p>1. <b>Capital Formation:</b> Understanding the role of capital accumulation in economic development and human capital</p> <p>2. <b>Technology and Innovation:</b> Examining technological progress as a key driver of development through embodied and disembodied innovations.</p> <p>3. <b>Institutions and Governance:</b> Analysing the role of institutions—formal and informal—in shaping economic outcomes.</p>

## Course Outcomes

Student will

1. Able to understand the evolution and structural transformation of the Indian economy since independence.
2. Able to gain the ability to analyze sectoral performance and interpret the linkages between agriculture, industry, and services.

3. Able to evaluate the effectiveness of major economic reforms and policies on growth, trade, and inclusive development.
4. Able to critically assess the trends and issues related to poverty, inequality, and unemployment using empirical evidence.
5. Able to apply analytical frameworks to interpret India's contemporary economic challenges and propose evidence-based policy insights.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome													Program Specific Outcome				
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 10	P O 11	P O 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2												3					
CO2			1											2				
CO3				2	2								1			2		
CO4			3														2	
CO5		3	2		2				2	2			2			2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. Datt, G., & Mahajan, A. (2016). *Indian economy*. (72<sup>nd</sup> ed.). New Delhi: S.Chand & Company Pvt. Ltd.
2. Kapila, U. (2016). *Indian Economy – Performance and Policies* (17<sup>th</sup> ed.). New Delhi: Academic Foundation.
3. Misra, S. K., & Puri, V. K. (2011). *Indian economy* (34<sup>th</sup> ed.). Delhi: Himalaya Publishing House.

## **PAPER 6**

### **BEC044D: STATISTICAL METHODS USING EXCEL AND SPSS**

#### **Course Objectives**

1. To demonstrate understanding of the basic elements of data reading and visualisation.
2. To apply summary statistics to describe the problem through data.
3. To quantify the relationship between variables to test theories.
4. To analyse the trend of a time series variable(s) and apply the concept of index numbers to construct price and quantity indices.
5. To enable students to use statistical tools and software applications for data-driven economic analysis and decision-making.

<b>UNIT I</b>	Introduction and Overview Meaning; Scope of statistics; Importance and limitation of statistics Collection of Data: Planning and organizing a statistical enquiry; Methods of collecting primary data; Sources of secondary data; Sampling: Census method vs. sample method; Classification of data: Meaning, methods of classification; Tabulation of data: meaning, role, parts of a table; General rules of tabulation; Presentation of data; Diagrams and graphs: General rules for construction a diagram; Types of diagrams; Types of graphs; Software applications using MS-Excel.
<b>UNIT II</b>	Measures of Central Tendency and Dispersion Measures of Central Tendency: Mean, median and mode; Geometric and Harmonic means; Measures of Dispersion: Range, interquartile range and quartile deviation, mean deviation, standard deviation and Lorenz curve, Moments, Skewness and Kurtosis; Partition Values: Quartiles; deciles; percentiles; Software applications using MS-Excel.
<b>UNIT III</b>	Correlation and Linear Regression Model Correlation Analysis: Meaning, Types of correlation; Methods of studying correlation: Scatter diagram method, Karl Pearson's coefficient of correlation,

	<p>Spearman's Rank method, Linear Regression, properties of regression lines, Software applications using MS-Excel.</p>
<b>UNIT IV</b>	<p>Time Series Statistics</p> <p>Measurement of Secular trend: Freehand curve method or eye inspection method - Semi average method; Method of moving average; Method of least squares. ; Attributes, classes and class frequencies, consistency of data – Independence of attributes, association of attributes.</p> <p>Software applications using MS-Excel.</p>
<b>UNIT V</b>	<p>Index Numbers</p> <p>Meaning and importance; problems in the construction of index numbers; Types of index numbers: price index; quantity index; value index; construction of price index numbers: unweighted and weighted indices (Laspeyres's index, Paasche's index, Fisher's ideal index); Consumer Price Index (CPI): meaning and uses; Limitations of index numbers; Random phenomena – Basic concepts of Probability – Classical Probability – Empirical Probability – Axiomatic approach to Probability – conditional probability – marginal probability – Independence of events – Baye's theorem. Hypothesis testing Defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; Software applications using MS-Excel.</p>

### **Course Outcomes**

1. Students will be able to explain basic elements of data reading and illustrate data through graphical representation.
2. Students will be able to apply methods related to Measures of Central Tendency and dispersion to describe the problems through data representation.
3. Students will be able to quantify the relationship between variables using correlation and regression analyses to test theory(ies).
4. Students will be able to analyse time-series data to inspect the trend of the variable(s) and can construct weighted and unweighted indices used for data analyses.
5. Students will be able to apply statistical tools and software like MS Excel to interpret, visualise, and evaluate economic data for research and policy purposes.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<i>Course Outcome</i>	Program Outcome													Program Specific Outcome			
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 11	PP 12	PS O1	PS O2	P S O 3	P S O 4	P S O 5
CO1					3	1								3			
CO2					2	2										2	
CO3						3										2	
CO4						3										2	
CO5	2	2	3											3	2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings**

1. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2014). *Essentials of Statistics for Business and Economics*. Boston: Cengage Learning.
2. Gibbs, G. R. (2002). *Qualitative Data Analysis: Explorations with NVivo*. Buckingham: Open University Press
3. Levine, D. M. (2005). *Statistics for Managers Using Microsoft Excel*. (5<sup>th</sup> ed.). New York: Prentice.
4. Lind, D. A., Waite, C. A., Marchal, W. G., & Wathen, S. A. (2005). *Basic Statistics for Business & Economics*. New York: McGraw-Hill.
5. Sharma, J. K. (2010). *Fundamentals of Business Statistics*. (2<sup>nd</sup> ed.). New Delhi: Vikas Publishing House.



## **SEMESTER IV**

**PAPER 7**  
**BEC046C: DEVELOPMENT ECONOMICS**

**Course Objectives**

1. Recognize and examine the role of theories of the economics of development in a number of existing development issues.
2. Be able to reflect on the links between various development economic theories and approaches.
3. Explore the prospects of the course to improve the quality of life in developing countries.
4. Recognize important role of macroeconomic policies for economic development.
5. To develop analytical and critical thinking skills to evaluate development strategies and policy interventions for achieving sustainable and inclusive growth.

<b>UNIT I</b>	Meaning of Development and Relevant Concepts; Economic growth and development -Meaning, differences and Measures – PQLI- Physical Quality of Life Index, HDI - Human Development Index, GDI- Gender Development Index, GII- Gender Inequality Index, MDPI- Multidimensional Poverty Index, GNHI – Gross National Happiness Index, Sen's Capabilities Approach; Environmental Sustainability and Sustainable Development- Concept and strategy; Market and State as agencies of development; Common characteristics of developing nations.
<b>UNIT II</b>	Classical Theories of Development; Contributions of Adam Smith, Ricardo, Karl Marx, Schumpeter, and Rostow.
<b>UNIT III</b>	Important Growth Models; Harrod and Domar: Instability of equilibrium; Neo-Classical Growth Model: Solow; Theories of Endogenous Growth with special reference to Romer's model.
<b>UNIT IV</b>	Theories of Development; Balanced and Unbalanced Growth; Nelson's Low Income Equilibrium Trap; Underdevelopment as Coordination failure, multiple Equilibria: A Diagrammatic Approach; the Big Push theory and Leibenstein's Theory of Critical Minimum Efforts, Dual Economy model of Lewis.
<b>UNIT V</b>	Poverty, Inequality and Development; Concept of Poverty and Poverty Line; Measurement of poverty – absolute and relative, Head-Count Index and Poverty Gap

	Indices, recent measures of Poverty; Recent Poverty Alleviation Schemes; Concept of inequality and recent measures; Economic growth and income inequality – Kuznets' inverted Hypothesis, the impact of inequality on development.
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### Course Outcome

Student will

1. Recognize and examine the role of theories of the economics of development in a number of existing development issues.
2. Be able to reflect on the links between various development economic theories and approaches
3. Explore the prospects of the course to improve the quality of life in developing countries.
4. Recognize important role of macroeconomic policies for economic development.
5. Apply theoretical and empirical frameworks to critically analyse development strategies, inequality, and poverty reduction programs in real-world contexts.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome													Program Specific Outcome				
	P O 1	PO 2	PO 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1			3		1									1				
CO2		2	1		2								1		2			
CO3									2						2			
CO4					1								3					
CO5			3		2					2					2			

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. Debraj Ray, Development Economics, Oxford University Press, 2009.
2. Partha Dasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press, 2006.
4. Kaushik Basu, The Oxford Companion to Economics in India, OUP, 2007.
5. Amartya Sen, Development as Freedom, OUP, 2000.

**PAPER 8**  
**BEC047C : BASIC ECONOMETRICS**

**Course Objectives**

1. To provide a comprehensive introduction to basic econometric concepts and techniques.
2. To have the ability to apply econometric techniques in the investigation of economic relationships and processes.
3. To provide in-depth understanding of simple as well as multiple linear regression models.
4. To provide the knowledge and skillset to understand and examine the CLRM assumption violations and specification errors and an introduction to dummy variables and their use in econometric modelling.
5. To enable students to integrate panel data and time-series approaches for empirical research and policy analysis using modern econometric software.

<b>UNIT I</b>	Definition and scope of econometrics; Methodology of econometric research; regression vs. correlation; Terminology and notation; The nature and sources of data for econometric analysis. Simple Linear Regression Model, Two Variable Case Estimation of model by OLS method: Assumptions; Properties of Least Square Estimators: Gauss-Markov Theorem; Testing of regression coefficient; Test for regression as a whole: Coefficient of determination.
<b>UNIT II</b>	Multiple Linear Regression Model, Multiple Regression Analysis: The problem of estimation, notation and assumptions; meaning of partial regression coefficients; the multiple coefficient of determination: R <sup>2</sup> and the multiple coefficient of correlation; R <sup>2</sup> and adjusted R <sup>2</sup> ; partial correlation coefficients; interpretation of multiple regression equation.
<b>UNIT III</b>	Dummy Variable Regression Models., Dummy Variable technique: The Nature of Dummy Variables; Dummy Variable Trap; ANOVA. Relaxing the assumptions of CLRM, Introduction to multicollinearity, Heteroscedasticity and autocorrelation: the nature of the problem; its detection and

	its corrective measures.
<b>UNIT IV</b>	Simultaneous-Equation Models ,Nature of simultaneous equations models; Simultaneous equation bias; Structural models; Reduced form models; Identification problem; Rules of identification; Tests for simultaneity and exogeneity; Method of indirect least squares (ILS); Method of two-stage least squares
<b>UNIT V</b>	Dynamic Econometric Models, Lags in econometric models; Distributed lag model; Autoregressive lag model; Reasons for lags; Estimation of distributed-lag model, The Koyck Approach to distributed-lag model; Rationalisation of koyck model: The adaptive expectations model, partial adjustment model; Estimation of autoregressive models; The method of instrument variable (IV); Causality in economics: The granger causality test.  Time Series Econometrics: Basic Concepts, Introduction to time series; Stationary and nonstationary time series; Spurious regression; Unit root tests: Dickey fuller and Augmented dickey fuller tests; Transforming nonstationary time series.

### Course Outcomes

1. Students will be able to define and explain the fundamental econometric concepts.
2. Students will be able to perform econometric analysis and estimation, by understanding their application in economics.
3. Students will be to construct and estimate simple as well as multiple linear regression models.
4. Students will be able to examine the assumption violations and specification errors, and formulate ways to overcome the same and will be able to analyse models using dummy variables.
5. Students will be able to apply econometric models and statistical software to analyse real-world data and interpret empirical results for economic decision-making.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<i>Course e Outcome</i>	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 11	PP 12	PS O1	PS O2	P S O 3	P S O 4	P S O 5
CO1	2		3										2				
CO2				1		3								1	3		
CO3			3		1												
CO4													1			3	
C05			2	2									2		3		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings**

1. Gujarati, D. N. (2016). *Econometrics by Example* (2nd ed.). New Delhi: Palgrave. Gujarati, D. N., Porter, D.C., &Gunasekar, S. (2017).
2. Basic Econometrics. (5th ed.). New Delhi: McGrawHill. Studenmund, A. H. (2016). *Using Econometrics: A Practical Guide*. (7th ed.). New Delhi: Pearson.

## **PAPER 8**

### **BEC045C SUSTAINABLE DEVELOPMENT AND ECONOMY**

#### **Course Objectives**

1. To understand the emergence and development of the SDGs
2. To understand the interlinkages of SDGs and the importance of triple bottom line.
3. To understand the structure of the SDGs in the United Nations context
4. To acquire an understanding of how the SDGs relate to addressing global challenges such as inequality, climate change, poverty, unsustainable consumption and production, and peace and security
5. To evaluate and analyse the challenges faced by Government and Private sector.

<b>UNIT I</b>	<b>The origin, development and idea of the SDGs</b> History and origins of the Sustainable Development Goals. What are the SDGs : Aim, Methodology and Perspectives. Dimensions of Sustainable Development, 5 Ps of Sustainable Development.
<b>UNIT II</b>	<b>Sustainability as Knowledge Domain</b> Human, Economic, Social and Environmental Sustainability. Relationship between Increasing Population, Life Expectancy, Infant Mortality and Sustainable Development. GDP Ratings, Failure of Global Capitalism and Sustainability Crisis on Earth. Triple Bottom Line: Profit, People, Planet
<b>UNIT III</b>	<b>SDGs and Society: Ensuring resilience and primary needs in society</b> The SDG 2030 Agenda:17 Sustainable Development Goals (No Poverty; Zero Hunger; Good Health and Well Being; Quality Education; Gender Equality; Clean Water and Sanitation; Affordable Clean Energy; Decent Work and Economic Growth; Industry, Innovation and Infrastructure; Reducing Inequality; Sustainable Cities and Communities; Responsible Consumption and Production; Climate Action; Life Below Water; Life on Land; Peace, Justice and Strong Institutions; Partnerships for the Goals )
<b>UNIT IV</b>	<b>Realizing the SDGs: Implementation through Global Partnerships</b> Analysis of SDG 2030 which aims to implement the SDGs through partnerships, finance, technology and the development of coherence between policies.
<b>UNIT V</b>	<b>Monitoring, Evaluation and Future of the SDGs:</b> Mechanisms for Monitoring and Evaluation of the SDGs at global, national and local levels. Indicators and measurement of progress toward the 2030 Agenda. Role of international organizations, governments, civil society, and private sector in achieving SDGs. Challenges in data collection and policy coherence. Financing sustainable development — green bonds, carbon pricing, and climate finance. Post-2030 vision — future of global sustainability frameworks, innovation for sustainability, and role of youth and education in advancing SDG implementation

## Course Outcomes

Student will

1. Understand the emergence and development of the SDGs
2. Understand the interlinkages of SDGs and the importance of triple bottom line.
3. Evaluate the structure of the SDGs in the United Nations context
4. Acquire an understanding of how the SDGs relate to addressing global challenges such as inequality, climate change, poverty, unsustainable consumption and production, and peace and security.
5. Evaluate and analyse the challenges faced by government and private sector.

