

## Course Outcome for B.A./B.Sc. (Major) in Economics

<b>Semester I</b>	
Type of Course: MAC1	
<b>Name of Course: Introductory Microeconomics</b>	
<b>Course Objective:</b> After completion of the course the learners will be able to Learn the basic idea of Microeconomics in particular and Economics in general	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Exploring the subject matter of Economics</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● To study Scope and Method of Economics</li> <li>● Understanding the Principles of Microeconomics</li> <li>● Explaining Interdependence and the Gains from Trade</li> <li>● Learning Reading and working with graphs</li> </ul>	<ul style="list-style-type: none"> <li>● Students will learn concepts like wants, scarcity, competing ends and choice – which are basics to define Economics. Students will learn to answer basic economic questions involving microeconomics and macroeconomics.</li> <li>● Students shall gain knowledge on principles of individual decision making and principles of economic interactions. Using concepts of trade off, opportunity cost, efficiency, marginal changes and cost-benefit they shall be able to explain how trade, market economy, property rights, market failure, externality and market power occurs</li> <li>● With the help of production possibilities frontier and increasing costs concepts basis of why trade occurs and gains from trade can be understood</li> <li>● Reading and working with graphs will make the course matter easy to understand</li> <li>● Students will learn to distinguish between market competitiveness, goods and factor markets, free and controlled markets, Market and non-market sectors, public and private sectors, economies- free market, command and mixed economy</li> </ul>

<p><b>Unit 2: Demand and Supply: How Markets Work</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Understanding the elementary theory of demand and supply</li> <li>● Knowing how market prices for goods are determined</li> <li>● Learning how market adjustments take place without Government</li> <li>● Understanding how market economies evolved and works</li> <li>● Learning the concept of elasticity; its methods of calculations</li> <li>● Knowing the determinants of elasticity</li> <li>● Evaluating its importance through case studies</li> </ul>	<ul style="list-style-type: none"> <li>● Students shall learn the determinants of household and market demand – when and how the changes in such demand takes place</li> <li>● Clarity shall be gained on factors affecting supply and their role in influencing individual and market supply</li> <li>● Knowledge of demand and supply conditions in an economy the students shall be able to know how equilibrium prices in a competitive market is determined</li> <li>● The above stated knowledge shall in turn help the students to know how to allocate economy's scarce resources</li> <li>● In this unit students shall learn how guided by self-interest of economic agents goods and services are bought and sold in a market through the price system</li> <li>● Insights on how different markets operate are also gained</li> <li>● This unit will help the students to understand the driving force behind formulation of government policies, factor price determinations and how business firms make decisions regarding prices and amount of goods and services to be produced</li> <li>● Applying the concept to real life economic situations shall improve the understanding of the students</li> <li>● Role and need of government intervention is also introduced in this unit in gist</li> </ul>
<p><b>Unit 3: Consumer Theory</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Learning the cardinal utility approach</li> <li>● Learning to derive the consumer's demand from cardinal utility theory</li> <li>● Knowing the limitations of this theory</li> <li>● Knowing consumer's preference through ordinal approach of utility theory</li> <li>● Learning to construct consumer's utility function from preference ordering</li> <li>● Learning to derive consumer's demand from ordinal approach of utility theory</li> <li>● Learning compensating and equivalent</li> </ul>	<ul style="list-style-type: none"> <li>● This section first try to make students understand that how consumer's utility is measured in terms of money</li> <li>● It then tries to make an elaboration of consumers demand and hence an understanding of consumer's preference and choice</li> <li>● However, as this theory works under very restrictive conditions, hence students are then elaborated with the ordinal utility theory</li> <li>● This is helpful for the students to understand the logical reversal of the neo- classical theory – from preference to utility – as opposed to the cardinal utility theory – from</li> </ul>

<p>variation: Slutsky equation</p> <ul style="list-style-type: none"> <li>• Understanding labour-leisure choice problem and labour supply</li> <li>• Choice under uncertainty – utility function and expected utility, risk aversion and risk preference</li> <li>• Inter-temporal choice (saving and borrowing)</li> <li>• Revealed preference</li> </ul>	<p>utility to preference</p> <ul style="list-style-type: none"> <li>• With the help of consumer’s preference ordering and the budget constraint that consumer faces, students can get an intuitive idea of how an economic agent’s (consumer) psyche actually functions in a market driven structure</li> <li>• From the equilibrium of the consumer, students might get an idea of consumer’s choice problem when given with a number of bundles of commodities</li> <li>• Through the mathematical and diagrammatic techniques students can formally elaborate their intuitions regarding the impact of a price change which can be further decomposed into change in the rate of substitution between commodities and change in the real income</li> <li>• Students also get the concept of lottery and what risk means. Thus they now are able to select among different lotteries according to their preferences</li> <li>• This unit develops the fundamental understanding of labour supply which follows from consumer’s choice decision vis-à-vis his/her decision to labour, instead of enjoying leisure time, in order to earn income</li> <li>• This course also makes the students to deal with more realistic problems of consumer’s decision making problem regarding their spending habits: today or in future. Also various investment decisions involve intertemporal choice, which the students are now well equipped to deal with</li> <li>• Revealed preference theory gives the students a scientific explanation to use the behaviouristic method in order to derive the demand theorem and establish the law of demand</li> </ul>
<p><b>Unit 4: Production and Costs</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Understanding technology with reference to production and cost</li> <li>• General concept of Production Function -</li> </ul>	<ul style="list-style-type: none"> <li>• Define the term “production” and explain what a production function is; define the term “production inputs,” and differentiate between labor, land, capital, entrepreneurship, technology</li> <li>• Define and differentiate between marginal,</li> </ul>

<p>Production with one and two variable inputs</p> <ul style="list-style-type: none"> <li>• Cost structure</li> </ul>	<p>average, and total product; compute and graph marginal, average, and total product; explain diminishing marginal product and diminishing marginal returns</p> <ul style="list-style-type: none"> <li>• Isoquants and marginal rate of technical substitution</li> <li>• Isocost line and firm's equilibrium elasticity of substitution</li> <li>• Types of production functions - Cobb-Douglas, fixed-coefficient and CES functions</li> <li>• Differentiate between Explicit and Implicit Costs, Accounting and Economic Profit</li> <li>• Identify sunk costs</li> <li>• Define and differentiate between marginal, average, and total cost; compute and graph marginal, average, and total cost; differentiate between variable and fixed costs</li> <li>• Differentiate between short-run and long-run costs; interpret the relationship between short-run and long-run costs</li> <li>• Calculate and graph the firm's fixed, variable, average, marginal and total costs;</li> <li>• Define and explain long-run costs, economies of scale, diseconomies of scale, and constant returns to scale</li> <li>• Cost minimization and expansion path, economies of scale</li> </ul>
<p><b>MAC1 Outcome:</b> This course is an introductory course on Microeconomics. One shall study how individuals and the firms make decision, in rudiment. The course will provide a useful tool to explain how efficient allocation of resources can be achieved. One shall also know the need for government intervention.</p>	

<p><b>Semester I</b></p>	
<p>Type of Course: SEC1</p>	
<p><b>Name of Course: Basic Mathematics</b></p>	
<p><b>Course Objective:</b> After completion of the course the learners will be able to Learn the basic mathematical tools which will be used further during their economics major course</p>	
<p><b>Course Content</b></p>	<p><b>Course Outcome</b></p>
<p><b>Unit 1: Basic Concepts of Functions</b></p>	<ul style="list-style-type: none"> <li>• The students will be able to get a clear idea</li> </ul>