Course Outcome	Program Outcome													Program Specific Outcome				
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 10	P O 11	P P 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2												3					
CO2	1																	
CO3	2						2					1					2	
CO4							2	1					2					

**3 = Highly Related; 2 = Medium; 1 = Low**

1. **United Nations (2015).** *Transforming Our World: The 2030 Agenda for Sustainable Development.*  
(Primary document introducing the SDGs – essential for Unit I)
2. **Jeffrey D. Sachs (2015).** *The Age of Sustainable Development.* Columbia University Press.  
(A comprehensive treatment linking development theory and global sustainability.)
3. **Erach Bharucha (2013).** *Textbook of Environmental Studies for Undergraduate Courses.* Orient Blackswan.  
(Connects environmental and social dimensions of sustainable development.)

4. **Amartya Sen (1999).** *Development as Freedom*. Oxford University Press.  
(*Philosophical foundations linking human development and sustainability.*)
5. **Kate Raworth (2017).** *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Random House.  
(*Brings in new frameworks for balancing growth, equity, and environmental limits.*)
6. **Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (eds.) (2023).** *Sustainable Development Report 2023: Implementing the SDGs in a Time of Crisis*. Sustainable Development Solutions Network (SDSN).  
(*Annual global report measuring SDG progress — ideal for Unit III.*)
7. **Mark Maslin (2014).** *Climate Change: A Very Short Introduction*. Oxford University Press.  
(*Useful for connecting SDG 13 to economic and social sustainability debates.*)
8. **Stephan Smith (2011).** *Environmental Economics: A Very Short Introduction*. Oxford University Press.  
(*Strengthens the economics foundation for sustainable development analysis.*)
9. **NITI Aayog (2023).** *SDG India Index and Dashboard*. Government of India.  
(*Key document for Unit III: India's implementation and progress.*)
10. **UNDP (2022).** *Human Development Report 2022: Uncertain Times, Unsettled Lives – Shaping our Future in a Transforming World*. United Nations Development Programme.  
(*Bridges human development and SDG perspectives.*)
11. **World Bank (2020).** *Poverty and Shared Prosperity Report*.  
(*Global data and analytical context for SDG 1 and inequality-related goals.*)
12. **Meadowcroft, J. (2007).** “Who is in Charge Here? Governance for Sustainable Development.” *Journal of Environmental Policy & Planning*, 9(3), 299–314.  
(*Insightful reading for Unit IV – governance and implementation challenges.*)
13. **The Brundtland Report (1987): Our Common Future**. World Commission on Environment and Development, Oxford University Press.  
(*Foundational text for understanding the origins of sustainable development.*)

14. **UN DESA (2023).** *The Sustainable Development Goals Report 2023.* United Nations Department of Economic and Social Affairs.  
(Latest annual assessment of global SDG progress.)
15. **United Nations Development Programme (UNDP) SDG Knowledge Platform:**  
<https://sdgs.un.org>  
(Authoritative portal for SDG documents, data, and global progress.)
16. NITI Aayog – SDG India Dashboard:  
<https://sdgindiaindex.niti.gov.in>  
(Up-to-date statistics, state-level comparisons, and case studies for India.)
17. Sustainable Development Solutions Network (SDSN):  
<https://www.unsdsn.org>  
(Research and policy briefs on global SDG implementation.)
18. OECD (2020). *Measuring Distance to the SDG Targets 2020.* OECD Publishing.  
(Empirical data on SDG progress among developed economies – useful for comparative analysis.)
19. Banerjee, Abhijit V. and Esther Duflo (2011). *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty.* PublicAffairs.  
(For project-based learning on SDG 1 & 2.)
20. Raworth, K. & Wackernagel, M. (2020). “Rethinking Growth: From GDP to Wellbeing and Planetary Boundaries.” *Nature Sustainability.*  
(Engages students in post-growth debates —fits Unit IV perfectly.)
21. Elkington, John (1998). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business.* Capstone Publishing.  
(A business and economics perspective on sustainable development.)

## **SEMESTER- V**

**PAPER 10**  
**BEC049C : INTERNATIONAL ECONOMICS**

**Course Objectives**

1. To understand the theories governing international trade.
2. To study the various concepts and issues related to international economics.
3. To know and analyse the meaning and role of Economic Integration.
4. To have an insight into the working of International Monetary Systems.
5. To develop the ability to evaluate international financial flows, balance of payments issues, and policy responses in an increasingly globalized world.

<b>UNIT I</b>	Introduction to International Economics .Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs. Heckscher-Ohlin Theory of Trade – Its main Features, Assumptions and Limitations. New Approaches to Trade Theory: The Product Cycle Theory, Technology Gap Theory, Intra-industry trade
<b>UNIT II</b>	Concept and types of Terms of trade. Effects of Tariff under Partial Equilibrium Analysis. Non-tariff Barriers. Political economy of Non-tariff Barriers. Economic Integration: Concept and Forms of Regional Integration; Static and Dynamic Effects of Custom Union.
<b>UNIT III</b>	Foreign Exchange Market: Fixed versus flexible exchange rates, Concept, Role and Types of Foreign Exchange Transactions: Speculation, Arbitrage and Hedging The Process of Adjustment in the Balance of Payments under Fixed and Flexible Exchange Rate Systems.
<b>UNIT IV</b>	International monetary systems: International Monetary Fund; Eurocurrency Market. Financial Globalization and Financial crises : Causes and case studies.
<b>UNIT V</b>	International financial flows: Foreign Direct Investment, Portfolio Investment. Currency convertibility. International factor mobility: Labour migration, Brain drain and types of foreign capital, Problems of foreign capital.

## Course Outcomes

Student will

1. Understand and learn various theories of International Trade.
2. Be able to analyse and discuss the issues related to International Economics.
3. Know the meaning and role of Economic Integration and International Institutions for International Trade.
4. Be able to analyse and understand various trade agreements.
5. Apply theoretical and empirical tools to assess international financial flows, balance of payments dynamics, and the impact of globalization on domestic economies.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome													Program Specific Outcome			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PP	PSO1	PSO2	PSO3	PSO4
CO1	2		3										3				
CO2																	
CO3	2												1				2
CO4			2				2										2
CO5		2			2				2								2

**3 = Highly Related; 2 = Medium; 1 = Low**

## Essential Readings

1. Salvatore, D.L., 1997, International Economics, Prentice Hall, Upper Saddle River, N.J.

2. Vaish, M.C. & S. Singh, 1995, International Economics.

**Reference Books:**

1. Mithani, D.M., Money, Banking, International Trade & Public Finance, Himalaya Publisher.
2. Sundaram, K.P.M., Money, Banking, & International Trade, Sultan Chand.
3. Kindleberger, C.P., 1973, International Economics, R.D. Irwin, Homewood.
4. Sodersten, B.O. 1991, International Economics, McMillan Press Ltd. London.
5. Lindert, International Economics, All India Traveller Book Seller.

## **SEMESTER VI**

**PAPER 11**  
**BEC053C: MATHEMATICAL ECONOMICS**

**Course Objective**

1. To introduce the students to mathematical methods like Differential and Integral Calculus, Derivatives, matrix algebra and determinants which are required to analyse economic problems.
2. To make the students aware of integration of mathematical methods with other courses of microeconomics as well as macroeconomics.
3. To introduce the students with different types of production function and its importance.
4. To apply mathematical techniques to economic theory in general.
5. To enable students to develop analytical and problem-solving skills using mathematical models for economic forecasting, policy formulation, and optimization.

<b>UNIT I</b>	Differential Calculus and Integral Calculus: Derivatives of first and second order and their properties and application in Economics, Matrix and Determinants, Solutions of Simultaneous Equations, Maxima and Minima, Cramer's Rule and Convexity and Concavity.
<b>UNIT II</b>	Theory of Consumer Behaviour: Nature of a Utility function, Properties of an Indifference Curve, Maximization of Utility, Demand Functions: Ordinary and Compensated, Price and Income Elasticity, Elasticity Relation in demand analysis, Slutsky Equation in Two Commodity Case, Elasticity form and Important Results. Income and Leisure: Derivation of Labour Supply Function and its properties.
<b>UNIT III</b>	Theory of Firm: Production Function, Properties of a Well-Behaved Production Function, Homogeneous Production Function, Cobb Douglas and CES Production Functions, Product Curves, Output Elasticity of Factor Input, Properties of an Isoquant, Elasticity of Substitution of a Homogeneous Production Function, Linearly Homogeneous and Cobb-Douglas Production Functions.

<b>UNIT IV</b>	Optimization Behaviour of a Firm: Constrained Cost Minimization, Constrained Output Maximization and Profit Maximization, Input Demand Functions Properties and Derivation of Producer's Input Demand Functions. Cost Functions: Properties of Short Run and Long Run Cost Functions and Consumer's and Producer's Surplus.
<b>UNIT V</b>	Linear Programming: Graphical and Simplex Method (Maximization Problem Only), Input-Output Analysis, Concept of Static, Dynamic, Closed and Open Input-Output Models, Hawkins-Simons Conditions of Viability, Determination of Gross Output, and Value added in Open Input-Output Model, Theory of Games: Two-person Constant Sum Games, Zero Sum Game, Maximin and Minimax, Dominant Strategies and Saddle Point Solution, First Order Difference Equation-Cobweb Model.

### **Course Outcomes**

1. Students will be able to use mathematical techniques to analyse economic problems
2. Students will be able to apply mathematical techniques and models for a deeper understanding of economics, especially the branches of microeconomics and macroeconomics.
3. Students will be able to distinguish between different types of production function and where to use them.
4. Students will be able to build economic problems in a multivariable model and yield valuable insight about optimizing human behaviour.
5. Students will be able to employ mathematical and quantitative tools for forecasting, decision-making, and evaluating economic policy outcomes.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<b>Course Outcome</b>	<b>Program Outcome</b>												<b>Program Specific Outcome</b>				
	P O 1	PO 2	PO 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1			3											3			
CO2		1				2											
CO3				2							1				2		
CO4			2											2	2		
CO5			2		2							2			2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. J.M. Henderson and R.L. Quandt: Micro Economic Theory: A Mathematical Approach, McGraw-Hill London.
2. RGD Allen, Mathematical Economics, McMillan
3. B.C, Mehta: Mathematical Economics: Micro Economic Models, Sultan Chand & Sons, New Delhi
4. Alpha C Chiang: Fundamental Methods of Mathematical Economics, McGraw-Hill, Kagakusha Tokyo.

**PAPER 12**  
**BEC054C ECONOMICS OF HEALTH AND EDUCATION**

**Course Objectives**

1. To provide students with ability to understand the implications of market and government failures in the context of health care.
2. To understand how many institutions and regulatory arrangements observed in the sector can be linked to different types of markets.
3. To give an introduction to health economics theory and methods and how they could be applied to analyse the functioning of health system and the determinants of health and use of health services.
4. To enable students to critically evaluate health policy interventions and assess their effectiveness in improving health outcomes, equity, and efficiency in health care delivery.
5. To integrate the economics of education with health economics by analysing investment in human capital and assessing the long-term socio-economic impacts of education and health policies.

<b>UNIT I</b>	Role of Health and Education in Human Development Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.
<b>UNIT II</b>	Microeconomic Foundations of Health Economics Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

<b>UNIT III</b>	Education sector in India: An overview
<b>UNIT IV</b>	Health Sector in India: An Overview Health outcomes; health systems; health financing.  Education: Investment in Human Capital Rate of return to education: private and social; quality of education; signalling or human capital; theories of discrimination; gender and caste discrimination in India.
<b>UNIT V</b>	Evaluation of Health Programs Costing, cost effectiveness and cost-benefit analysis; burden of disease.

## Course Outcomes

Student will

1. Have knowledge and understanding of the major theories and frameworks for core areas of health economics in terms of main issues, methods, results and unresolved problems.
2. Have a good understanding of how economic theory and methods are applied in the health care sector.
3. Understand the efficiency and equity considerations in health and health care.
4. Be aware of the advantages and problems of working across disciplines.
5. Be able to apply economic tools to evaluate education and health policies, measure returns on human capital, and propose evidence-based policy recommendations for inclusive development.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<b>Course Outcome</b>	Program Outcome													Program Specific Outcome				
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 1	P O 1	P O 1	PS O1	PS O2	PS O3	PS O4	PSO5	
CO 1	2					1							3					
CO 2		2							3									
CO 3			1	2													2	
CO 4													1					
CO 5	1					1		2								2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. William, Jack, Principles of Health Economics for Developing Countries, World 24 Bank Institute Development Studies, 1999.
2. World Development Report, Investing in Health, The World Bank, 1993.

3. Ronald G., Ehrenberg and Robert S., Smith, Modern Labor Economics: Theory and Public Policy, Addison Wesley, 2005.

## **SEMESTER VII**

**PAPER 13**  
**BEC0057C :ENERGY ECONOMICS**

**Course Objectives**

1. To provide students an understanding of the economic fundamentals and principles of decision making involved in energy projects.
2. Students learn about cash flows, time value of money and evaluation of investments and projects
3. To provide students with advanced concepts of techno-economic analysis and its role in decision making in renewable energy technology.
4. The tools introduced include present worth analysis, annual cash flow, rate of return, incremental analysis, future worth analysis, and payback period.
5. To enable students to assess the economic viability and policy implications of renewable energy projects under uncertainty, emphasizing sustainability and risk analysis in investment decisions.

<b>UNIT I</b>	Role of engineering economics in the decision making process, Economic decisions versus design decisions, discount rate and economic equivalence, present-worth analysis, annual equivalent- worth analysis, rate-of-return analysis, depreciation, and taxation, developing project cash flows, social cost benefit analysis
<b>UNIT II</b>	Dynamics of fuel substitution by renewable energy systems and quantification of benefits, fiscal, financial and other incentives for promotion of renewable energy systems and their effect on financial viability, case studies on financial feasibility evaluation of renewable energy devices and systems.
<b>UNIT III</b>	Basic pricing principles, short run versus long run marginal cost pricing, peak load, seasonal, sectoral pricing of electricity, pricing of natural gas and petroleum products, power exchange.
<b>UNIT IV</b>	Energy Modelling Review of various energy sector models, energy demand analysis and forecasting, energy supply assessment and evaluation energy.

<b>UNIT V</b>	Origins of renewable energy project risks, sensitivity analysis, break-even analysis, expected value decisions. Technology dissemination models, volume and learning effects on costs of renewable energy systems
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### Course Outcomes

By the end of this course, the student will be able to:

1. Evaluate the cost effectiveness of individual renewable energy projects using the methods learned and draw inferences for the investment decisions.
2. Compare the life cycle cost of multiple renewable energy technologies using the methods learned and make a quantitative decision between alternate options.
3. Utilize spreadsheet functions to perform economic calculations.
4. Compare the differences in economic analysis between the private and public sectors. Recognize the limits of mathematical models for factors hard to quantify.
5. Apply techno-economic and risk analysis techniques to evaluate renewable energy investments, considering environmental sustainability, policy incentives, and financial feasibility.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

<i>Course Outcome</i>	Program Outcome												Program Specific Outcome				
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	2								2				3				
CO2			1												1		
CO3					2				3								1
CO4						1						3					

CO5			2		2												2	
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**3 = Highly Related; 2 = Medium; 1 = Low**

### **Essential Readings:**

Bhattacharyya, S C. (2011), Concepts, Issues, Markets and Governance, Springer

Kandpal T.C. & Garg, H.P. (2003), Financial Evaluation of Renewable Energy Technologies, Macmillan India

Park, C. S., Kim, G., & Choi, S. (2007). Engineering Economics. Pearson Prentice Hall, New Jersey.

Thuesen, G. J., & Fabrycky, W. J., (2002). Engineering economy. Prentice Hall of India.

### **Suggested readings**

Belli, P., Anderson, J., Barnum, H., Dixon, J., & Tan, J. P. (1998). Handbook on economic analysis of investment operations. The World Bank, Washington, DC.

Dahl, C. (2015). International Energy Markets: Understanding Pricing, Policies, & Profits. PennWell Books.

Desai, V. (1997). Guidelines for the economic analysis of projects. Asian Development Bank.

Gittinger, J. P. (1973), Economic Analysis of Agricultural Project, The Johns Hopkins University Press.

Jebraj, S., & Iniyan, S. (2006). A review of energy models. Renewable and Sustainable Energy Reviews, 10(4), 281-311.

Kaplan, S. (1983). Energy economics: quantitative methods for energy and environmental decisions. McGraw-Hill College.

## **PAPER 14**

### **BEC058D :Research Methodology and Quantitative Techniques**

#### **Course Objective**

1. To understand the importance of research in creating and extending the knowledge base in their area of research interest;
2. To develop their ability to distinguish between the strengths and limitations of different research approaches in general and in their research area specifically
3. To gain skills required to work independently, so that they can plan and carry out a small- scale research project.
4. To propose, justify and undertake a small-scale research project and to read, analyse critically, compare and evaluate peer-reviewed journal articles from social science discipline in their area of interest.
5. To equip students with quantitative and qualitative analytical tools for data interpretation, hypothesis testing, and effective research communication.

<b>UNIT I</b>	<b>Introduction :</b> Meaning of Research – Research Process – Social Research – Objectives – Methods of Social Research: Scientific Method, Historical Method, Case study and Survey Method – Characteristics of Research. Deductive and inductive theory. Characteristics of scientific method.
<b>UNIT II</b>	<b>Selection and Formulation of Research Problem</b> Selection of Research Topic – Formulation of Research Problem – Objectivity in social research – sources of research problem and Review of literature. Research design: Contents or components of a research design– Measurement Issues. Exploratory Research Design – concept, types and uses, Descriptive Research Designs – concept, types and uses. Experimental Design: Concept of Independent & Dependent variables

<b>UNIT III</b>	<b>Sampling and Tools for Analysis</b>  Objectives of Sampling – Characteristics of a good sample – Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Sample Size--Types of sampling – Random and Non-Random Sampling method – Collection of data – Primary and Secondary data – Questionnaire and Interview Schedule. Classification – Tabulation – Frequency Distribution – Measures of Central Tendency – Measures of Dispersion – Correlation and Regression – Scaling Techniques.
<b>UNIT IV</b>	<b>Testing of Hypothesis</b>  Meaning of Hypothesis – Sources of Hypothesis – Types of Hypotheses, Characteristics of good Research Hypotheses – Null Hypothesis & Alternative Hypothesis. Procedure of Testing Hypotheses – Test of Significance for large Samples and small samples – Z-Test, ‘F’ test and ANOVA (Two-way), Chi-Square Test.
<b>UNIT V</b>	<b>Report Writing</b>  The General Format – Page and Chapter Format – Use of Quotations – Footnotes Tables and Figures – References – Appendix – Commonly used abbreviations – Editing the final draft.

### Course Outcomes

1. Students will be able to analyse and evaluate the concepts critically underpinning different research methodologies suitable for use within the economics and social sciences.
2. Students will be able to demonstrate in-depth knowledge of a range of research methods applicable to economics discipline and decide how to choose a method guided by their research question.
3. Students will gain a clear understanding of the ethical considerations and the need for rigour in conducting research in social sciences.
4. Students will acquire knowledge and understanding to develop research design.
5. Students will be able to apply quantitative techniques and statistical tools to collect, analyse, and interpret data, and present research findings systematically and ethically.

### **MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome	69			Program Specific Outcome		
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	PO1	PO2	PO3	PO4	P O 5	PO6	PO7	PO8	PO9	P O1 0	PO 11	PO 12	PSO1	PSO 2	P S O 3	P S O 4	P S O 5
CO1	2													3			
CO2			2					2	3	3						2	
CO3					3												
CO4		1															1
CO5			2	2				2									3

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

- 1 Cargan, L. (2007). Doing Social Research. Lanham, MD: Rowman & Littlefield Publishers.
- 2 Kothari, C. R. (2014). Research Methodology: Methods and Techniques (2nd ed.). New Delhi: New Age International Publishers.
- 3 Walliman, N. (2016). Social Research Method: The Essentials. London: SAGE Publications.
- 4 Wellington, J. & Szczerbiński, M. (2007). Research Methods for the Social Sciences. New York: Continuum International Publishing Group.
5. Andres, L. (2012). Designing & Doing Survey Research. London: SAGE Publications.
- Buchanan, D. A., & Bryman, A. (2009).
6. The SAGE Handbook of Organizational Research Methods. London: SAGE Publications.
- Gillham, B. (2000). Case Study Research Methods. London: Continuum International Pub. Group.
- Gillham, B. (2008).
7. Small-scale Social Survey Methods: Real World Research. London: Continuum International Publishing Group. Hammersley, M., & Traianou, A. (2012).
8. Ethics in Qualitative Research: Controversies and Contexts. London: SAGE Publications.
- Mustafa, A. (2008). Case Study Method: Theory and Practice: Research and Management Approaches. New Delhi: Atlantic Publishers & Distributors.
- Ornstein, M. D. (2013).



## **SEMESTER VIII**

**PAPER 15**  
**BEC061C DISSERTATIONS / PROJECT**

**Course Objectives**

1. To inculcate in students, the rigour of research work.
2. To imbibe in students, the spirit of inquiry.
3. To encourage student's to-do academic reading of journal articles
4. To be informed about new developments in the field of economics research.
5. To enable students to integrate theoretical knowledge with empirical research and present their findings through a well-structured academic dissertation.

<b>UNIT I</b>	Introduction to the topic
<b>UNIT II</b>	The Industry profile section should broadly cover the following topics a. Introduction to Industry/area of business b. Total size/annual turnover of the industry c. Key players in the industry & their market share. d. Annual Industry Growth Rate e. Government policies/regulations influencing the industry (with reference to foreign competition or FDI limit).
<b>UNIT III</b>	Unit 3: Research Design
<b>UNIT IV</b>	Data Analysis and Findings
<b>UNIT V</b>	Policy Recommendations and Conclusion

## **Course Outcomes**

### **Student will**

1. Identify research topics/areas and design and conduct an original and ethical research.
2. Be able to formulate a research problem statement and identify the sources and types of reference materials
3. Learn about researches that are empirical data based (qualitative, quantitative, or mixed methods)
4. Be able to critically review research and theory. Students will suggest recommendations and policies for solving the problems studied.
5. Synthesize theoretical and empirical insights to produce a structured dissertation report, demonstrating academic writing, data interpretation, and presentation skills.

### **Text Books and Reference Books:**

The references are the research studies and the books that the students find relevant to their research.

### **Essential Reading / Recommended Reading**

The references are the research studies and the books that the students find relevant to their research.

**OR**

### **INDUSTRY INTERNSHIP**

## **TRACK 1: FINANCIAL ECONOMICS**

### **PAPER 1**

#### **BEC060C : ECONOMICS OF MONEY AND BANKING**

##### **Course Objectives**

1. To study the role played by banks in modern monetary economies and financial markets, including issues arising from bank regulation, the role of banks in financial intermediation, and the significance of bank behaviour in monetary policy.
2. To provide knowledge of the theory and functioning of the monetary and financial sectors of the economy.
3. To highlight the organization, structure and role of financial markets and institutions.
4. To discuss interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.
5. To develop analytical skills for evaluating monetary policy, banking reforms, and financial innovations and their impact on macroeconomic stability and growth.

<b>UNIT I</b>	Money Concept, functions, measurement; theories of money supply determination.
<b>UNIT II</b>	Central Banking and Monetary Policy Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy.
<b>UNIT III</b>	Interest Rate Determination; sources of interest rate differentials, interest rates in India.
<b>UNIT IV</b>	Balance sheet and Indian banking system: Changing role and structure; banking sector reforms. current monetary policy of India.
<b>UNIT V</b>	Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations in finances.

## **Course Outcomes**

Students will

1. Understand the several key models and concepts of monetary economics and banking theory.
2. Understand articles concerned with monetary economics and banking theory.
3. Apply to current events key models and concepts of monetary economics and banking theory.
4. Appreciate the potential importance of monetary phenomenon in the economy.
5. Evaluate the effectiveness of monetary policy, financial innovations, and banking reforms in promoting financial stability and inclusive economic growth.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<b>Course Outcome</b>	Program Outcome													Program Specific Outcome				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1							2									2		
CO2		2						2			2	1						
CO3	3		2						3									
CO4				1	2	3				1							3	
CO5	2	2							2								3	

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings**

1. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial Markets and Institutions, Pearson Education, 3rd edition, 2009.
3. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011.
4. M. Y. Khan, Indian Financial System, Tata McGraw Hill, 7th edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency Group, IMF Staff Papers.

**PAPER 2**  
**BEC056C: BEHAVIOURAL FINANCE**

**Course Objectives**

1. To provide students with in-depth understanding of Behavioural Finance and Bounded rationality concept.
2. To understand the key behavioural biases of individual and professional investors.
3. To analyse the theoretical and empirical foundations and challenges to the efficient market hypothesis.
4. To apply behavioural finance concepts to real-world financial decision-making and market anomalies, enhancing students' ability to evaluate and design investment strategies under psychological influences.
5. To enable students to critically assess behavioural insights for policy design, investor education, and improving financial decision-making in uncertain environments.

<b>UNIT I</b>	Introduction to Behavioral finance – Nature, scope, objectives and application Psychology and market people. Investors, portfolio managers, analysts: are they rational? Bounded rationality in real market conditions. Decision-making process and behavioral biases. Simple experiments on anchoring.
<b>UNIT II</b>	Utility/ Preference Functions: Expected Utility Theory [EUT] and Rational Thought: Decision making under risk and uncertainty - Expected utility as a basis for decision-making – Theories based on Expected Utility Concept - Investor rationality and market efficiency
<b>UNIT III</b>	Behavioral Corporate Finance: Behavioral factors and Corporate Decisions on Capital Structure and Dividend Policy - Capital Structure dependence on Market Timing -. Systematic approach to using behavioral factors in corporate decision making.
<b>UNIT IV</b>	Prospect Theory, Framing and Mental Accounting, Ellsberg's Paradox, Investors Sentiments and Bubble Creation.
<b>UNIT V</b>	Emotions and Decision – Making: Experimental measurement of risk-related - Measuring Risk - Emotional mechanisms in modulating risk-taking attitude - Neurophysiology of risk taking. Personality traits and risk attitudes in different domains.

## Course Outcomes

Course Outcomes:

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

1. Students will be able to identify and apply psychological concepts to financial markets and financial decision – making...
2. Students will be able to apply the understanding of the concepts to help promote more efficient financial decisions.
3. Students will be able to explore behavioral corporate finance, considering financial, investment and dividend policy decisions.
4. Students will be acquiring knowledge to infer about human decisions influencing their financial decisions in domestic and global markets.
5. Evaluate behavioral factors that drive market anomalies and design evidence-based strategies for effective investment and policy interventions.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAMSPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 1	PO 1	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	2		3					2		3						2	
CO2		2		2					2			2					
CO3										2				1			
CO4				1	2	3						1	3				
CO5		2	3											3			

**3 = Highly Related; 2 = Medium; 1 = Low**

## Essential Readings:

1. Behavioral Finance: Psychology, Decision-Making, and Markets", by Ackert and Deaves.
2. Understanding Behavioral Finance by Ackert □ The Psychology of Investing by JohnR.