<p>Objective:</p> <ul style="list-style-type: none"> <li>● To learn Function and Graphs</li> </ul>	<p>of definition and examples of functions including graphs, classification of functions and types of function</p>
<p><b>Unit 2: Limits and Continuity of Functions</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Understanding limit and continuity</li> </ul>	<ul style="list-style-type: none"> <li>● The students will develop a clear understanding of Concept of limit with examples, definition of the limit of a single-valued function</li> <li>● The section also elucidates properties of limit</li> <li>● The unit then turns to clarify the concept of continuity of functions with examples</li> </ul>
<p><b>Unit 3: Derivatives</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● First order derivative</li> <li>● Second order derivative</li> <li>● L'Hopital's (L'Hospital's) rule</li> </ul>	<p>After completion of this unit the students will develop a clear conception of</p> <ul style="list-style-type: none"> <li>● Derivatives with examples, Derivatives and tangents to curves</li> <li>● Second order derivatives</li> <li>● Power function and its derivative, rules for the evaluation of derivatives, function of a function rule, inverse function rule</li> <li>● The evaluation of second order derivatives, partial and total derivatives</li> <li>● Finally the unit elucidates L'Hopital's (L'Hospital's) rule</li> </ul>
<p><b>Unit 4: Integrals of functions of one variable</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Understanding the basics of integration</li> </ul>	<p>After completion of this unit the students will be able to handle</p> <ul style="list-style-type: none"> <li>● Definition of indefinite integral</li> <li>● Basic rules of integration</li> <li>● Concept of definite integral including examples</li> </ul>
<p><b>Unit 5: Matrix and Determinants</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Understanding the basics of matrix and determinant</li> </ul>	<p>The unit will clearly elucidate</p> <ul style="list-style-type: none"> <li>● Concept of matrix, matrix operations and different laws</li> <li>● The concept of identity matrix and null matrix</li> <li>● Concept of determinants and basic properties</li> </ul>
<p><b>SEC1 Outcome:</b> This course introduces the basic mathematic tools used in economics to the students. These tools will be used for different papers later and hence throughout their journey in Economics major course.</p>	

<b>Semester I</b>	
Type of Course: MIC11	
<b>Name of Course: Principles of Microeconomics</b>	
<b>Course Objective:</b> After completion of the course the learners will be able to learn the fundamental concepts of microeconomics.	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Introduction</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● To learn the concepts of scarcity, choice, opportunity cost, production possibility frontier and economic systems</li> <li>● Theories of Demand and supply</li> </ul>	<ul style="list-style-type: none"> <li>● The students will be able to get a clear idea of definition of scarcity, choice, opportunity costs, production possibility frontier and economic systems</li> <li>● The students will be able to get a clear idea of laws of demand and supply, determinants of demand and supply, movement and shifts of demand and supply curves.</li> <li>● The students will be able to get a clear idea of the concepts like elasticity, price elasticity of demand, how to calculate various elasticities and the determinants of price elasticity, income elasticity, elasticity of supply and its determinants</li> <li>● Students will also understand the mechanism of market equilibrium.</li> </ul>
<p><b>Unit 2: Consumer Theory</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Understanding Utility in Cardinal Approach and Ordinal Approach</li> </ul>	<ul style="list-style-type: none"> <li>● The students will develop a clear understanding of concepts like Utility in Cardinal Approach, Utility and choice, Total Utility, Marginal Utility, Choice-maximization, marginal utility and theory of demand reference Ordinal Approach</li> <li>● The section also elucidates the concepts of utility in ordinal approach, indifference curve, marginal rate of substitution, convexity of IC, budget constraint, income substitution effects</li> <li>● Derivation of demand curve from indifference curve and budget constraint</li> </ul>
<p><b>Unit 3: Production and Costs</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Understanding technology with reference to production and cost</li> <li>● General concept of Production Function - Production with one and two variable inputs</li> <li>● Cost structure</li> </ul>	<p>After completion of this unit the students will develop a clear conception of</p> <ul style="list-style-type: none"> <li>● Define the term “production” and explain what a production function is; define the term “production inputs,” and differentiate between labor, land, capital, entrepreneurship, technology</li> <li>● Define and differentiate between marginal,</li> </ul>

	<p>average, and total product; compute and graph marginal, average, and total product; explain diminishing marginal product and diminishing marginal returns</p> <ul style="list-style-type: none"> <li>• Isoquants and marginal rate of technical substitution</li> <li>• Isocost line and firm's equilibrium elasticity of substitution</li> <li>• Differentiate between short-run and long-run costs; interpret the relationship between short-run and long-run costs</li> <li>• Cost minimization equilibrium condition</li> </ul>
<p><b>Unit 4: Perfect Competition</b> Objective: Understanding the basic theory of a firm under perfect competition</p>	<p>After completion of this unit the students will be able to handle</p> <ul style="list-style-type: none"> <li>• demand and revenue curves in case of perfect competition</li> <li>• marginal revenue and marginal cost curve</li> <li>• supply decision of the firm, equilibrium of the firm in the short run and long run;</li> <li>• long run industry supply curve</li> <li>• increasing, decreasing and constant cost industries</li> </ul>
<p><b>MIC 11 Outcome:</b> This course introduces the basic concepts used in economics to the students. These tools will be used for better understanding of foundation theories of microeconomics.</p>	

<b>Semester I</b>	
Type of Course: MDC 1	
<b>Name of Course: Basic Economics</b>	
<b>Course Objective:</b> After completion of the course the learners will be able to learn the fundamental concepts of microeconomics.	
Course Content	Course Outcome
<p><b>Unit 1: Introduction to Micro and Macro Economics</b> Objective: To Learn:</p> <ul style="list-style-type: none"> <li>• The concepts of scarcity, choice, opportunity cost, production possibility frontier and economic systems</li> <li>• Meaning of microeconomics and</li> </ul>	<ul style="list-style-type: none"> <li>• The students will be able to get a clear idea of definition of scarcity, choice, opportunity costs, production possibility frontier and economic systems</li> <li>• The students will be able to get a clear and broad idea of the meaning of the subject matters of microeconomics and macroeconomics and know what does an economy mean in economics as a discipline</li> </ul>

<p>macroeconomics</p> <ul style="list-style-type: none"> <li>● Meaning positive and normative economics</li> <li>● Central problems of an economy:</li> </ul>	<ul style="list-style-type: none"> <li>● Approach of positive and normative economics</li> <li>● The students will be able to get a clear idea of the basic problems of an economy; i.e. what, how and for whom to Produce.</li> </ul>
<p><b>Unit 2: Utility, Demand and Supply: How Markets Work.</b></p> <p>Objective:</p> <p>To Learn:</p> <ul style="list-style-type: none"> <li>● Meaning of Utility, Marginal Utility, Law of Diminishing Marginal Utility</li> <li>● Elementary theory of demand</li> <li>● Elementary theory of supply</li> <li>● The elementary theory of market price</li> </ul>	<ul style="list-style-type: none"> <li>● The students will develop a clear understanding of concepts like Utility in Cardinal Approach, Utility and choice, Total Utility, Marginal Utility and the Law of Diminishing Marginal Utility</li> <li>● The section also elucidates the concepts of determinants of household demand, market demand, movement and shifts in the market demand curve</li> <li>● The section also elucidates the concepts of determinants of household supply, market supply, movement and shifts in the market supply curve</li> <li>● Determination of equilibrium price and quantity in a competitive market</li> </ul>
<p><b>Unit 3: Producer Behaviour and Supply</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Understanding the meaning of Production function</li> <li>● Understanding the meaning of Cost function</li> </ul>	<p>After completion of this unit the students will develop a clear conception of</p> <ul style="list-style-type: none"> <li>● The meaning of Production Function, Short-Run and Long-Run Total Product, Average Product and Marginal Product.</li> <li>● meaning and their relationships and Returns to a Factor</li> <li>● Meaning of Cost function, Short run costs, Total Cost, Total Fixed Cost, Total Variable Cost, Average Cost, Average Fixed Cost, Average Variable Cost and Marginal Cost.</li> <li>● Meaning and their relationships</li> </ul>
<p><b>Unit 4: Analysis of Market</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Definition and classification of various markets</li> <li>● competition &amp; its Features</li> </ul>	<p>After completion of this unit the students will be able to understand</p> <ul style="list-style-type: none"> <li>● revenue curves in case of perfect competition</li> <li>● Total Revenue, Average Revenue and Marginal Revenue - meaning and their</li> <li>● Role of strategic behaviour</li> </ul>
<p><b>Unit 5: National Income and Related Aggregates</b></p> <p>Objective:</p>	<p>After completion of this unit the students will be able to understand</p> <ul style="list-style-type: none"> <li>● Circular flow of income in a two sector model</li> </ul>



<p>To Learn</p> <ul style="list-style-type: none"> <li>• The concepts like Circular flow of income</li> <li>• Aggregates related to National Income</li> <li>• Concept of Equilibrium and Multiplier in Simple Keynesian Model</li> </ul>	<ul style="list-style-type: none"> <li>• Methods of calculating National Income like Value Added or Product method, Expenditure method and Income method</li> <li>• Meaning of concepts such as Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP ,GDP Deflator, GDP and Welfare</li> <li>• Meaning and mechanism of Equilibrium and multiplier in a Simple Keynesian Model</li> </ul>
<p><b>Unit 6: Money and Banking</b></p> <p>Objective:</p> <p>To Learn</p> <ul style="list-style-type: none"> <li>• The concept and definition of Money</li> <li>• Commercial Bank and its function</li> <li>• Central bank and its functions</li> </ul>	<p>After completion of this unit the students will be able to understand</p> <ul style="list-style-type: none"> <li>• The concept and definition of Money</li> <li>• Operation of commercial banks and its functions</li> <li>• Functions of Central Bank like Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Repo Rate and Reverse Repo Rate, Open Market Operations and Margin requirement</li> </ul>
<p><b>Unit 7: Inflation and Unemployment</b></p> <p>Objective:</p> <p>To Learn</p> <ul style="list-style-type: none"> <li>• The definition and meaning of Inflation</li> <li>• The definition and meaning of Unemployment</li> </ul>	<p>After completion of this unit the students will be able to understand</p> <ul style="list-style-type: none"> <li>• The concept of inflation, causes of Inflation, and methods of combating Inflation</li> <li>• Meaning of Unemployment, different types of unemployment and Relation between inflation and unemployment</li> </ul>
<p><b>MDC 1 Outcome:</b> This course introduces the basic concepts used in economics to the students. These tools will be used for better understanding of foundation theories of microeconomics and macroeconomics.</p>	

## Course Outcome of Economics Honours Curriculum under CBCS System

(Semester-wise)

<b>Semester I</b>	
Type of Course: CC1	
<b>Name of Course: Introductory Microeconomics</b>	
<b>Course Objective:</b> After completion of the course the learners will be able to Learn the basic idea of Microeconomics in particular and Economics in general	
Course Content	Course Outcome
<p><b>Unit 1: Exploring the subject matter of Economics</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● To study Scope and Method of Economics</li> <li>● Understanding the Principles of Microeconomics</li> <li>● Explaining Interdependence and the Gains from Trade</li> <li>● Learning Reading and working with graphs</li> </ul>	<ul style="list-style-type: none"> <li>● Students will learn concepts like wants, scarcity, competing ends and choice – which are basics to define Economics. Students will learn to answer basic economic questions involving microeconomics and macroeconomics.</li> <li>● Students shall gain knowledge on principles of individual decision making and principles of economic interactions. Using concepts of trade off, opportunity cost, efficiency, marginal changes and cost-benefit they shall be able to explain how trade, market economy, property rights, market failure, externality and market power occurs</li> <li>● With the help of production possibilities frontier and increasing costs concepts basis of why trade occurs and gains from trade can be understood</li> <li>● Reading and working with graphs will make the course matter easy to understand</li> <li>● Students will learn to distinguish between market competitiveness, goods and factor markets, free and controlled markets, Market and non-market sectors, public and private sectors, economies- free market, command and mixed economy</li> </ul>

<p><b>Unit 2: Demand and Supply: How Markets Work, Markets and Welfare</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Understanding the elementary theory of demand and supply</li> <li>● Knowing how market prices for goods are determined</li> <li>● Learning how market adjustments take place without Government</li> <li>● Understanding how market economies evolved and works</li> <li>● Learning the concept of elasticity; its methods of calculations</li> <li>● Knowing the determinants of elasticity</li> <li>● Evaluating its importance through case studies</li> </ul>	<ul style="list-style-type: none"> <li>● Students shall learn the determinants of household and market demand – when and how the changes in such demand takes place</li> <li>● Clarity shall be gained on factors affecting supply and their role in influencing individual and market supply</li> <li>● Knowledge of demand and supply conditions in an economy the students shall be able to know how equilibrium prices in a competitive market is determined</li> <li>● The above stated knowledge shall in turn help the students to know how to allocate economy's scarce resources</li> <li>● In this unit students shall learn how guided by self-interest of economic agents goods and services are bought and sold in a market through the price system</li> <li>● Insights on how different markets operate are also gained</li> <li>● This unit will help the students to understand the driving force behind formulation of government policies, factor price determinations and how business firms make decisions regarding prices and amount of goods and services to be produced</li> <li>● Applying the concept to real life economic situations shall improve the understanding of the students</li> <li>● Role and need of government intervention is also introduced in this unit in gist</li> </ul>
<p><b>Unit 3: The Households</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Learning the basics of consumer's decision</li> <li>● Knowing the concept of affordability</li> <li>● Understanding consumer's income and price changes</li> <li>● Learning to describe preferences</li> <li>● Understanding consumer's choice problem</li> </ul>	<ul style="list-style-type: none"> <li>● This section first try to make students understand that how consumer's optimal decision is made</li> <li>● It then tries to make an elaboration of consumer's affordability with the help of budget constraint</li> <li>● The section tries to elucidate the understanding of consumption, income and price changes, demand for all other goods and price changes</li> <li>● By defining consumer's preferences this unit tries to provide an idea of what is best for the consumer</li> <li>● It provides the understanding of the consumer's optimum choice problem:</li> </ul>

	consumer chooses the best bundle that is affordable
<p><b>Unit 4: The Firm and Perfect Market Structure</b></p> <ul style="list-style-type: none"> <li>Defining the concept of Firm</li> <li>Define the characteristics of Perfect Competition</li> <li>Defining technology: production function, constant returns to scale, increasing returns to scale and decreasing returns to scale</li> <li>Revenue</li> <li>Equilibrium</li> </ul> <p>Understand why perfectly competitive markets are efficient</p>	<p>In this section, the students will learn the following concepts:</p> <ul style="list-style-type: none"> <li>Understand the difference between the firm and the industry</li> <li>Understanding production by defining production function and constant, increasing and decreasing returns to scale</li> <li>Calculate and graph the firm's average, marginal and total revenues; determine the profit maximizing output level and price using graphs and demand schedules; calculate and graphically illustrate where marginal revenue equals marginal costs</li> <li>Calculate and graphically illustrate profit and losses for a perfectly competitive firm</li> <li>Determine the break-even, and the shutdown points of production for a perfectly competitive firm</li> <li>Short run and long run costs and supply curve</li> <li>Understand the difference between short-run and long-run equilibrium</li> <li>Consumer and Producer surplus, welfare and efficiency of competitive equilibrium.</li> </ul>
<p><b>CC1 Outcome:</b> This course is an introductory course on Microeconomics. One shall study how individuals and the firms make decision, in rudiment. The course will provide a useful tool to explain how efficient allocation of resources can be achieved. One shall also know the need for government intervention.</p>	

<b>Semester I</b>	
Type of Course: CC2	
<b>Name of Course: Mathematical Methods in Economics-I</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to know the preliminary mathematical techniques required for economic analysis	
Course Content	Course Outcome
<p><b>Unit 1: Preliminaries</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>Learning about Sets and set operations</li> </ul>	<p>This unit shall enable the students to learn about</p> <ul style="list-style-type: none"> <li>Functions and their properties</li> <li>Geometric properties of functions:</li> </ul>