3. Nofsinger, Pearson Prentice Hall, (4th Edition)
4. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman, McGraw-Hill
5. Handbook of Behavioral Finance – Brian R. Bruce
6. Behavioral finance - Wiley Finance - Joachim Goldberg, Rüdiger von Nitzsch
7. Plous, Scott, 1993, The Psychology of Judgment and Decision Making, Ch 10-15
8. Shleifer, Andrei, 2000, Are Financial Markets Efficient?, Chapter 1 in Inefficient Markets, Oxford University Press.
9. Ackert, L., and R. Deaves, 2010, Behavioral Finance: Psychology, Decision-Making and
10. Markets, South-Western Cengage Learning, Mason, Ohio.
11. Nofsinger, J. R., 2001, Investment Madness, Prentice Hall.
12. Mitchell, O. S., and S. P. Utkus, eds., 2004. Pension Design and Structure: New Lessons from Behavioral Finance (Oxford University Press, New York, New York).
13. Shleifer, Andrei (2000): Ineffcient Markets: An Introduction to Behavioral
14. Finance,Oxford University Press, Oxford.

## **PAPER-3**

### **BEC017C: FINANCIAL MARKETS AND INSTRUMENTS**

#### **Course Objectives**

1. To provide students with in-depth understanding of the operational issues of capital market and money market with its regulatory framework.
2. To understand the various regulations related to financial sector.
3. To analyse the various instruments of financial markets.
4. To familiarise students with the functioning of financial institutions and intermediaries in India and abroad.
5. To enable students to critically evaluate financial reforms, market dynamics, and policy responses to ensure financial stability in a globalized economy.

<b>UNIT I</b>	Introduction to Financial markets - Money vs. capital markets - Primary vs. secondary markets - Instruments in the money market - Instruments in the capital markets - Financial institutions; Banking and credit.
<b>UNIT II</b>	Financial Regulations and Financial Sector Reforms, Money Market regulations – Banking sector reforms – quarterly credit policy of RBI - Capital market regulations of SEBI- Legal issues in security trading - FERA & FEMA
<b>UNIT III</b>	Equity Market, IPO dematerialization, depositories, credit rating of financial instruments, financial institutions: development financial institutions, non-banking financial intermediaries, LIC of India and UTI, mutual funds, venture capital, bank assurance
<b>UNIT IV</b>	Structure of banking industry, major developments in India, and in international capital markets 1975-1997: legal basis of corporate finance and investment banking
<b>UNIT V</b>	Financial Stability- Importance and indicators, WB, IMF, RBI; Understanding financial crisis- Causes and policy response; Global Financial Crisis (2008); Emerging challenges to financial stability.

## Course Outcome

Students will

1. Be able to understand the various concepts and practical operations of the financial markets and apply them in real life.
2. Be able to recognize the various financial instruments and laws related to financial sector.
3. Be able to learn the topics of financial regulations, equity market and financial intermediaries.
4. Be acquiring knowledge of major development of investment banking in India.
5. Critically assess financial sector reforms, global financial crises, and emerging challenges to financial stability with a focus on India's policy framework.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outc ome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1					3		2									2	
CO2		2						2									
CO3	3		2						3								
CO4				1		3				1						3	
CO5	2	3	3								2				3		

**3 = Highly Related; 2 = Medium; 1 = Low**

### Essential readings:

1. Madura, Jeff. (2015). *Financial Institutions and Markets* (11th ed.), Cengage Learning, USA.

2. Bailey, R. E. (2005). *The economics of financial markets*. Cambridge University Press.
3. Copeland, T. E., Weston, J. F., & Shastri, K. (2005). Financial theory and corporate policy. (4th ed.), Pearson.
4. Farrell, J. L., & Reinhart, W. J. (1997). *Portfolio management: theory and application*. McGraw- Hill.
5. Fisher, E. Donald., & Jordan, J. Roland. (1995). *Security Analysis and Portfolio management* (6th ed.), Pearson India.
6. Hearth, D., & Zaima, J. K. (2001). *Contemporary investments: security and portfolio analysis*. Harcourt College Publ.
- Hull, J. C., (2016). *Futures, Options and other Derivatives* (9th ed.), Pearson.
7. L. M. Bhole., & J. Mahakud. (2009). *Financial Institutions and Markets* (5th ed.), McGraw- Hill.
8. Machiraju, H. R. (2010). *Indian financial system*. Vikas Publishing House.
- Palat, R. (2010). *Fundamental Analysis* (4th ed.), Vision Books Pvt. Ltd.
- Radcliffe, R. C. (1997). *Investment Concepts, Analysis and Strategies* (5th ed.), Addison Wesley.
11. Subramanyam, P. *Investment Banking*, TATA McGraw-Hill, 2005

**PAPER:4**  
**BEC018C: INTERNATIONAL FINANCE**

**Course Objectives**

1. To provide students with in-depth understanding of the Institutional Structure of International Finance
2. To understand the various exchange rate system.
3. To analyse the Balance of Payments mechanism.
4. To acquire in depth understanding of investment and movements.
5. To enable students to evaluate the role and effectiveness of international financial institutions and policies in maintaining global financial stability and promoting sustainable development.

<b>UNIT I</b>	Institutional Structure of International Finance The eurodollar, euro currency markets, multinational banking, international trader with letters of credit, financing international trade, institutions regulating international trade GATT, WTO, free – trade areas, customs union, NAFTA, ASEAN
<b>UNIT II</b>	Classical gold-standard system, Bretton woods, European money market, hybrid system of exchange rates. purchasing power parity principle, interest parity combination of PPP and covered interest parity
<b>UNIT III</b>	The principles of balance of payments, implications of the bop accounting identity balance of payments theory: different approaches and synthesis, imports, exports and deriving currency supply and demand curve
<b>UNIT IV</b>	Investment and borrowing with transaction costs, international dimension of cash management, portfolio investment international capital asset pricing, capital budgeting for foreign direct investment
<b>UNIT V</b>	International financial institutions: Introduction to IMF- its importance, functions and significance.

## Course Outcome

Students will

1. Be able to understand the various concepts of institutional structure of International Finance.
2. Be able to analyze the various exchange rate systems and its implications.
3. Be able to learn the balance of payments mechanisms.
4. Acquire knowledge of international dynamics of investment and capital movements.
5. Critically assess the policies and functions of global financial institutions such as the IMF and WTO, and their impact on international financial stability and economic development.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAMSPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3												2				
CO2			2					2									
CO3												1					
CO4		1			2				3								2
CO5		2		3	2										2		

**3 = Highly Related; 2 = Medium; 1 = Low**

### Essential Readings:

1. Levi, M.D. International Finance: The Markets and Financial Management of Multinational Business, 3rd Edition, McGraw Hill International Editions, Finance Series, 1996.
2. Pilbeam, K. International Finance, Macmillan, 1994

## **PAPER 5:**

### **BEC020C:ANATOMY OF FINANCIAL CRISIS, RISK MANAGEMENT AND REGULATION**

#### **Course Objectives**

1. To describe the major U.S. financial crises over the last 100 years and their relationship to domestic and world economies.
2. To understand the various types financial risks associated and relevant management to the same.
3. To analyse the various regulatory mechanisms for the risk and market discipline.
4. To explore the ethical foundations and regulatory responses to financial crises and systemic risks.
5. To enable students to evaluate contemporary financial stability frameworks and the evolution of global financial regulation

<b>UNIT I</b>	Introduction: Financial Crisis-1929 Crash, Great Depression; The Mortgage Bubble and the Great Recession; Fall of Lehman, Bailout of everyone else: Money market funds
<b>UNIT II</b>	Introduction to Risk Management: Sources of risk, currency risk, fixed income risk, equity risk, commodity risk, market risk measurement; Hedging liner risk, optimal hedging; Settlement risk, introduction to credit risk, measuring credit risk, credit exposure,
<b>UNIT III</b>	Capital adequacy regulations Basel accord I & II. accounting standard, disclosure and relationship banking mark-to-market accounting, liquidity risk and contagion market discipline: issues and evidence market discipline in emerging economies: beyond bank fundamentals
<b>UNIT IV</b>	The ethics of finance and the economic function of financial markets – The purpose of regulation – levels of regulation – Securities Contract Regulation Act – Securities and Exchange Board of India (SEBI)

<b>UNIT V</b>	Post-2008 Reforms in Global Financial Governance—G20, Financial Stability Board (FSB), IMF Reforms; Macroprudential Supervision and Systemic Risk Mitigation; FinTech, Crypto-assets, and Emerging Risks; Cybersecurity and Digital Financial Regulation; Climate-related Financial Risk; Lessons for Building Resilient Financial Systems.
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### Course Outcome

Students will

1. Understand the reasons of how the crises happened, grew out of one another, and apply that information to the nation's regulatory system.
2. Be able to analyze the various financial risk and their implications on the stability and sustainability.
3. Be able to know the various risk mitigating mechanisms for the financial discipline.
4. Acquire knowledge of regulatory framework for financial management and ethical functioning.
5. Assess contemporary challenges like fintech risks, climate finance, and digital regulation, proposing measures for long-term financial stability.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAMSPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3											2				
CO2			3				2								3		
CO3		2							2							2	
CO4	2							3									
CO5			2		3								2				

**3 = Highly Related; 2 = Medium; 1 = Low**

## Essential Readings

1. Mishkin, F. S. (2018). *The Economics of Money, Banking and Financial Markets*. Pearson Education.
2. Reinhart, C. M., & Rogoff, K. S. (2011). *This Time is Different: Eight Centuries of Financial Folly*. Princeton University Press.
3. Hull, J. C. (2018). *Risk Management and Financial Institutions*. Wiley.
4. Brunnermeier, M. K. (2009). *Deciphering the Liquidity and Credit Crunch 2007–2008*. *Journal of Economic Perspectives*, 23(1).
5. Mishra, R. K. & Alok, S. (2019). *Financial Risk Management and Global Financial Crises*. Bloomsbury India.
6. Reserve Bank of India (RBI). *Financial Stability Reports* (Latest issues).
7. Bank for International Settlements (BIS). *Basel Committee Reports on Banking Supervision* (Basel I–III Frameworks).

## Reference Books

1. Kindleberger, C. P., & Aliber, R. Z. (2011). *Manias, Panics and Crashes: A History of Financial Crises*. Palgrave Macmillan.
2. Allen, F., & Carletti, E. (2013). *Systemic Risk and Macroprudential Policy*. *Journal of Financial Stability*.
3. Rose, P. S., & Hudgins, S. C. (2013). *Bank Management and Financial Services*. McGraw-Hill Education.
4. Barth, J. R., Caprio, G., & Levine, R. (2012). *Guardians of Finance: Making Regulators Work for Us*. MIT Press.
5. Sen, S. & Srivastava, R. (2020). *Financial Sector Reforms and Regulation in India*. Oxford University Press.
6. World Bank & IMF (2023). *Global Financial Stability Report*. Washington, D.C.

**PAPER-6**  
**BEC064A: CORPORATE GOVERNANCE**

**Course Objectives**

1. To provide students with in-depth understanding of the conceptual and operational framework of corporate governance and its relevance to modern business practices.
2. To familiarise students with the legal, regulatory, and ethical dimensions of governance in financial and corporate institutions.
3. To analyse global corporate governance models, principles, and failures to understand lessons for effective governance.
4. To explore the structure, functioning, and accountability of boards, committees, and management in ensuring corporate transparency and responsibility.
5. To enable students to critically evaluate corporate governance reforms and policy responses for enhancing ethical conduct, sustainability, and financial stability in a globalised economy.

<b>UNIT I</b>	Conceptual Framework of Corporate Governance: Corporate Governance: Meaning, significance and principles; Management and corporate governance; Theories of Corporate Governance: Agency Theory, Stewardship theory, Stakeholder Theory, Resource Dependency Theory, Managerial Hegemony Theory; Models of Corporate Governance; Art of Governance as per Kautilya's Arthashastra.
<b>UNIT II</b>	Recent Issues and Challenges of Corporate Governance: Board structure and Directors; Role of Board; Board Committees and their functions; Insider Trading; Whistle Blowing; Shareholders Activism; Role of institutional investors; Class Action suits. CSR and Corporate Governance. Concept of Gandhian Trusteeship.
<b>UNIT III</b>	Global Corporate Failures and International Codes: BCCI (United Kingdom), Maxwell (United Kingdom), Enron ( USA), World.Com ( USA), Vivendi (France), Lehman Brothers; Sir Adrian Cadbury Committee 1992, SOX 2002, OECD Principles of Corporate Governance
<b>UNIT IV</b>	Corporate Governance Regulatory Framework in India: Regulatory framework in India: Kumar Mangalam Birla (1999), NR Narayana Murthy Committee (2005), Relevant provisions of Companies Act, 2013, SEBI: Listing Obligations and Disclosure Requirements Regulations (LODR), 2015 and Uday Kotak Committee

	(2017).
<b>UNIT V</b>	Corporate Failures and Scams in India: Satyam Computer Services Ltd, Kingfisher Airlines, PNB Heist, IL&FS Group Crisis; ICICI Bank, Yes Bank; Common Governance Problems in various corporate failures in India and abroad.

### Course Outcome

Students will be able to

1. Describe the concept and significance of corporate governance in a business setup.
2. Analyze the role of the board of directors and discuss important dimensions in corporate governance.
3. Analyze global corporate failures; understand international codes and its implications.
4. Discuss corporate governance regulatory framework in India.
5. Assess and analyze the problems of corporate governance in Indian Inc.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	2																
CO2	3		2					2									
CO3									2								
CO4			2														
CO5		2										2					

**3 = Highly Related; 2 = Medium; 1 = Low**

### Essential readings:

1. A handbook of corporate governance. (2022). (3rd ed.). Institute of Directors. Delhi, India: IOD

Publishing.

2. Das, S. C. (2021). *Corporate governance in India: An evaluation*. (4th ed.). Delhi, India: PHI Learning Pvt. Ltd.
3. Goel, S. (2019). *Corporate governance: principles and practices* (1st ed., Vol. 1). Noida, India: McGraw-Hill.
4. Sharma, J. P. (2018). *Corporate governance, business ethics and csr: with case studies and major corporate scandals*. Delhi, India: Ane Books.
5. Soloman, J. (2021). *Corporate governance and accountability*. (5th ed.). United States: Wiley
6. Tricker, B., & Tricker, R. I. (2015). *Corporate governance: principles, policies, and practices*. United States: Oxford University Press.
7. Tricker, B. (2020). *Elements in corporate governance*. United Kingdom: Cambridge University Press.

77 Additional Resources

8. Mallin, C. A. (2019). *Corporate governance*. Oxford, United Kingdom: Oxford University Press.
9. Rani, D. G., & Mishra, R. K. (2017). *Corporate governance: theory and practice*.

**PAPER-7**  
**BEC065A: Corporate Finance**

**Course Objectives**

1. To provide an understanding of the essential elements of the financial environment in which business firms operate.
2. To acquaint students with the techniques of financial management and their application in business decision-making.
3. To analyse global corporate governance models, principles, and failures to understand lessons for effective governance.
4. To explore the structure, functioning, and accountability of boards, committees, and management in ensuring corporate transparency and responsibility.
5. To enable students to critically evaluate corporate governance reforms and policy responses for enhancing ethical conduct, sustainability, and financial stability in a globalised economy.

<b>UNIT I</b>	Nature of Financial Management: Finance and related disciplines; Scope of Financial Management; Profit Maximization, Wealth Maximization - Traditional and Modern Approach; Agency Issues; Functions of finance – Finance Decision, Investment Decision, Dividend Decision; Objectives of Financial Management; Organization of finance function; Concept of Time Value of Money present value, future value, annuity, growing annuity, perpetuity, growing perpetuity, excel functions of time value of money.
<b>UNIT II</b>	Strategic Investment Decisions: Capital Budgeting -; Nature and meaning of capital budgeting; Principles and Process; Estimation of relevant cash flows and terminal value; Evaluation techniques – Payback period, Accounting Rate of Return, Net Present Value, Internal Rate of Return & MIRR, Net Terminal Value, Profitability Index Method, Payback Period, NPV vs. IRR, Risk analysis in Capital Budgeting -Sensitivity analysis, Certainty Equivalent Approach, Calculation of RADR, Real options, excel functions of capital budgeting techniques. Cost of

	Capital: Meaning and concept, Explicit and Implicit costs; Measurement of cost of capital; Cost of debt; Cost of perpetual debt; Cost of Equity Share; Cost of Preference Share
<b>UNIT III</b>	Strategic Financing Decisions- Capital Structure, Theories and Value of the firm - Net Income approach, Net Operating Income approach, Traditional approach, Modigliani Miller (MM) model, HAMADA model; Determining the optimal capital structure, Checklist for capital structure decisions, Costs of bankruptcy and Financial distress, Trade off models, Pecking Order Theory. Leverage analysis and EBIT-EPS Analysis: Concept of leverage, Types of leverage: Operating leverage, Financial leverage, Combined leverage; EBIT-EPS Analysis, Guidelines for capital structure planning, Link between capital structure and capital budgeting Dividend Decisions: Factors determining dividend policy, Theories of dividend-Gordon model, Walter model, MM Hypothesis, Signaling Theory, Forms of dividend – Cash dividend, Bonus shares, Stock split, Dividend policies in practice, Patterns observed in payout policies worldwide
<b>UNIT IV</b>	Working Capital Management: Management of Cash - Preparation of Cash Budgets (Receipts and Payment Method only); Cash management technique (Lock box, concentration banking), Receivables Management – Objectives; Credit Policy, Cash Discount, Debtors Outstanding and Ageing Analysis; Costs - Collection Cost, Capital Cost, Default Cost, Delinquency Cost, Inventory Management (Very Briefly) - ABC Analysis; Minimum Level; Maximum Level; Reorder Level; Safety Stock; EOQ (Basic Model), Determination of Working Capital. Determining financing mix of working capital.
<b>UNIT V</b>	Financial Ethics, Corporate Governance, and Risk Management: Concept of Corporate Governance in Financial Management; Role of Board of Directors and Financial Managers in Governance; Ethical Financial Decision-Making and Corporate Social Responsibility; Principles of Transparency, Accountability, and Fairness in Financial Operations. Financial Risk Management—Types of Financial Risks (Liquidity, Credit, Market, and Operational Risks); Techniques for Risk Assessment and Mitigation; Integration of Governance and Risk Management for Financial Sustainability.

## **Course Outcome**

Students will be able to

1. Explain the fundamental concepts, objectives, and scope of financial management and its strategic role in business decision-making.
2. Apply financial management techniques to evaluate investment, financing, and dividend decisions in corporate settings.
3. Examine global corporate governance models and failures to derive insights for ethical and effective corporate management.
4. Analyse the governance structure, regulatory mechanisms, and board accountability within the Indian corporate framework.
5. Critically assess financial and governance challenges in Indian and global corporations, and propose responsible, transparent solutions.

## **MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<b>Course Outc o me</b>	<b>Program Outcome</b>												<b>Program Specific Outcome</b>			
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4
CO1	2															
CO2		2														
CO3									2							
CO4											2					
CO5		2										2		2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential readings:**

1. Prasanna Chandra, "Financial Management: Theory and Practice", 9th ed, Mc Graw Hill.
2. Horne, James C V. and John M. Wachowicz, Jr. "Fundamentals of Financial Management. 13th ed; FT Prentice Hall, Pearson Education.
3. Pandey, I.M. Financial Management: Theory and Practices, Vikas Publishing House.

**Additional Readings:**

1. Khan, M.Y. & Jain, P.K. Financial Management Text Problem and Cases, Tata McGraw Hill Publishing Co. Ltd.
2. Brealey, R. R., Myers. S., Allen, F., & Mohanty, P.. Principles of Corporate Finance. New Delhi: Tata Mc-Graw Hill.
3. Megginson, Smart., & Gitman.. Corporate Finance . Thomson.

## **TRACK 2: ECONOMICS AND PUBLIC POLICY**

### **PAPER-1**

#### **BEC027C: INTRODUCTORY PUBLIC POLICY**

#### **Objectives of the Course:**

1. To understand why certain issues emerge as policy issues for the government to act upon.
2. To understand the different ideas and process of public policy-making.
3. To discuss how different actors play their role in shaping and influencing the policy process.
4. To examine how policy problems and issues are defined, formulated and implemented.
- 5.

<b>Unit 1</b>	Public Policy: Meaning and Scope, Rise of Public Policy as a Discipline, Meta and Meso Analysis of Public Policy, Putting Policy as Public Agenda, Policy-makers and their environment, Policy formation: problems, agendas and formation, Policy impact, evaluation and change.
<b>Unit 2</b>	Analytical Framework: Classical, Neo-Classical, Marxist, Neo-Marxists, Keynesian Perspective, Welfare Economics, Institutional Economics, Behavioral Economics, Stages Approach to Policy process: Theoretical Narratives of Policy Cycle, General Systems Analysis, Social Fabric Matrix
<b>Unit 3</b>	Rationality in policy-making. Contributions of Weber, Simon and Public Choice theorists: Rationale Choice Theory, Public Choice Theory, Maslow's Theory, Cost- Benefit Analysis

<b>Unit 4</b>	Pluralist approach and role of institutions: Pluralism, Institutionalism, New Institutionalism, Complexity, Policy paradox- determining policy objectives equity and justice: Ideologies and institutional constraint, Translating Theory into practice, Exclusion and inclusion in public policy
<b>Unit 5</b>	Models of Policy Implementation—Top-down and Bottom-up Approaches; Street-Level Bureaucracy (Lipsky); Policy Networks and Advocacy Coalitions; Policy Evaluation—Formative and Summative Evaluation, Criteria for Policy Success and Failure; Evidence-Based Policy Making; Role of Civil Society and Media; Contemporary Policy Challenges—Governance, Globalization, Digitalization, and Climate Policy.

### **Course Outcomes:**

Students will

1. Identify and explain the relationship between interests, ideas, and institutions in a policy-process.
2. Clearly articulate and frame a policy issue in a way that calls attention to it and mobilizes action.
3. Develop the competence to identify the key stakeholders on an issue.
4. Develop the capacity to evaluate and recommend a policy response to a specific policy problem.
5. Critically analyse policy implementation and evaluation challenges in contemporary governance contexts.

**MAPPING COURSE OUTCOMES LEADING TO THE  
ACHIEVEMENT OF PROGRAM OUTCOMES AND  
PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome													Program Specific Outcome				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5	
	1	2	3	4	5	6	7	8	9	0	1	2	PSO1	PSO2	PSO3	PSO4	PSO5	
CO1	2								3								1	
CO2		3																
CO3			3									2						
CO4											3		2			2		
CO5																		

**3 = Highly Related; 2 = Medium; 1 = Low**

## **Suggested Readings:**

- Amy, Douglas J. (1984). —Why Policy Analysis and Ethics are Incompatible.|| *Journal of Policy Analysis and Management*. Vol. 3, No. 4 (Summer). Pp. 573-591.
- Anderson, James E (2004) Public Policy making, Houghton, New York.
- Bochel, Hugh and Duncan, Sue 2007 Making Policy in Theory and Practice, The policy Press, Great Britain
- Brewer, G., and deLeon, P. (1983). The Foundations of Policy Analysis. Monterey, Cal.: Brooks.
- Cochran, Charles and Malone, Eloisef, 2007 Public Policy: Perspectives and Choice, Viva Books Pvt Ltd. , New Delhi
- Dani, Anis A and HaanArjan de(ed) 2008 Inclusive States: Social Policy and Structural Inequalities.
- deLeon, P. (1999). The Stages Approach to the Policy Process. In P.A. Sabatier (ed.), Theories of the Policy Process, pp. 19–32. Boulder, CO: Westview Press.
- Fischer, F. (1993). Policy Discourse and the Politics of Washington Think Tanks. In F. Fischer and J. Forrester (eds.), The Argumentative Turn in Policy Analysis and Planning. Durham and London: Duke University Press, 21–24.
- Fischer, F. (2003). Reframing Public Policy: Discursive Politics and Deliberative Practices. Oxford: Oxford University Press.
- Frank Fischer and Gerald Muller (eds) 2007 Handbook of Public Policy Analysis Theory, Politics and Methods.
- Geyer, Rober and Rihani, samir( 2010) Complexity and Public Policy, Routledge, London.
- Guy Peters, 2015, Advanced Introduction to Public Policy, Edward Elgar Publishing House. Cheltenham, U.K.
- Guy Peters, B and Pierre, Jon (2007) Institutionalism Volume.1, vol.2, vol.3, vol.4, Sage Publications.
- Hager, Maarten A and Wagenaar, Hendrik (2003) Deliberative Policy Analysis, Cambridge, University Press.
- Hayden, F. Gregory (2006) Policy making for a good society: The social Fabric Matrix approach to Policy analysis and programme Evaluation.
- Hogwood, B.W., and Gunn, L.A. (1984). Policy-analysis for the real world. Oxford: Oxford University Press.

- Howlett, M., and Ramesh, M. (2003).*Studying Public Policy.Policy Cycles and Policy Subsystems* 2nd Edition. Oxford: Oxford University Press.
- Jenkins, W.I., (1978). *Policy-Analysis.A Political and Organisational Perspective.* London: Martin Robertsen.
- Mathur, K. (2001). Governance and Alternative Sources of Policy Advice: The Case of India. In K.
- Mathur, Navdeep & Mathur, Kuldeep, 2007 Policy analysis in India: Research Bases and Discursive practices in handbook of Policy Analysis : Theory, politics and methods, edited by Fisher Etal., CRC Press, Taylor and Francis Pp. 603 – 617.
- Parsons, Wayne, 2005, *Public Policy: An Introduction to the Theory and Practice of Policy Analysis*, Edward Elgar Publishing Ltd. Cheltenham, U.K.

## **PAPER-2**

### **BEC028C: MARKET FAILURES AND POLICY INTERVENTIONS**

#### **Objectives of the course:**

1. To enhance the understanding of micro-economic concepts for the larger understanding of the policy problems.
2. To develop the case-study methods through the application of economic data and analysis to gauge the gravity of policy problems.
3. To enhance discipline specific competencies relevant to academician, industry, and generic skills.
4. Recognize and apply the special features of externalities & public goods and their implications on the efficiencies of markets and government activities.
5. To enable students to critically evaluate public policies, regulatory mechanisms, and welfare programs using economic reasoning and quantitative evidence.

<b>Unit - 1</b>	Scope and Methods of Public Economics, Economic Analysis of Public Policy, Type of markets-Market Economy and Mixed Economy, Ways of Government Intervention, Equity vs Inequality.
<b>Unit - 2</b>	Alternative Classifications of Public Goods, Optimal Provision of Public Goods, Private Provision of Public Goods, Nash-Cournot Solution, Preference Revelation, Samuelson and Lindahl Equilibrium, Club Goods Model.
<b>Unit - 3</b>	Externalities-Positive and Negative Externalities, Negative Externalities and Social Cost, Choice of Policy Instruments, Pigouvian Tax, Coase Theorem and Private Negotiation (Private Property Solution) Tradable Permits, Subsidy Solution, Externality Solutions and their Problems
<b>Unit - 4</b>	Economic Rationale of Regulation, Concerns of Regulation like Environment, Health and Safety, Network Economies- Bandwagon and Snob effect.
<b>Unit -5</b>	Regulating Rate Structure, Public Utility Pricing, Marginal Cost Pricing and Two-Part tariff, Private Provision of Public Goods. Public goods and markets with asymmetric information.