<ul style="list-style-type: none"> <li>• Number systems</li> <li>• Convex sets; convex functions, their characterizations, properties and applications;</li> <li>• Quasi-convex functions</li> <li>• Limit and continuity</li> </ul>	<p>convex functions, their characterizations, properties and applications</p> <ul style="list-style-type: none"> <li>• Quasi-convex functions, their characterizations, properties and applications</li> <li>• Theorems with proof along with the concept of first principle</li> <li>• Using the concept of continuity</li> </ul>
<p><b>Unit 2: Functions of one real variable</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Continuous functions of different types and their graphs</li> <li>• Concept of derivatives</li> <li>• Application in economics - concept of marginal, Concept of elasticity, Concept of average function</li> </ul>	<p>This unit shall help the students to learn about</p> <ul style="list-style-type: none"> <li>• Various types of functions like quadratic, polynomial, power, exponential, and logarithmic</li> <li>• The limit of a function at a point numerically and algebraically using appropriate techniques including L'Hospital's rule</li> <li>• Graphical meaning of derivatives - sketch the graph of the derivative from the given graph of a function</li> <li>• Derivatives of first and second order and their properties - interpret the derivative of a function at a point as the slope</li> <li>• Convex, concave and linear function</li> <li>• Concept of average and marginal function</li> <li>• Concept of elasticity</li> </ul>
<p><b>Unit 3: Single variable optimization</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Local and global optima</li> <li>• Interpretation of necessary and sufficient conditions with examples</li> <li>• Applications in Economics - profit maximization and cost minimization</li> </ul>	<p>In this unit, the students shall learn about</p> <ul style="list-style-type: none"> <li>• Geometric characterizations, characterizations using calculus</li> <li>• Significance of first and second order conditions</li> <li>• Interpretation of necessary and sufficient conditions with examples</li> <li>• Applications in Economics- profit maximization and cost minimization</li> </ul>
<p><b>Unit 4: Integration of functions</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Integration of different types of functions</li> <li>• Methods of Substitution and integration by parts</li> <li>• Applications in economics - obtaining total</li> </ul>	<ul style="list-style-type: none"> <li>• On completing the course, students can now evaluate a definite integral using properties of definite integrals</li> <li>• Using the Fundamental Theorem of Calculus the students will be able to find the area under a curve, as used to interpret different economic activities</li> </ul>

from the marginal	
<b>Unit 5: Difference Equations</b> Objectives <ul style="list-style-type: none"> <li>• Finite difference equations</li> <li>• Application in Economics</li> </ul>	In this section, the students will learn about: <ul style="list-style-type: none"> <li>• Equations of first and 2nd orders and their solutions</li> <li>• Cobweb model, Multiplier-Accelerator model</li> </ul>
<b>CC2 Outcome:</b> This course is a preliminary course in Mathematical Methods in Economics. This course intends to equip the students about set theory, types of functions and their properties and graphical representation. They will also get an idea about derivatives, single variable optimization and their economic applications. Students also learn the elementary operations of matrix algebra and apply different methods to solve linear and non-linear equation. Game theory makes the students use the strategic behaviors in solving certain common games.	

<b>Semester II</b>	
Type of Course: CC3	
<b>Name of Course: Introductory Macroeconomics</b>	
<b>Course Objective:</b> After the completion of the course the learner will be able to be equipped with the knowledge of basic functioning of a market economy at the macro level including understanding of national income accounting	
Course Content	Course Outcome
<b>Unit 1: National Income Accounting, Unemployment and Open Economy Issues</b> Objectives: <ul style="list-style-type: none"> <li>• Understanding macroeconomic processes: circular flow of income</li> <li>• Knowing the basic concept of National Income Accounting</li> <li>• Understanding the concepts of different measures of National Income in market price and factor cost</li> <li>• Knowing the methods of national income accounting</li> <li>• Concept of Growth, open Economy and concept of unemployment</li> </ul>	<ul style="list-style-type: none"> <li>• From this unit, first of all, students might get a theoretical idea of how the macroeconomic functions in a closed economy and how the national income of that economy can be determined</li> <li>• Along with this, students can also get a clear understanding of how the national income measure can be adjusted for inflation</li> <li>• This unit tries to provide the understanding of different methods of measuring national income, their associated problems and the techniques that are being followed to avoid those problems</li> <li>• It provides the basis of understanding the income determination model in the short run</li> <li>• Understanding the concept of growth, role of savings and investment; understanding open economy and understanding unemployment with special reference to the different types and characteristics of the same</li> </ul>
<b>Unit 2: Income Determination in the Short</b>	<ul style="list-style-type: none"> <li>• This unit fundamentally provides an idea of Keynesianism – a structuralist</li> </ul>

<p><b>Run</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Knowing the basic framework of demand side analysis of an economy</li> <li>• Understanding the equilibrium income determination in the short run: Simple Keynesian Model and IS-LM model (only the notion of a more general equilibrium)</li> <li>• Providing an idea of Keynesian consumption function, saving function and investment function</li> <li>• Understanding the importance of fiscal policy through multiplier analysis</li> </ul>	<p>understanding of the economy</p> <ul style="list-style-type: none"> <li>• From the Keynesian cross model students might get a clear idea of functioning of the economy in a depression situation</li> <li>• It is to make students understand that the depression can be do away with a expansionary fiscal policy that generates a multiplier effect on the national income by expanding the effective demand – the demand side argument</li> <li>• Students might get an understanding of Keynesian consumption function, saving function (structuralist) and investment function (humanist) from this unit</li> <li>• Other associated problems such as paradox of thrift is described and analyzed to provide the students a clear idea of the demand side argument of Keynes</li> <li>• This unit also analyses the different kind of multipliers that a government can follow in order to stabilize the economy</li> <li>• Introducing money market and associated discussion of IS and LM curves, enable the students to develop a broader understanding of short run macroeconomic equilibrium which is more general as compared to the Simple Keynesian equilibrium</li> <li>• This unit tries to make students understand the role of government intervention in an economy as opposed to laissez-faire policy</li> </ul>
<p><b>Unit 3: Money and Inflation</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Developing a holistic understanding of monetary system</li> <li>• Knowing the determinants of money supply</li> </ul> <p>Understanding the concept of inflation</p>	<ul style="list-style-type: none"> <li>• This unit shall clear the student's understanding on how monetary system operates</li> <li>• The understanding of determinants of money supply will help the students in developing analytical skills regarding the functioning of the monetary authority of a nation</li> <li>• The students will form an idea on influence of monetary authority on economy</li> <li>• Investment expenditure plays a key role in theories of business cycle. This unit will help the students to understand the main determinants of investment. One shall get profound knowledge on rate of interest as</li> </ul>

	<p>the main determinant of investment</p> <ul style="list-style-type: none"> <li>• This unit shall also help the students to understand why prices of goods and services vary over time and across countries</li> <li>• The theories on inflation shall illustrate the meaning of inflation, deflation, stagflation and reflation, identify different kinds of inflation, causes and effects of inflation on different sectors of the economy, and describe different measures to control inflation</li> </ul>
<p><b>CC3 Outcome:</b> This course is an introductory course on Macroeconomics. Students will be introduced to concepts essential to study the behavior of the aggregate economy. One will understand how an economy works.</p>	



<b>Semester II</b>	
Type of Course: CC4	
<b>Name of Course: Mathematical Methods in Economics-II</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to make economic analysis using mathematics. This is a sequel to the course Mathematical Methods for Economics – I	
Course Content	Course Outcome
<p><b>Unit 1: Matrix Algebra</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To study the elementary operations and different types of matrix.</li> <li>• To understand the concepts of Determinants and inverse of a square matrix.</li> <li>• To learn the concept of comparative statics</li> </ul>	<ul style="list-style-type: none"> <li>• A proper completion of this course shall make the students able to learn how to calculate the Rank of matrix and also to calculate the inverse of a square matrix</li> <li>• This course helps to solve the system of linear equations by applying Cramer’s rule; and System of nonlinear equations by using Jacobian determinant</li> <li>• The students become capable enough to apply Matrix Algebra in input-output analysis-the Leontief Static Open Model (LSOM) and the Hawkins-Simon conditions and explain the interdependence of the two industries in a economy, easily, through input-output matrix operations</li> </ul>
<p><b>Unit 2: Function of several variables</b></p> <p>Objectives</p> <ul style="list-style-type: none"> <li>• Continuous and differentiable functions</li> <li>• Euler’s theorem, implicit function theorem (without proof)</li> <li>• Economic applications</li> </ul>	<p>The students will be equipped to handle:</p> <ul style="list-style-type: none"> <li>• Partial derivatives and Hessian matrix</li> <li>• Homogeneous and homothetic functions</li> <li>• Application to comparative statics problems</li> <li>• The idea of level curves, theories of consumer behaviour and theory of production</li> </ul>
<p><b>Unit 3: Multi-variable optimization</b></p> <p>Objectives</p> <ul style="list-style-type: none"> <li>• Optimization of nonlinear functions</li> <li>• Unconstrained optimization</li> <li>• Constrained optimization with</li> </ul>	<p>After the completion of this unit, students would have known the following concepts:</p> <ul style="list-style-type: none"> <li>• Unconstrained optimization</li> <li>• Lagrangian multiplier method and the role of Hessian determinant</li> </ul>