**Course Outcomes:**

Students will

1. Be able to define the concepts and conditions of resources allocation between different stakeholders.
2. Be able to interpret the main differences between public and private goods, and services, and recognize the economics of externalities.
3. Develop the case studies specific to the public policy problems.
4. Understand the concept and the use of various economic data in achieving society goals.
5. Critically assess public policy instruments, regulatory frameworks, and welfare programs through empirical evidence and economic analysis.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 1	PO 2	PO 1	PSO 1	PSO 2	PSO 3	PSO 4
CO1				1									2				
CO2		2													1		
CO3			3							3							
CO4															3		
CO5			3		2						2					3	

**3 = Highly Related; 2 = Medium; 1 = Low**

## Suggested Readings:

- Arora, Rashmi Umesh (2009), —Globalization and Stages of Development: An Exploratory Analysis», *Review of Urban and Regional Development Studies*.
- Bhattacharya, B.B., S. Sakthivel, —Regional Growth and Disparity in India: A Comparison of pre and post reform decades», Institute of Economic Growth: Delhi, Available at <http://iegindia.org/workpap/wp244.pdf>
- Bradhan, Pranab (2002), —Decentralization of Governance and Development», *Journal of Economic Perspective*, vol. 16, No.4, pp. 185-205.
- Charles Wheelan and Burton G. Malkiel, *Naked Economics: Undressing the Dismal Science* (Norton, 2003).
- David A. Starrett (1988), *Foundations of Public Economics*, Cambridge University Press.
- Dennes C. Muller (2003); *Public Choice III*, Cambridge University Press.
- Jean Hindriks and Gareth D. Myles (2006), *Intermediate Public Economics*, MIT Press.
- John Leach (2004); *A course in Public Economics*, Cambridge University Press.
- Jonathan Gruber, *Public Finance and Public Policy* (Worth Publishers, 2009).
- Kahn Alfred Edward (1988); *Economics of Regulations: Principles and Institution*, MIT Press.
- Kapur, Devesh (2010) —Political Economy of the State», in Niraja Gopal Jayal and PratapBhanu Mehta (2010), *The Oxford Companion to Politics in India*, Oxford University Press: New Delhi.
- Kenneth A. Shepsle, *Analyzing Politics: Rationality, Behavior, and Institutions* (W.W. Norton, 2010), chap. 9.
- Kniesner T.J. (2005); *Economics of Regulation: Principle and Regulations*, MIT Press.
- Kohli, Atul and R. D. Mullen (2003), —Democracy, Growth and Poverty in India», in Atul Kohli, Chung-in Moon and Georg Serenson (2003), *State, Markets and Just Growth: Development in the 21st Century*, United Nations University Press: Japan.
- Kundu, Amitabh, K.Varghese (2010), —Regional Inequality and Inclusive Growth in India under Globalization: Identification of Lagging States for Strategic Intervention», Oxfam India working papers.
- Learmonth, ATA (January, 1960), —Regional Planning in India: Now or Never?», *The*

Economic Weekly Annual.

- M.H. Suryanarayana, Ankush Agrawal and K. SeetaPrabhu (2011), Inequality-adjusted Human Development Index for India's States, UNDP: New Delhi.
- Peter Abelson (2008); *Public Economics: Principles and Practices*, Oxford University Press.
- Purfield, Catriona (2006), —Mind the Gap- Is Economic Growth in India Leaving Some StatesBehind?||, IMF working paper WP/06/103.
- State Action Plan on Climate Change in India: Framing, Processes and Drivers, 2013. (Report on the Round Table Dialogue organized by The Centre for Policy Research).
- Topalova, Petia (2008), —India: Is the rising tide lifting all boats?|| IMF working Papers WP/08/54.
- Viscuss WK (2009); Economics of Regulations and Anti-Trust, Joseph Harrington Press.

### **PAPER-3**

#### **BEC029C: BIG DATA AND PUBLIC POLICY**

##### **Objectives of the Course:**

1. To enhance interdisciplinary understanding with Big-Data.
2. To understand the use of Big-Data in policy making process.
3. To recognize and appreciate the importance of Big-Data and their application in academic, industrial, social, economic and environmental context.
4. Evaluate which data are appropriate to a given research question and statistical need.
5. To enable students to apply data-driven insights in public policy analysis, promoting evidence-based decision-making and sustainable development goals.

##### **Syllabus:**

<b>Unit 1</b>	Introduction to Big Data, Handling and Processing Big Data, Methodological Challenges and Problems, Ethics and Big Data, The Big Data and Public Policy: Inter-relationship and Challenges
<b>Unit 2</b>	Policy, Politics and Governance in Digital Era: Digital Government, Development of E-Governance, E-Democracy, Digital Citizenship, E-Parliament, E-Rulemaking, Digital Nation State.
<b>Unit 3</b>	Biases, Fairness, and Inference, Privacy, Confidentiality, and Ethics
<b>Unit 4</b>	Theoretical Perspectives on Big Data and Society – Big Data as a social construct; datafication of society and its implications; relationship between Big Data, surveillance, and power; theoretical debates on data sovereignty, digital divide.
<b>Unit 5</b>	Case Study Analysis: The Analysis of CMIE, Census, NFHS, NSS, Employment Data and other Economic Data Sets like RBI Data, India Public Finance Statistics.

**Course Outcomes:**

Students will

1. Identify the different data quality frameworks and apply them to public policy problems.
2. Use a broad array of basic computational skills required for data analytics, typically not taught in social science, economics, statistics or survey courses.
3. Identify compelling uses of big data to solve social and economic problems.
4. Develop case studies related to big data and sustainable communities, and gain experience in presenting and defending research.
5. Apply Big Data tools and policy analytics to design, evaluate, and improve evidence-based public policies and governance mechanisms.

**MAPPING COURSE OUTCOMES LEADING TO THE  
ACHIEVEMENT OF PROGRAM OUTCOMES AND  
PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome													Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 1	PO 2	PO 1	PS O1	PS O2	PS O3	PSO 4	PS O5
CO1													2			1		
CO2					1										2			
CO3										3								
CO4										3								
CO5	2	2									2				3		2	

**3=Highly Related; 2=Medium; 1=Low**

### **Suggested Readings:**

- Bollier, David (2010). The Promise and Peril of Big Data. The Aspen Institute Communications and Society Program.
- Cate, Fred H. (2014). The Big Data Debate. *Science* 346(6211): 818-818.
- Cathy O'Neil. (2016). Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Penguin Books.
- Dutcher, Jenna. (2014). What is Big Data? UC Berkeley Data Science Blog.
- Lazer, David, Alex Pentland, Lada Adamic, Sinan Aral, Albert-László Barabási, Devon Brewer, Nicholas Christakis, Noshir Contractor, James Fowler, Myron Gutmann, Tony Jebara, Gary King, Michael Macy, Deb Roy, and Marshall Van Alstyne. (2009). Computational Social Science. *Science* 323(5915): 721-723.
- Lazer, David, Ryan Kennedy, Gary King, and Alessandro Vespignani. (2014). The Parable of Google Flu: Traps in Big Data Analysis. *Science* 343(6176): 1203-1205.
- Lazer, David. (2015). The Rise of the Social Algorithm. *Science* 348(6239): 1090-1091.
- Manovich, Lev. (2012). Trending: The Promises and the Challenges of Big Social Data. *Debates in the Digital Humanities*, edited by Matthew K. Gold. The University of Minnesota Press.
- Matthew J. Salganik. (2017). Bit by Bit: Social Research in the Digital Age. Princeton University Press.
- Press, Gil. (2014). 12 Big Data Definitions: What's Yours? *Forbes* Blog.
- Rob Kitchin. (2014). The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences. SAGE Publications.
- Ulfelder, Jay. (2015).

## **PAPER-4**

### **BEC030C: PUBLIC POLICY ANALYSIS**

#### **Objectives of the Course:**

1. Understand the purpose and value of policy analysis, for both stakeholders and policymakers.
2. Cultivate a policy analysis toolkit while simultaneously critiquing the conventional assumptions that underlie how public policy is analysed in India.
3. Complete a thorough, professional policy analysis project.
4. To develop the skill of writing policy memos, briefs along with academic writing.
5. Develop the ability to integrate ethical reasoning, political feasibility, and institutional perspectives in evaluating and formulating policy recommendations

<b>Unit 1</b>	Introduction to Policy Analysis: Basic Understanding of the Concepts and Skills required for policy analysis, Identifying and diagnosing policy problems along with their symptoms, stakeholders, and decision makers, documenting policy problems; defining the problem and collecting evidence, conceptualizing policy tools, designing policy options/alternatives, and considering appropriate criteria
<b>Unit 2</b>	Decision making under uncertainty, Tradeoffs: Analyzing costs and benefits, Analyzing Equity, Behavioral policy tools: From neoclassical to the nudge.
<b>Unit 3</b>	Policy Writing: Reasons for writing effective policy documents, Significance, Tools of Writings, Lessons and objectives achieved
<b>Unit 4</b>	Writing Policy Briefs, Writings Legislative Briefs, Policy Memos, Case Study for the Students: Writing Workshop
<b>Unit 5</b>	Ideology and Policy: Economic liberalization and recent developments.

#### **Course Outcomes:**

Students will

1. Recognize and articulate the promise and limitations of policy analysis.

2. Critically assess the use of evidence and data in policy analysis practices.
3. Select and apply the appropriate policy analysis techniques, with consideration of given policy problems, contexts, and goals.
4. Effectively communicate, in written and spoken formats, policy analysis procedures and their conclusions.
5. Integrate ethical, political, and institutional dimensions in evaluating real-world policy decisions and their societal impact.

**MAPPING COURSE OUTCOMES LEADING TO THE  
ACHIEVEMENT OF PROGRAM OUTCOMES AND  
PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome															Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO1 1	PO1 0	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5		
CO1	2																			
CO2									1										1	
CO3			3																	
CO4														1		2				
CO5		3	2	2				2						2	3					

6. 3 = Highly Related; 2 = Medium; 1 = Low

**Suggested Readings:**

- —What Are Policy Briefs?|| FAO Corporate Document Repository. United Nations.
- Bardach, Eugene. A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem-Solving. 4th edition. Thousand Oaks, CA: Sage, 2012.
- Behavioural Insights Team. (2016). *Update report*. London: Author. [Please read both forewords, the executive summary, the sections on Health and Wellbeing, Education and Skills, Growth, Employment and Productivity, and two additional sections of your choice.]
- Bemelmans-Videc, M. L., Rist, R. C., & Vedung, E. O. (Eds.). (2011). Carrots, sticks, and sermons: Policy instruments and their evaluation. New Brunswick, NJ: Transaction Publishers. [Chapter 5, skim briefly Chapters 2, 3 and 4.]
- Bertrand, M., Mullainathan, S., & Shafir, E. (2004). A behavioral economics view of poverty. *The American Economics Review*, 94(2), 419-423.
- Dunn, W. (2008). *Public policy analysis: An introduction*. Upper Saddle River, N.J.: Pearson Prentice Hall. Chapter 3: Structuring policy problems.
- Gooden, S. (2015). Chapter 2: The saturation of racial inequities in the United States. *Race and Social Equity: A Nervous Area of Government* (pp. 21-44). New York: M.E. Sharpe.

- Hammond, J., Keeney, R., & Raiffa, H. (2002). *Smart choices: A practical guide to making better life decisions*. New York: Random House. Chapter 7: Uncertainty.
- Head, B. & Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration & Society*, 47(6), 711-739.
- Herman, Luciana. Policy Memos. John F. Kennedy School of Government. Harvard University.
- How to Write a Public Policy Memo. Student Learning Center. University of California, Berkeley.
- Le Grand, J. (1990). Equity vs. efficiency: The elusive tradeoff. *Ethics*, 100(3).554-568.
- Manski, C. (2013). *Public policy in an uncertain world: Analysis and decisions*. Cambridge, MA: Harvard University Press. Chapter 1: Policy Analysis with Incredible Certitude.
- Memo: Audience and Purpose. The Writing Lab and The OWL. Purdue University.
- Mintrom, M. (2012). *Contemporary policy analysis*. New York: Oxford University Press. Chapter 15: Race Analysis.
- Pennock, Andrew. —The Case for Using Policy Writing in Undergraduate Political Science Courses.|| PS: Political Science and Politics 44 (January 2011): 141-146.
- Policy Memo Guidelines. Cornell Fellows Program. Cornell University.
- Policy Memo Requirements and Guidelines, 2012-2013 edition. Institute for Public Policy Studies. University of Denver.
- Salamon, L. (2001). The New Governance and the Tools of Public Action. In Salamon (Ed.). *The Tools of Government: A Guide to the New Governance*, pp. 1-47. New York: Oxford University Press.
- Stone, D. (2011). *Policy paradox: The art of political decision making*. New York: W. W. Norton & Company. Chapters 1: The Market and the Polis, Chapter 7: Symbols, and Chapter 8: Numbers.
- Thaler, R., Sunstein, C., & Balz, J. (2013). Choice architecture. In E. Sharif (Ed.), *The Behavioral Foundations of Public Policy* (pp. 428-439). Princeton, NJ: Princeton University Press.
- Thrall, A. Trevor. How to Write a Policy Memo. University of Michigan--Dearborn, 2006.

### **Suggested Case Studies:**

- Michelle Rhee and the Washington DC Public Schools.
- Parking in San Francisco.
- The challenge of adapting to climate change: King County brings local action to a global threat.

## **PAPER-5**

### **BEC032C: PUBLIC POLICY CAPSTONE**

#### **Objectives of the Course:**

1. To apply the knowledge acquired by learning.
2. To understand the policy analysis.
3. To analyse, synthesize, think critically, solve problems, and make decisions.
4. To communicate and interact productively with a diverse and changing workforce in contributing to the public policy process.
5. To cultivate the ability to integrate interdisciplinary perspectives and ethical considerations into the formulation of actionable policy recommendations.

#### **Course Outcomes:**

Students will

1. Identify an organizational, program, or policy issue, problem, or concern, and present relevant contextual and background material.
2. Be able to articulate a research question regarding this issue; and can review relevant public policy literature, including theoretical frameworks and best practices.
3. Be able to select appropriate data sources, data collection methods, and analytical methods; analyse data and interpret these results.
4. Develop conclusions and recommendations derived from the analytical findings; and complete a final written report and oral presentation, which effectively communicates this capstone research project.
5. Demonstrate the ability to integrate multidisciplinary insights, ethical reasoning, and stakeholder perspectives in developing sustainable policy solutions.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1		2															1
CO2					2											2	
CO3						1					2			2			
CO4												3					
CO5					2				3						2		

**3 = Highly Related; 2 = Medium; 1 = Low**

**PAPER-6**  
**BEC019C: PUBLIC FINANCE**

**Course Objectives**

1. To provide students with in-depth understanding of the Public Finance
2. To understand the classification and the basic principles of public expenditure.
3. To analyse the various sources of public revenue and its implications.
4. To familiarize students with the structure and process of budgeting and fiscal federalism in India.
5. To evaluate the role of public debt and fiscal policy in macroeconomic stabilization and sustainable development.