<p>equality constraints</p> <ul style="list-style-type: none"> <li>• Inequality constraints</li> <li>• Value function and Envelope theorem</li> <li>• Economic applications – consumer behaviour and theory of production.</li> <li>• Optimization of linear function:</li> <li>• Economic Applications of Linear programming</li> </ul>	<ul style="list-style-type: none"> <li>• Kuhn-Tucker Conditions</li> <li>• Economic applications – consumer behaviour and theory of production</li> <li>• Linear programming - how to develop linear programming models for simple problems, graphical solution of a two variable linear programming model, importance of extreme points</li> <li>• Know the use and interpretation of the concepts of slack and surplus variables (graphical solution only), describe the process of decision making</li> <li>• The Duality Theorem</li> </ul>
<p><b>Unit 4: Differential Equations</b></p> <p>Objectives</p> <ul style="list-style-type: none"> <li>• Differential equations</li> <li>• Economic Application</li> <li>• Economic application-</li> <li>• Qualitative graphic solution to 2x2 linear simultaneous non-linear differential equation system</li> </ul>	<p>After the completion of this unit, students will know:</p> <ul style="list-style-type: none"> <li>• Solution of Differential equations of first order and second order of linear differential equations and the meaning of the solution</li> <li>• Price dynamics in a single market-multimarket supply demand model with two independent markets</li> <li>• Phase diagram, fixed point and stability</li> <li>• Economic applications in microeconomics and macroeconomics</li> </ul>
<p><b>CC4 Outcome:</b> This course is a continuation of CC2 - Mathematical Methods in Economics. In this course the students will further get an idea about functions of several variable, constrained and unconstrained optimizations and their application in Economics. They will be equipped to solve first and second order difference and differential equations and their economic applications.</p>	

<p><b>Semester III</b></p>
<p>Type of Course: CC5</p> <p><b>Name of Course: Intermediate Microeconomics –I</b></p> <p><b>Course Objective:</b> After completion of the course the learner will be able to understand the fundamentals of microeconomic theories in the context of a market economy</p>

Course Content	Course Outcome
<p><b>Unit 1: Consumer Theory</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning the cardinal utility approach</li> <li>• Learning to derive the consumer's demand from cardinal utility theory</li> <li>• Knowing the limitations of this theory</li> <li>• Knowing consumer's preference through ordinal approach of utility theory</li> <li>• Learning to construct consumer's utility function from preference ordering</li> <li>• Learning to derive consumer's demand from ordinal approach of utility theory</li> <li>• Learning compensating and equivalent variation: Slutsky equation</li> <li>• Understanding labour-leisure choice problem and labour supply</li> <li>• Choice under uncertainty – utility function and expected utility, risk aversion and risk preference</li> <li>• Inter-temporal choice (saving and borrowing)</li> <li>• Revealed preference</li> </ul>	<ul style="list-style-type: none"> <li>• This section first try to make students understand that how consumer's utility is measured in terms of money</li> <li>• It then tries to make an elaboration of consumers demand and hence an understanding of consumer's preference and choice</li> <li>• However, as this theory works under very restrictive conditions, hence students are then elaborated with the ordinal utility theory</li> <li>• This is helpful for the students to understand the logical reversal of the neo- classical theory – from preference to utility – as opposed to the cardinal utility theory – from utility to preference</li> <li>• With the help of consumer's preference ordering and the budget constraint that consumer faces, students can get an intuitive idea of how an economic agent's (consumer) psyche actually functions in an market driven structure</li> <li>• From the equilibrium of the consumer, students might get an idea of consumer's choice problem when given with a number of bundles of commodities</li> <li>• Through the mathematical and diagrammatic techniques students can formally elaborate their intuitions regarding the impact of a price change which can be further decomposed into change in the rate of substitution between commodities and change in the real income</li> <li>• Students also get the concept of lottery and what risk means. Thus they now are able to select among different lotteries according to their preferences</li> </ul>

	<ul style="list-style-type: none"> <li>• This unit develops the fundamental understanding of labour supply which follows from consumer's choice decision vis-à-vis his/her decision to labour, instead of enjoying leisure time, in order to earn income</li> <li>• This course also makes the students to deal with more realistic problems of consumer's decision making problem regarding their spending habits: today or in future. Also various investment decisions involve intertemporal choice, which the students are now well equipped to deal with</li> <li>• Revealed preference theory gives the students a scientific explanation to use the behavioural method in order to derive the demand theorem and establish the law of demand</li> </ul>
<p><b>Unit 2: Production and Costs</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Understanding technology with reference to production and cost</li> <li>• General concept of Production Function - Production with one and two variable inputs</li> <li>• Cost structure</li> </ul>	<ul style="list-style-type: none"> <li>• Define the term "production" and explain what a production function is; define the term "production inputs," and differentiate between labor, land, capital, entrepreneurship, technology</li> <li>• Define and differentiate between marginal, average, and total product; compute and graph marginal, average, and total product; explain diminishing marginal product and diminishing marginal returns</li> <li>• Isoquants and marginal rate of technical substitution</li> <li>• Isocost line and firm's equilibrium elasticity of substitution</li> <li>• Types of production functions - Cobb- Douglas, fixed-coefficient and CES functions</li> <li>• Differentiate between Explicit and Implicit Costs, Accounting and Economic Profit</li> <li>• Identify sunk costs</li> </ul>

	<ul style="list-style-type: none"> <li>● Define and differentiate between marginal, average, and total cost; compute and graph marginal, average, and total cost; differentiate between variable and fixed costs</li> <li>● Differentiate between short-run and long-run costs; interpret the relationship between short-run and long-run costs</li> <li>● Calculate and graph the firm's fixed, variable, average, marginal and total costs;</li> <li>● Define and explain long-run costs, economies of scale, diseconomies of scale, and constant returns to scale</li> <li>● Cost minimization and expansion path, economies of scale</li> </ul>
<p><b>Unit 3: Competitive Equilibrium</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Understanding short run and long run equilibrium</li> <li>● Supply curve of firm and industry</li> <li>● External economies and diseconomies of scale</li> </ul>	<ul style="list-style-type: none"> <li>● This unit explains and illustrates the differences between the demand curve for a perfectly competitive firm and that for a perfectly competitive industry</li> <li>● It explains the difference between short-run and long-run equilibrium in details</li> <li>● It make students able to understand the concept of “zero economic profit”</li> <li>● The unit also gives a profound knowledge on external economies and diseconomies of scale</li> </ul>
<p><b>Unit 4: Input Market in Perfect Competition</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Marginal principle of input demand</li> <li>● To learn about the factor markets in a competitive framework</li> <li>● Returns to scale and product exhaustion</li> </ul>	<ul style="list-style-type: none"> <li>● The students will be able to deal with the marginal principle of factor payment</li> <li>● It provides the knowledge of how labour market works under competitive framework and how the wage is determined</li> <li>● Develops the classical understanding of rent, quasi-rent and economic rent</li> <li>● The detailed understanding of rate of interest is also provided</li> </ul>