<b>UNIT I</b>	Meaning and Scope of Public Finance; Distinction between Private and Public Finance, Public goods and Private goods. Principle of Maximum Social Advantage.
<b>UNIT II</b>	Meaning, Classification and Principle of Public Expenditure; Effects of Public Expenditure on production and distribution; Trends in Public Expenditure and Causes of Growth of Public Expenditure in India
<b>UNIT III</b>	Sources of Public Revenue; Taxation: Meaning and Classification of Taxes; Principles of Taxation: Benefit and Ability to Pay Approaches; Impact and Incidence of Taxes; Effects of Taxation on production and distribution
<b>UNIT IV</b>	Public Budget: Economic and Functional Classification of Budget; Preparation of Budget in India; Centre-State Financial Relations in India; Fiscal Federalism
<b>UNIT V</b>	Public Debt: Meaning, Objectives, and Classification—Internal and External Debt; Burden and Management of Public Debt; Debt Sustainability; Redemption of Debt; Fiscal Policy—Objectives, Instruments, and Role in Economic Stabilization; Deficit Financing—Concepts and Implications; Fiscal Consolidation and Recent Fiscal Policy Trends in India.

**Course Outcome**

Students will

1. Be able to understand the various concepts of Public Finance.

2. Be able to analyze the Public Expenditure, its effects and trends.
3. Be able to know the various approaches to taxation as a source of public revenue.
4. Acquire knowledge of Budget formulation with reference to India and its pre- requisites.
5. Assess the role of public debt and fiscal policy in promoting macroeconomic stability, growth, and sustainable public finance.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAMSPECIFIC OUTCOMES:**

Course Outcome	Program Outcome												Program Specific Outcome			
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4
CO1	2															
CO2					1										2	
CO3			2					2								
CO4				1		3										3
CO5																

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. J. Hindriks, G. Myles: Intermediate Public Economics, MIT Press, 2006.
2. H. Rosen, T. Gayer: Public Finance, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, Economics of the Public Sector, W.W. Norton & Company, 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, Public Finance in Theory & Practice, McGraw Hill Publications, 5th edition, 1989. Bagchi, Amaresh (ed) Readings in Public Finance, OUP.
5. Report of the Finance Commission (Latest).
6. Economic Survey, Government of India (Latest)



**PAPER 7**  
**BEC031C: IMPACT EVALUATION**

**Course Description:**

Through the course, the student will be able to build understanding of knowledge about the fields of policy evaluation, how government programmes are evaluated, programme monitoring strategies adopted by official and non-governmental evaluators, and what are various evaluation units and their domains of evaluation in various programmes citing varied practices from India and the world.

**Objectives of the Course:**

1. To understand the meaning and concept of impact assessment.
2. To enhance the understanding of evaluation process policy/programme implementation.
3. To apply qualitative and quantitative research in evaluation of policy/programme in India.
4. To enhance the knowledge application that would create different type of evaluation professionals.
5. To analyse the different phases of outcome monitoring and outcome evaluation.

**Syllabus:**

<b>UNIT I</b>	Fundamentals of Evaluation: Meaning, Brief History, Characteristics, Significance, Nature and Types of Evaluation
<b>UNIT II</b>	Approaches of Evaluation: Goal Based, Goal Free, Theory Based/Logic Model, Utilization, Collaborative, Balanced Score Card, Appreciative Inquiry, External, Kirkpatrick and CIPP Model, Cost-Benefit Analysis, Cost-Effective Analysis.
<b>UNIT III</b>	Impact Evaluation: Key Concepts, Theory of Change, Evaluation Designs and Methods, Experimental Design- Randomized Controlled Trials (RCTs), Quasi-Experimental Designs – Judgemental Matching, Propensity Score Matching, Propensity Score Matching (PSM), Good Practices.
<b>UNIT IV</b>	Phases of Program Evaluation and Tools, Program Monitoring Meaning, Types of Program Monitoring: Process Monitoring, Outcome Monitoring and uses. Process Monitoring versus Process Evaluation.

<b>UNIT V</b>	Phases of Outcome Monitoring, Outcome monitoring versus outcome evaluation, Strengths and limitations of outcome monitoring.
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### **Course Outcomes:**

Students will

1. Be able to plan an impact assessment of various policies.
2. Be able to describe the various levels of impact assessment.
3. Identify and/or develop various indicators for impact assessment.
4. Identify how to measure the impact of public policies or programme.
5. Be able to analyse the different phases of outcome monitoring and outcome evaluation.

### **MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

<b>Cours e Outco me</b>	Program Outcome													Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PS O1	PS O2	PS O3	PSO 4	PS O5	
CO1		2											1					
CO2							3								3			
CO3													1					
CO4									1								1	
CO5				3										3				

### **Suggested Readings:**

- Bringhan, Richard D and Claire L. Felbinger (2002), Evaluation in

Practice: A Methodological Approach, New York: Chattam House Publishers.

- Carol H. Weiss, Evaluation: Methods for Studying Programs and Policies, 2<sup>nd</sup> Edition, Prentice Hall; 2<sup>nd</sup> edition (December 18, 1997).
- Ian Graham Ronald Shaw, Jennifer Greene, Melvin M Mark. (2006), The SAGE Handbook of Evaluation, SAGE Publications Ltd.
- Nagel, Stuay S. (ed) (2002), Handbook of Public Policy Evaluation, New Delhi: Sage Publication.
- Peter H. Rossi, Mark W. Lipsey, Howard E Freeman, Evaluation: A Systematic Approach, Edition 7, SAGE, 2004.

## TRACK 3: CONTEMPORARY ECONOMICS

### **PAPER 1**

#### **BEC033C: ECONOMICS OF INFRASTRUCTURE**

##### **Course Objectives**

1. To provide students with a thorough grounding in the key concepts of Infrastructure economics.
2. To study the necessity of infrastructure & its management
3. To illustrate how these concepts and standard economic tools can be used to analyse Infrastructure-related Theory and policy issues.
4. To be able to apply this knowledge to the analysis of specific infrastructure economics issues in India.
5. To develop an understanding of the challenges and opportunities in sustainable and green infrastructure development in the context of technological and institutional reforms.

<b>UNIT-I</b>	Infrastructure and Economic Development. Infrastructure as a public good. Social and Physical Infrastructure. Special Characteristics of Infrastructural Facilities. Green Infrastructures. Economics of scale of Joint Supply.
<b>UNIT-II</b>	Marginal Cost Pricing vs Other Methods of Pricing in Public Utilities. Cross Subsidization-Free Prices, Equity and Efficiency. Modal Cost of Transportation. Principle of Pricing, Public Transportation for Sustainable Development.
<b>UNIT-III</b>	Six Modern Transport System- Metro, Air Connectivity, Green Buses, Railways. Marine and River and Delivery by Drones. Transport Management in India. Future Development in Transport Sector.
<b>UNIT-IV</b>	Price Determination. Infrastructure Development and Reforms in Communication. Characteristics and Problems of Postal Services. Fixation of Postal Rates in India. Significance of Telephone and Postal Services in India.

<b>UNIT-V</b>	Problems of Different Modes of Transport. Infrastructure Development and Reforms in Transport Sector in India. Structure of Telecommunication Sector. Growth of Digital Communication Networks
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### Course Outcomes

Students will

1. Be exposed to the concepts and models related to Infrastructure.
2. Understand basic Economics theories and models required for infrastructure sector understanding.
3. Be able to demonstrate clear understanding of concepts Infrastructure economics and policy.
4. Exhibit the ability to integrate technical, economic, social and regulatory frameworks for Infrastructure sector planning and resource management.
5. Develop the competence to evaluate infrastructure policies, reforms, and sustainability initiatives in the Indian and global context.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome													Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2	2										2						
CO2			3			2								2				
CO3	2					2				2								
CO4									3			2						
CO5	2	2						2						2				

**3 = Highly Related; 2 = Medium; 1 = Low**

## **Essential Readings**

1. Dash L.N., Infrastructure Development and the Indian Economy. Atlantic Publisher, New Delhi.
2. Samanta P.K., Mohanty A.K., Ports Infrastructure and Economic Development.
3. India Infrastructure Report, OUP India Co. (Oxford)
4. Report of Ministry of Human Resources and Development

**PAPER 2**  
**BEC034C : DEMOGRAPHY**

**Course Objectives**

1. Identify and compare the advantages and disadvantages of the different sources of demographic data.
2. Describe basic demographic indicators and elaborate on their computation and interpretation.
3. Introduce population projection calculations and analysis.
4. Describe the distribution of a population using various demographic characteristics.
5. Evaluate demographic transition patterns, fertility and mortality dynamics, and their implications for economic development and public policy.

<b>UNIT-I</b>	Introduction to Population Study: Its Nature and Scope; Relationship with other disciplines; Sources of Demographic Data: Census of India; Vital Registration System, Sample Surveys; Dual report system; Population registers; International Publications. Population growth in India. Recent census findings on demographic characteristics.
<b>UNIT-II</b>	Population theories: Malthus; Optimum population theory; Theory of Demographic Transition; Fertility: Basic Terms; sources of Data; Basic Measures: Crude Birth Rate, General Fertility Rate, Age specific fertility rate, Total Fertility Rate; Measures of Reproduction: Gross Reproduction Rate, Net Reproduction Rate.
<b>UNIT-III</b>	Bongaarts Proximate Determinants of Fertility; Social theories of fertility: Social Capillarity; Theory of diffusion, Theory of change and response, Liebenstein theory; Becker's theory, Caldwell wealth flows theory, UN Threshold hypothesis.
<b>UNIT-IV</b>	Mortality: Basic Concepts and terms; Measures: Crude Death rate, Age specific death rate, Infant mortality rate; Maternal mortality; Causes of death; Reasons for mortality decline in developing countries. Mosley and Chen's Framework for Child Survival.
<b>UNIT V</b>	Morbidity: Concept and need; Measures: Incidence rate, Attack rate, Secondary Attack rate, Prevalence rate, Case fatality rate. Comparison of Demographic and epidemiological transition

## Course Outcomes

Students will

1. Understand the basics of demography.
2. Understand the core social demographic variables, and how these variables influence population growth, composition, and structure
3. Use demographic tools in understanding public health issues Knowledge attitude and practices.
4. Analyze and find out the reasons for decline in mortality rate and its comparison with other countries of the world.
5. Identify appropriate sources of data, perform basic demographic analyses using various techniques and ensure their comparability across populations.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 0	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1	3			2				2		2			1		2		
CO2		2					2		2							2	
CO3																	
CO4	1						2				1						3
CO5		2	2								2					3	

**3 = Highly Related; 2 = Medium; 1 = Low**

## Essential Readings

1. Bhende, Asha A. and Tara Kanitkar (2004) Principles of Population Studies, Mumbai: Himalaya Publishing House, Chapter8, Pp.241-288.
2. Jacob 8S. Siegel and David a. Swanson (2004): The Methods and Materials of Demography, Second Edition, Chapters 1, 2, 3, 7, 9,10, Elsevier Science, USA.
3. John Weeks (2005): Population: An Introduction to Concepts and Issues, Wordsworth Learning. Singapore 9" edition.

4. Pathak, K.B. and F.Ram (1998) Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House, Chapter 4 Pp.108-153 and Chapter8, Pp.339-372.
5. National Family Health Surveys.
6. Srinivasan K. (1998) Basic Demographic Techniques and Applications. New Delhi: Sage Publications. Chapter IV, Pp.59-85
7. United Nations, (1973): The Determinants and Consequences of Population Trends, Vol. I, Population Studies, No. 50, Chapter VII, New York. United Nations, World Population Ageing, 1950-2050

**PAPER 3**  
**BEC063A :GENDER ECONOMICS**

**Course Objectives**

1. To provide an understanding of basic concepts in gender economics such as invisibility of women's work.
2. To introduce students to the debates on gender disparity and gender equity
3. To help students examine the role of international development agencies in measuring and addressing gender disparity
4. To enable students to analyse gendered dimensions of labour markets, social security, and public policy, with a focus on empowering women through inclusive economic frameworks.
5. To develop critical thinking and research-based understanding of the intersection between gender, development, and macroeconomic policies.

<b>UNIT I</b>	Gender and Development: Gender division of work; Invisibility of women's work; Women and development (WAD); Conceptualizing and measuring women's contribution to national income and growth.
<b>UNIT II</b>	Sector Specific Gender Issues: Significance of Women's education; Gender gaps in educational achievements; Policies and Programmes for promoting women's education; Women in agriculture; Women in industry; Women in services; Gender dimensions of International trade; housewifisation, feminization of work.
<b>UNIT III</b>	Gender, Labour, and Policy: Gender wage gap and occupational segregation; Informal sector and unpaid care work; Labour force participation trends and gendered implications of labour laws; Social security provisions and gender; Gender budgeting and public policy interventions in India.
<b>UNIT IV</b>	Role of International Organization: Role of UNDP and WEF in developing countries in gender policy. Measuring Gender Gaps: Gender related development indices (Gender Development Index and Gender Empowerment Measure); HDI, GDI, GGI, GEE. Gender dimension of national health policies and programmes; National Rural Health Mission; Reproductive and Child Health Programme; Women's Rights.

<b>UNIT V</b>	Gender dimension of national health policies and programmes; National Rural Health Mission; Reproductive and Child Health Programme; Women's Rights.
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### Course Outcome

Student will

1. Developed an understanding of the basic issues affecting women and their contribution towards the economy.
2. Examined the various measures and policy debates with regard to gender gap.
3. Considered various factors affecting women in specific sectors
4. Understanding the role of various international organisations in reducing gender disparity.
5. Study the various National Health Policies and its Impact

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

<i>Course Outcome</i>	Program Outcome													Program Specific Outcome				
	P O1	PO 2	PO 3	P O4	P O5	P O6	P O7	P O8	P O9	PO 10	PO 11	PP 12	PS O1	PS O2	PS O3	PS O4	PS O5	
CO1	2	2		3					3		2		3		2			
CO2	1		2			3				2		2			2			
CO3		3			3		2						1				3	
CO4	2				2				2					2				
CO5		3		2					1						2			

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings:**

1. Arputhamurthy, S. (1990), *Women Work and Discrimination*, New Delhi: Ashish Publishing House.
2. Bosarup, E. (1970), *Women's Role in Economic Development*, George Allen and Unwin, London.
3. Devasia, L. (1994), *Empowering Women for Sustainable Development*, Ashish Publishing House, New Delhi.
4. Eswaran, M. (2014), *Why Gender Matters in Economics*, Princeton University Press.
5. Jacobsen, J. (2007), *The Economics of Gender*, Wiley-Blackwell.
6. Neetha, N (2006), 'Invisibility continues? Social security and unpaid women workers' *Economic and Political Weekly*, 41(32), pp. 3497-3498
7. Pal, M., P. Bharati, B. Ghosh, and T.S. Vasulu (eds.) (2011), *Gender and Discrimination Health, Nutritional Status, and Role of Women in India*, New Delhi: Oxford University Press.
8. Sen, A. and J. Drèze (1995), *India: Economic Development and Social Opportunity*, Oxford University Press.