	<ul style="list-style-type: none"> <li>• The unit also gives an understanding of profits</li> <li>• Finally, the unit concludes with returns to scale and product exhaustion theorem</li> </ul>
<p><b>CC5 Outcome:</b> This course mainly allows the students to apply the theoretical concepts of consumer behavior they have learnt in their previous semesters. They will learn to explain how consumer behavior shapes the demand curve with respect to utility and loss, analyze the relationship between inputs used in production and the resulting outputs and costs and assess how resource markets/factors of production work under perfect competition.</p>	

<b>Semester III</b>	
Type of Course: CC6	
<b>Name of Course: Intermediate Macroeconomics –I</b>	
<b>Course Objective:</b> After the completion of the course the learner will be able to understand the fundamental macroeconomic theories in the context of a market economy	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Income Determination in Short Run</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Knowing the simultaneous equilibrium in commodity market and money market: IS-LM model</li> <li>• Understanding the stability of t</li> <li>• Understanding the idea of policy effectiveness</li> <li>• Understanding real balance effect</li> </ul>	<ul style="list-style-type: none"> <li>• On the basis of the previous understanding of the Simple Keynesian system and the basic knowledge of IS-LM framework, this section might provide the students more clarity in understanding the phenomenon of short run equilibrium income determination in a more general approach</li> <li>• This section deals with money market and commodity market simultaneously and thereby explains the simultaneous equilibrium of these markets and the stability of the equilibrium</li> <li>• The analyses of the multipliers and different shapes of the IS and LM curves in this system might give the students the idea of policy effectiveness – both fiscal and monetary policies – in different situations</li> <li>• This unit also provides the understanding of the optimal portfolio decision of an individual:</li> </ul>

	the optimal split of wealth between bond and money
<p><b>Unit 2: Aggregate Demand and Aggregate Supply</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning to derive aggregate demand and aggregate supply curves in complete Keynesian system</li> <li>• Understanding the simultaneous equilibrium in the economy in short run and its stability</li> <li>• Knowing the fiscal and monetary policy effectiveness.</li> <li>• Getting an idea of unemployment equilibrium, its causes and remedies including the real balance effect</li> </ul>	<ul style="list-style-type: none"> <li>• In this section we bring labour market in the discussion of Keynesian system and try to make students learn to derive the aggregate demand and supply curve in the short run</li> <li>• From the analysis of aggregate demand and supply curves students might get a clear idea of the macroeconomic equilibrium in the short run and how stable it is</li> <li>• It is aimed to provide students a clear idea of fiscal and monetary policy effectiveness in this system</li> <li>• In the end, this section tries to analyse the reasons behind unemployment equilibrium and how this can be overcome, with special reference to real balance effect</li> </ul>
<p><b>Unit 3: Inflation, Unemployment and Expectations</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To study the concept of inflation, its causes, its impact</li> <li>• Learning Central Bank's role in controlling inflation</li> <li>• Knowing the need to control inflation</li> <li>• Inflation and unemployment trade-off</li> </ul>	<ul style="list-style-type: none"> <li>• This unit shall help the students to understand why prices of goods and services vary over time and across countries</li> <li>• The theories on inflation shall illustrate the meaning of inflation, deflation, stagflation and reflation, identify different kinds of inflation, causes and effects of inflation on different sectors of the economy, and describe different measures to control inflation</li> <li>• The students will also learn why and how RBI intervenes in controlling inflation</li> <li>• This unit also tries to explain the trade-off between inflation and unemployment with the help of both the short run and long run Phillips curves</li> <li>• The inflation-unemployment trade-off outcome is developed under the situations of adaptive expectations</li> </ul>

	and rational expectations
<b>CC6 Outcome:</b> In this course you will learn major principles of macroeconomics. Students will get to learn core macroeconomic models.	

<b>Semester III</b>	
Type of Course: CC7	
<b>Name of Course: Statistical Methods for Economics</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to know the basic statistical applications necessary for economic data analysis	
Course Content	Course Outcome
<p><b>Unit 1: Elementary Probability Theory</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Sample spaces and events (concepts and definitions using set theory)</li> <li>• Axiomatic definition of probability and properties, theorem of total probability</li> <li>• Conditional probability, theorem</li> <li>• Bayes' theorem and its applications</li> </ul>	<ul style="list-style-type: none"> <li>• Because data used in statistical analyses often involves some amount of "chance" or random variation, understanding probability helps you to understand statistics and how to apply it</li> <li>• Its application in economic theories will help you to explain economic situations that you often come across in newspaper</li> </ul>
<p><b>Unit 2: Univariate Probability Distributions</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning – Random Variables <ul style="list-style-type: none"> <li>- Discrete Probability Distributions: Binomial, Poisson</li> <li>- Continuous Probability Distribution: Normal</li> <li>- Their properties, mean and, variance</li> <li>- Expected Value of Random Variables</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• In economics, we do not deal with homogeneous cases. Human action and economic actions cannot be analyzed in the same way that one would analyze objects. To make sense of an historical data one must scrutinize it not by means of statistical methods but by means of trying to grasp and understand how it emerged. The knowledge on probability distributions will help you to understand economic situations well</li> </ul>
<p><b>Unit 3: Jointly Distributed Random Variables</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning Joint Distribution functions of random variables <ul style="list-style-type: none"> <li>- Bivariate normal distribution</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• This unit, after learning the previous one, develops a more holistic understanding of probability distribution</li> </ul>



<ul style="list-style-type: none"> <li>- Its density function</li> <li>- Its means, variances, and correlation coefficients</li> </ul>	
<p><b>Unit 4: Sampling</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning - Principal steps in a sample survey (concepts of population, sample, parameter, statistic)</li> <li>- Methods of sampling</li> </ul> <p>Sampling distribution of sample mean and sample proportion</p>	<ul style="list-style-type: none"> <li>• In this unit you will learn methods of sampling from within a statistical population to estimate characteristics of the whole population. Economists attempt for the samples to represent the population in question. Two advantages of sampling are lower cost and faster data collection than measuring the entire population</li> </ul>
<p><b>Unit 5: Estimation</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning methods of statistical inference</li> <li>- Point and Interval Estimation</li> <li>- Basic principles of ordinary least squares, maximum likelihood and method of moments</li> </ul>	<ul style="list-style-type: none"> <li>• This unit will help you to interpret economic situations precisely</li> <li>• This unit also elucidate the idea of point estimator and the method of obtaining the same</li> </ul>
<p><b>CC7 Outcome:</b> Statistics play a vital role in every field of human activity. In particular, they are quantitative tools widely used in the areas of economics and finance. Knowledge of modern probability and statistics is essential for the development of economic and finance theories and for the testing of their validity through robust analysis of real-world data. For example, probability and statistics could help to shape effective monetary and fiscal policies and to develop pricing models for financial assets such as equities, bonds, currencies, and derivative securities.</p>	

<b>Semester III</b>	
Type of Course: SEC I	
<b>Name of Course: Statistical Tools for Data Analysis</b>	
<p><b>Course Objective:</b> This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analyzed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyze data</p>	
<b>Course Content</b>	<b>Course Outcome</b>
<ul style="list-style-type: none"> <li>• Sources of Data, Population versus sample surveys, Random sampling</li> <li>• Presentation of Data</li> </ul>	<ul style="list-style-type: none"> <li>• This unit will help to improve the skills of collection and presentation of data</li> <li>• It helps to summarize and analyze</li> </ul>

<ul style="list-style-type: none"> <li>● Univariate Frequency Distribution</li> <li>● Measures of central tendency</li> <li>● Measures of Dispersion</li> <li>● Moments, Skewness and Kurtosis</li> <li>● Bivariate Frequency Distribution <ul style="list-style-type: none"> <li>- Correlation and Regression</li> </ul> </li> <li>● Time Series <ul style="list-style-type: none"> <li>- Components</li> <li>- Measures of trend</li> <li>- Moving Average</li> <li>- Curve fitting (linear only)</li> </ul> </li> <li>● Index Numbers <ul style="list-style-type: none"> <li>- Laspayer’s, Paasche and Fisher</li> <li>- Cost of Living</li> <li>- Factor Reversal and Time Reversal Test</li> </ul> </li> <li>● Vital Statistics <ul style="list-style-type: none"> <li>- Life Tables (Concepts Only)</li> </ul> </li> </ul>	<p>data</p> <ul style="list-style-type: none"> <li>● This unit shall facilitate students to apply the theories of statistics learnt in practice</li> <li>● The knowledge of statistical packages like STATA/E-Views/R shall help students in management of data</li> <li>● Student can gather profound knowledge on how Indian official statistics offices (CSO, NSSO, RBI) collect and disseminate data on important economic variables like GNP, GDP, Price, Monetary aggregates, Consumer Expenditure, Employment and unemployment, Census, etc.</li> </ul>
<p><b>SEC I Outcome:</b> The course content of SEC I will facilitate the students to understand and interpret economic situations analytically. It will help in practical analysis of economic theories. Students will get to learn the working of the government and various government statistical organizations. It will help them to understand how theories are applied in practice.</p>	

<b>Semester IV</b>	
Type of Course: CC8	
<b>Name of Course: Intermediate Microeconomics II</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to learn the fundamentals of microeconomic theories	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: General Equilibrium, Efficiency and Welfare</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● To understand the concepts of General equilibrium and efficiencies</li> <li>● To know about market failure</li> </ul>	<p>The students will get an idea about</p> <ul style="list-style-type: none"> <li>● Exchange, production and welfare, Pareto Optimality, Edgeworth box and contract curve, Pareto efficiency and perfect competition</li> <li>● Reasons for Market failure, Pareto efficiency and market failure (externalities and public goods),</li> </ul>

<ul style="list-style-type: none"> <li>• To get an idea about asymmetric information</li> </ul>	<p>property right and Coase Theorem</p> <ul style="list-style-type: none"> <li>• Markets with asymmetric information- adverse selection, moral hazards, agency problems</li> </ul>
<p><b>Unit 2: Imperfect Market Structure</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• To study the Monopoly market structure, output determination and price rule</li> <li>• To learn how to measure and locate the sources of monopoly power and also to get an idea of social costs of monopoly power- deadweight loss</li> <li>• Study the mechanism of pricing with market power: first, second, and third degree price discrimination, multi-plant monopoly</li> <li>• To study Monopolistic competition</li> <li>• To study Oligopoly market and solve Oligopoly equilibrium as Nash equilibrium</li> <li>• To use iso-profit curves and simple game theoretic interpretation</li> <li>• Study Sweezy's kinked demand curve model and non-collusive equilibrium</li> <li>• Also, to learn the concept of competition versus collusion: the Prisoners' Dilemma</li> <li>• Understanding Collusive Oligopoly: Cartels and Price Leadership</li> </ul>	<ul style="list-style-type: none"> <li>• On successfully completing the course students will be able to distinguish between a perfectly competitive market situation from the set of imperfect market structures</li> <li>• On studying the pricing with market power students can apply such concepts in daily life and also solve different types of real-life pricing problems</li> <li>• Studying the monopolistically competitive market structure students will be able to arrive at the short run and long run equilibrium, using the concept of the two sets of demand curves, proportional and perceived. Students also now have a clear idea of excess capacity in the market</li> <li>• As the students have already studied game theory in the semester I in their CC2 course it will be an area to apply the theory in order to solve the different oligopolistic models like Cournot, Bertrand and Stackelberg Model. They also apply the concept of game theory in the concept of collusion and competition</li> </ul>
<p><b>Unit 3: Input market under Imperfect Competition</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• To learn about other imperfect market forms</li> <li>• Understanding externalities, public goods and markets with asymmetric information</li> </ul>	<ul style="list-style-type: none"> <li>• Students will be enabled to understand how labour market works under Monopsony, bilateral monopoly</li> <li>• It develops the knowledge of externalities and public goods</li> <li>• The unit also provides the knowledge of markets with asymmetric information</li> </ul>
<p><b>CC8 Outcome:</b> In this course students get a departure from the perfectly competitive</p>	

market structure in both eth commodity and factor markets into their respective imperfect market structures and gives the students an idea about how prices and output are determined under imperfect markets and the social costs associated with it. The students will also learn about determination input prices under imperfect markets. They will know the concept of general equilibrium, economic efficiency and market failures. They will get an idea about how markets work in presence of asymmetric information.

<b>Semester IV</b>	
Type of Course: CC9	
<b>Name of Course: Intermediate Macroeconomics II</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to learn the fundamentals of macroeconomic theories	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Schools of Macroeconomic Thoughts</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● The Classical System: <ul style="list-style-type: none"> <li>- Knowing the basic idea of supply side analysis of the market economy</li> <li>- Understanding the output and employment determination in the classical system – full employment output determination when wages and prices are flexible</li> <li>- Explaining the dichotomy between real sector and monetary sector and hence ineffectiveness of monetary policy</li> </ul> </li> <li>● Keynes vs. Classics <ul style="list-style-type: none"> <li>- Understanding the Keynesian system vis-à- vis the Classical system</li> <li>- Knowing Friedman’s restatement of Classical ideas</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● The quantity theory of money and Say’s tries to make students understand the supply side argument of functioning of market</li> <li>● It explains how full employment and output are determined in the long run when wages and prices are flexible</li> <li>● Through the analysis of classical dichotomy students might get a clear idea of the methodological individualist advocacy of laissez-faire policy</li> <li>● This section then tries to make a comparative analysis Keynesian system vis-à-vis the Classical system to make students understand the methodological, analytical and philosophical differences between these two frameworks</li> <li>● In the end of this section, it will be tried to provide students with the idea of Friedman’s restatement of the classical system which makes classical economics stronger to defend the Keynesian attack</li> </ul>
<p><b>Unit 2: Macroeconomic Foundations</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● Learning theories of consumption</li> <li>● Learning the Theory of Investment</li> </ul>	<ul style="list-style-type: none"> <li>● This unit will help you to determine the driving forces of economic growth</li> <li>● Consumption is one of the bigger concepts in economics and is</li> </ul>

<ul style="list-style-type: none"> <li>• Understanding the theories of demand for money</li> </ul>	<p>extremely important because it helps determine the growth and success of the economy. Theories of consumption will help you to understand the determinants of it and what can be done to increase the level of consumption in an economy</p> <ul style="list-style-type: none"> <li>• Investment expenditure plays a key role in theories of business cycle. This unit will help the students to understand the main determinants of investment. One shall get profound knowledge on rate of interest as the main determinant of investment</li> <li>• The theories of demand for money will provide you a set of tools to analyze monetary policy and the financial sector effectively</li> <li>• It will also help you to analyze household's decision of how much money to hold</li> </ul>
<p><b>Unit 3: Monetary Policy</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>• Knowing the measures of money supply with special reference to India</li> <li>• Learning the importance of money supply in stimulating the economy</li> <li>• Learning the monetary policy operations of the Central bank</li> <li>• Understanding the budgetary operations of the Government</li> </ul>	<ul style="list-style-type: none"> <li>• From this unit one shall get insights on concept of money supply and its role in stimulating economic activities</li> <li>• Concepts of multipliers in the context of theory of money supply shall help the students to measure the maximum amount of money that can be created by various financial institutions</li> <li>• The balance sheet view of the banking sector and the RBI shall clear their understanding on the workings of the institutions</li> <li>• Knowledge on conduct of monetary policy will help the students to know the function of RBI in fostering economic growth</li> <li>• Conceptions on budget deficits, its causes and its impacts shall facilitate the students in understanding the working of the government</li> </ul>
<p><b>Unit 4: Economic Growth</b></p> <p>Objectives:</p>	<ul style="list-style-type: none"> <li>• The subject of the course is theories of economic growth: trade-off</li> </ul>