## **PAPER 4**

### **BEC055C : ENVIRONMENTAL ECONOMICS**

#### **Course Objectives**

1. To introduce the students to concepts, methods and policy options in managing the environment using tools of economic analysis.
2. To enable the students to understand the economic implications of environmental policies and environmental issues.
3. To understand the economic implications of environmental policies through practical applications.
4. To equip students with the ability to critically evaluate and design market-based and regulatory instruments for addressing environmental challenges at local, national, and global levels.
5. To develop analytical skills for assessing sustainable development strategies and integrating environmental valuation into policy formulation and economic planning.

<b>UNIT I</b>	The Environment and Economics: Interaction between economy and environment. Genesis of Environmental Problems: Market Failures, Public Goods and Externalities
<b>UNIT II</b>	Regulating the Environment: Instrument Choice Command and Control methods: Standards, Technology Mandates Market based incentives: Pigouvian Taxes, Tradable Permits, Property Rights, Liability Rules Incentives and Market Structure, Coase Theorem
<b>UNIT III</b>	Valuation of Environmental Goods and Services: Revealed Preference Methods: (a) Hedonic Pricing, (b) Household Production Function approach - defensive cost, health cost and travel cost methods  The direct method of environmental valuation: Stated preference: Contingent valuation method.;
<b>UNIT IV</b>	Sustainable Development Concepts; Measurement; Indicators of sustainable development; Trade-off between environmental protection and economic growth; Environmental Kuznets' curve.  Measuring the Benefits of Environmental Improvements Non-Market values and measurement methods; risk assessment and perception.
<b>UNIT V</b>	Role of Information in environmental decision making and regulation: Asymmetric information, Uncertainty, Public Disclosure, Moral Hazard and Enforcement, Eco-labelling Green markets, Corporate social responsibility; Incentives for technical change; Porter's Hypothesis.

## Course Outcomes

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

1. Discuss the environmental issues in relation to the theory of externalities, public goods, and welfare.
2. Illustrate and examine economic principles concerning the choice of instruments for controlling pollution and the relative strength and weaknesses of environmental policies based on command-and-control vis-à-vis market-based instruments.
3. Discuss various approaches and methods developed for valuing environmental goods and services.
4. Examine issues in the contemporary environmental discourse from an economists' point of view.
5. Integrate environmental valuation and sustainability indicators into economic decision-making and evaluate their implications for long-term sustainable development.

## MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome													Program Specific Outcome				
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	
CO1	2					1							3					
CO2		2							3									
CO3			1	2													2	
CO4												1						
CO5	1					1		2								2		

3 = Highly Related; 2 = Medium; 1 = Low

## Essential Readings

1. Bhattacharya, R. N. (2001). *Environmental Economics*. (1st ed.). New Delhi: Oxford India Paperbacks.
2. IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report (2014).
3. Kenneth Arrow et al., (2004). Are We Consuming Too Much. *Journal of Economic Perspectives*, 18(3), 147-172.
4. Millennium Ecosystem Assessment Report. (2005). *Ecosystem Services and Human Well-being: Synthesis*. Washington DC: Island Press.

## **PAPER-5**

### **BEC036C: INDUSTRIAL ECONOMICS**

#### **Course Objective**

1. To develop the students' comprehension of both industrial models and their links in practice, with a special accent on government policy.
2. To provide the various concepts and scope of Industrial Economics in Indian context.
3. To discuss the various stages of development in Industrial Sector.
4. To acquaint students with financial, productivity, and locational aspects of industries to evaluate industrial performance.
5. To equip students with analytical insights into industrial policy, reforms, and challenges of competitiveness in a globalised economy.

<b>UNIT I</b>	Industrial Organization and Ownership Structure Nature and scope of Industrial Economics; Concepts in industrial Economics; industry, market, market structure, market conduct and Market Power; Organizational Structure of a Firm; Objectives of firms.
<b>UNIT II</b>	Market Structure and Market Concentration, An overview of standard forms of market structure: Concept of Workable Competition; Definition of market concentration; Concentration indices; Market power measures; Concentration and market performance; Vertical integration: Types of vertical integration; Incentives to vertical integration; Effects of vertical integration for the economy; Merger: types; Motives for merger and implication for public policies.
<b>UNIT III</b>	Industrial Finance and Location Analysis, need of finance; Types of finance; sources of finance; Choice of funding; Development Banking: IDBI, IFCI and SFCs; Factors Influencing Location of Industries; Theories of Industrial Location: Weber, Sargent Florence; Industrial location trends in India.
<b>UNIT</b>	Industrial Productivity, Concept and measurement of productivity; Empirical evidence of productivity in Indian industries; Industrial sickness; Under-utilization of

<b>IV</b>	capacity; factors accounting for it and consequences.
<b>UNIT V</b>	Trends and Patterns of Industrial Growth in India—Pre- and Post-Reform Periods; Industrial Policy Resolutions (1948, 1956, 1977, 1980, 1991); Role of Public and Private Sectors; Small-Scale and MSME Sector; Liberalization, Privatization, and Globalization—Impact on Industrial Structure and Competitiveness; Emerging Challenges—Infrastructure Bottlenecks, Environmental Concerns, and Industrial Sustainability.

### **Course Outcomes**

Student will

1. Explain the concepts and scope of Industrial Economics and understand its relevance to economic development.
2. Analyze market structures, industrial organization, and competitive behavior among firms.
3. Evaluate the role of industrial finance, development banking, and location theories in shaping industrial development.
4. Assess industrial productivity and identify key challenges affecting industrial efficiency and performance.
5. Critically examine industrial policies, reforms, and globalisation trends to understand the evolution and competitiveness of Indian industries.

**MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF  
PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcome	Program Outcome															Program Specific Outcome				
	P O1	P O2	P O3	P O4	P O5	P O6	P O7	P O8	P O9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5			
CO1	2											2								
CO2		3												2						
CO3				2													2			
CO4		3												3						
CO5		3								2						2+-				

**3 = Highly Related; 2 = Medium; 1 = Low**

**Essential Readings**

1. Ahluwalia, I. J. (1985). Industrial Growth in India: Stagnation since the Mid- Sixties. , New Delhi: Oxford University Press.
2. Cable, J. R. (1994). Current Issues in Industrial Economics. London: Macmillan. Ferguson, P. R., & Ferguson, G. (1994). Industrial Economics: Issues and Perspectives. New York: NYU Press.
3. Hay, D. A., & Morris, D. J. (1991). Industrial Economics and Organization: Theory and Evidence. Oxford: Oxford University Press.
4. Howe, W. S. (1978). Industrial Economics: An Applied Approach. London: Macmillan. Martin, S. (1994). Industrial Economics: Economic Analysis and Public Policy. New Jersey: Prentice Hall.
5. Narayan, B. N. (1997). Industrial Economics: A Special Study for Students of MBA, M. Com., and MA. Bengaluru: Anmol Publications.

## **PAPER-6**

### **BEC025C: INTERNATIONAL TRADE IN AGRICULTURE**

#### **COURSE OBJECTIVES**

1. To provide insight into theoretical aspects and policy related issues in international trade in agricultural commodities.
2. To acquaint with various principles and theories of international trade and trade patterns.
3. To provide insights of AoA under WTO and its impact on agricultural trade.
4. To introduce issues relating to Indian agricultural trade and export import procedures.
5. To understand emerging trends in sustainable trade, climate policy, and digital technologies shaping global agricultural markets.

<b>UNIT I</b>	Importance of Agriculture in development, trade and agriculture, Inter-regional verses international trade- importance of trade, case for free trade and for protectionism- globalization and agriculture –case of free trade and for protectionism in case of agriculture.
<b>UNIT II</b>	Mercantilist doctrine of balance of trade - Adam Smith and absolute advantage theory of trade -Ricardo and comparative advantage, its limitations; Comparative advantage in Heckscher Ohlin Model - Factor price equalization theorem - Factor intensity reversal - the empirical evidence on Heckscher Ohlin theory - the Leontief Paradox. Stolper-Samuelson Theorem – Rybczynski Theorem- Trade theories and empirical evidence relating to trade patterns, applicability to India. Recent explanations of the basis of trade in terms of technological lead, domestic market size and product cycle approach–Linder's hypothesis-Gravity models- empirical evidence.
<b>UNIT III</b>	Brief history of GATT- provisions relating to agri trade- factors leading to establishment of WTO basic principles- functions and organization -Agreement on Agriculture - main provisions – market access- domestic support - export subsidies-special and differential treatment, sanitary and phyto-sanitary provisions, export standards, TRIPS, various rounds and Doha impasse - emergence of various country groups /alliances and their participation in negotiations -Issues for further negotiations- implications of WTO provisions on Indian Agriculture - reduction commitments for India.

<b>UNI T IV</b>	Formation of regional trade blocks- reasons, types and performance – impact on trade. Competitiveness of Indian Agriculture, measures of competitiveness, competitiveness of various crops, domestic and international prices, competitiveness and commodity trade flows, measures for improving competitiveness of Indian exports- policy recommendations.
<b>UNI T V</b>	Sustainable and inclusive agricultural trade; climate change and agri-trade linkages; carbon border adjustments and green trade policies; digital agriculture, e-commerce, and blockchain applications in agri-trade; global food value chains and resilience; role of international organizations (FAO, IFAD, UNCTAD) in promoting fair trade; future prospects of Indian agriculture in the global market.

## COURSE OUTCOMES

Students will

1. Know about the inter-regional and international trade and their importance.
2. Analyse various theories of International Trade and their relevance to the Agricultural sector.
3. Have insights of AoA under WTO and its impact on agricultural trade.
4. Develop insight for issues relating to Indian agricultural trade and export import procedures.
5. Critically examine emerging challenges and opportunities in sustainable and digital agricultural trade.

### MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcome	Program Outcome												Program Specific Outcome				
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5
CO1								2				1					
CO2			2										2				
CO3	3				1												
CO4				3													3
CO5																	

3 = Highly Related; 2 = Medium; 1 = Low

### **Suggested Readings**

- Bhalla, G.S. (2004), Globalisation and Indian Agriculture, State of the Indian Farmers, Vol.19, Academic Foundation, New Delhi.
- *Chadha G. K. (2003), WTO and Indian Economy. Deep and Deep Publications.*
- *Datta Samar K. and Satish Y. Deodhar (2001), Implications of WTO Agreements for Indian Agriculture, Oxford and IBH Pub. Co., New Delhi*
- Hooda and Gulati (2007), WTO Negotiations on Agriculture and Developing Countries, Oxford University Press, New Delhi
- *Gulati, Ashok and Tim Kelley (1999), Trade liberalization and Indian Agriculture: Cropping Pattern Changes and Efficiency Gains in Semi-Arid Tropics, Oxford University Press in New Delhi, New York.*
- Vashisht A. K. and Singh Alka (2003), WTO and New International Trade Regime- Implication for Indian Agriculture. Advance Publishing Concept.
- Krugman and Obstfield (2009), International Economics; Theory and Practice Pearson Publications, New Delhi.

## **PAPER-7**

### **BEC025B: MANAGERIAL ECONOMICS**

#### **Course Objectives**

1. To understand the various concepts related to managerial economics.
2. To integrate the basic concepts of economics with the tools of mathematics and statistics in order to analyse and make optimal business decisions.
3. To acquire knowledge of Capital budgeting and its methods.
4. To enable students to apply economic reasoning to decision-making under uncertainty, risk, and strategic business environments.
5. To enable students to apply economic reasoning and decision-making tools under conditions of risk, uncertainty, and competitive market structures.

<b>UNIT 1</b>	Demand, Cost and Profit Analysis, Demand for durable and non-durable products, demand forecasting techniques, Cost estimation, Cost-volume-profit analysis (break even analysis)- objectives and assumptions; determination of breakeven point, limitations of c-v-p analysis
<b>UNIT II</b>	Pricing Policies and practices, Factors governing prices, price discounts and differentials, price forecasting.
<b>UNIT III</b>	Capital Budgeting, meaning, need for capital budgeting, different steps in capital budgeting, Capital budgeting appraisal methods – payback method, accounting rate of return method, net present value method, interest rate of return method, benefit cost ratio method. Capital rationing, alternative methods of financing investments

<b>UNIT IV</b>	Cost of capital, Cost of debt capital, cost of share capital, cost of equity capital, cost of retained earnings. Inventory Management, Inventory costs, concepts of average inventory, various inventory models- economic order quantity, optimum number of orders per year, optimum number of days supply per order.
<b>UNIT V</b>	Meaning and distinction between risk and uncertainty; risk analysis in managerial decisions; decision tree analysis and expected value approach; sensitivity and scenario analysis; game theory and strategic behaviour of firms; cost-benefit trade-offs in uncertain environments; behavioural insights in managerial decision-making.

## **Course Outcomes**

### **Student will**

1. Understand the roles of managers in firms.
2. Be able to make the internal and external decisions to be made by managers.
3. Be able to analyse the demand and supply conditions and assess the position of a company in terms of money, cost, inventory management etc.
4. Acquire knowledge regarding capital budgeting techniques and its methods.
5. Evaluate managerial decisions under uncertainty using tools such as decision trees, game theory, and risk analysis.

**MAPPING COURSE OUTCOMES LEADING TO THE  
ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM  
SPECIFIC OUTCOMES:**

<i>Course specific Outcome</i>	Program Outcome															Program Specific Outcome			
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 10	P O 11	P P 1	PS O 1	PS O 2	PS O 3	PS O 4	PS O 5		
CO1	2												3						
CO2		3												2					
CO3		2						1				1							
CO4	3															2			
CO5																			

**3 = Highly Related; 2 = Medium; 1 = Low**

### **Essential Readings**

1. Varshney R.L., and Maheshwari K.L. – Managerial Economics, Sulatn Chand, New Delhi
2. Keat P. G. and Young P.K.Y – Manegerial Economics, Pearson Education, N Delhi]
3. Mehta P.L - – Managerial Economics, Sulatn Chand, N Delhi
4. Samuelson W.F and Marks S,G - – Managerial Economics, Wiley Student Education
5. Clarke T. International Corporate Governance, Routledge.