<ul style="list-style-type: none"> <li>● Learning economic growth models <ul style="list-style-type: none"> <li>- Harrod-Domar Model of economic growth</li> <li>- Solow Model of economic growth</li> </ul> </li> </ul>	<p>between present and future consumption stability of capitalist economies, effects of technological progress and consequence of sustained economic growth</p> <ul style="list-style-type: none"> <li>● This section will help you to explain causes of difference in income over time and across countries</li> <li>● Students can develop their understanding of golden rule of capital accumulation, dynamic efficiency, and technological progress</li> </ul>
<p><b>CC9 Outcome:</b> This course provides advanced insights into macroeconomic theories. The course content will demonstrate an understanding of the connection between microeconomics and macroeconomics. Students will understand standard models of economic growth and shall be able to evaluate the long-run macroeconomic behavior and short-run macroeconomic behavior of relevant macroeconomic variables like income, output, rate of interest, etc. Use these models to will help you to analyze the macroeconomic effects of monetary and fiscal policy changes as well as other economic shocks. Use these models to interpret historical and current macroeconomic events.</p>	

<b>Semester IV</b>	
Type of Course: CC10 Name of Course: Introductory Econometrics Course Objective: After completion of the course the learner will be able to know the basics of econometrics	
Course Content	Course Outcome
<p><b>Unit 1: Nature and Scope of Econometrics</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Learning the distinction between economic and econometric models <ul style="list-style-type: none"> <li>- Importance of econometrics in economics</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● This section will help the students in distinguishing between economic and econometric models</li> <li>● Students will be able to learn the role of random disturbance in econometric models</li> <li>● You shall be able to apply econometrics in different branches of social science</li> </ul>
<p><b>Unit 2: Statistical Concepts</b></p> <ul style="list-style-type: none"> <li>● Sampling Distributions <ul style="list-style-type: none"> <li>- Standard Normal and Chi-Square distribution</li> <li>- t- and F distributions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● After completion of the unit students will be able to handle with the sampling distributions and can apply them in testing of hypothesis</li> <li>● With techniques of hypothesis testing, one shall be able to refute or</li> </ul>

<ul style="list-style-type: none"> <li>● Hypothesis testing <ul style="list-style-type: none"> <li>- Defining hypothesis</li> <li>- Distribution of test-statistics</li> <li>- Testing hypotheses related to population parameters</li> <li>- Type I &amp; Type II error</li> <li>- Power of a test</li> </ul> </li> </ul>	<p>accept economic theories for real life data</p> <ul style="list-style-type: none"> <li>● Students will also learn to test hypothesis related to population parameters</li> <li>● The unit also enables students to understand the importance of Type I and Type II error in hypothesis testing</li> <li>● The unit also elucidates the understanding of power of a test</li> </ul>
<p><b>Unit 3: Classical Linear Regression Model: Two Variable Case:</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Learning – Estimation of Simple and Multiple Linear Regression Models by Ordinary Least Squares Methods</li> <li>● Learning – BLUE Property of estimators in SLRM (Simple Linear Regression Model) <ul style="list-style-type: none"> <li>- Introduction to dummy independent variable models</li> <li>- Forecasting</li> </ul> </li> <li>● Problems in OLS method</li> </ul>	<ul style="list-style-type: none"> <li>● This unit shall help the students learning the basic interpretations of linear regression models.</li> <li>● Knowledge on concepts of population regression function and sample regression function shall facilitate the students to interpret regression results</li> <li>● Learning Estimation techniques will help the students to estimate econometric model</li> <li>● This unit will provide a foundation to advance econometric estimations</li> <li>● Students will learn to interpret the results of simple and multiple linear regression models with the help of the concepts of simple correlation, partial correlation and multiple correlation</li> <li>● At the end of the unit students will be able to make economic interpretations of econometric models</li> <li>● This section will demonstrate the properties of the Least Squares Estimators (BLUE) in SLRM-Gauss-Markov theorem</li> <li>● Given variables can be both quantitative and qualitative, this section will also help the students to learn how to estimate models in the presence of attributes</li> <li>● You will be able to learn</li> </ul>

	<p>interpretation of dummy variables</p> <ul style="list-style-type: none"> <li>Forecasting models will help you to utilize relevant and reliable information about the past and present events and the forecast the likely future events. You will be able to learn how to mitigate forecasting errors</li> </ul>
<p><b>CC10 Outcome:</b> On successful completion of this course, students will be able to explain econometric concepts and results intuitively and conduct independent data analysis and inquiry using the tools of statistics and econometrics. The course focuses on the estimation, inference and identification of linear regression models. Particular attention is paid to the econometric theory and to the interpretation of the estimation results.</p>	

<b>Semester IV</b>	
Type of Course: SEC II	
<b>Name of Course: Computer Application for Data Analysis</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <ul style="list-style-type: none"> <li>MS Excel programme for data analysis</li> <li>Relevant mathematical and statistical functions using MS Excel will be taught</li> </ul>	<ul style="list-style-type: none"> <li>This course introduces the student to how to analyse primary and secondary data using computer software. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data</li> </ul>
<p><b>SEC II Outcome:</b> The SEC II course aims at bridging the gap between “theory and practice”. Aim of this course is to complement to the programme in order to achieve an excellence in research methods required for economics. This course will enable the students to apply their theoretical knowledge in the domain of empirics.</p>	

<b>Semester V</b>	
Type of Course: CC11	
<b>Name of Course: International Economics</b>	
<p><b>Course Objective:</b> After completion of the course the learner will be able to learn the fundamentals of international economics theories and some relevant empirical facts</p>	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Basics of Trade Theory</b> Objective</p>	<ul style="list-style-type: none"> <li>Students will learn the basics of: <ul style="list-style-type: none"> <li>Arbitrage as basis and direction</li> </ul> </li> </ul>



<ul style="list-style-type: none"> <li>● Understanding the building blocks of trade theory</li> <li>● Learning the concept of social indifference curve and its properties</li> <li>● Understanding trade indifference curve, offer curve, Terms of Trade, international equilibrium, and the stability of equilibrium</li> <li>● Knowing gains from trade (GET)</li> </ul>	<ul style="list-style-type: none"> <li>of trade</li> <li>- Fundamental sources of cross-country price differences and arbitrage</li> <li>- Concept of comparative advantage</li> <li>- externalities</li> <li>- Regulation and perverse comparative advantage</li> <li>● Students will be able to develop the knowledge of International equilibrium in presence of trade</li> <li>● It is helpful for the students to learn how a social indifference curve can be constructed</li> <li>● The elaboration of social indifference curve might be helpful for the students to conceptualize, under what circumstances and assumptions a social indifference curve behaves like individual indifference curve</li> <li>● This unit also makes students understand the need for a trade indifference curve. It is also helpful to learn how to derive a trade indifference curve</li> <li>● From the trade indifference curve it is possible to derive offer curve for a country. This helps students to understand how much one country will export for each quantity of the other country's product that it imports</li> <li>● From this unit, students can learn how to derive international trade equilibrium and the equilibrium price ratio using offer curves</li> <li>● Students can also get an idea about the elasticity of offer curve, demand for exports and supply of imports and hence understand the stability of the equilibrium and the condition for stability</li> <li>● The detailed analysis of gains from</li> </ul>
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	<p>trade using production possibility frontier and social indifference curve, students might learn how to decompose gains from trade into production gain (gain due to resource mobilization) and consumption gain (gain due to change in the price ratio)</p>
<p><b>Unit 2: Technology and Trade (Ricardian Model)</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>● Learning the absolute advantage hypothesis and its shortcomings</li> <li>● Learning Ricardian comparative advantage hypothesis</li> <li>● Understanding the basis and direction of trade.</li> <li>● Knowing how trade occurs in a Ricardian one factor world</li> </ul>	<ul style="list-style-type: none"> <li>● This unit deals with the basics of classical trade models. This helps students to understand the basic idea of trade theory</li> <li>● The first question that occurs in the discussion is that why countries trade. In the process of answering this question students might get an idea of Adam Smith's absolute advantage hypothesis which is followed by its limitations and the Ricardian intervention in to this genre with his idea of comparative advantage</li> <li>● This unit provides the analysis, to the students, of arbitrage as the basis and direction of the trade and the arbitrage- concept of comparative advantage</li> <li>● This also helps students to understand the role of externalities, regulation and perverse comparative advantage in trade.</li> <li>● With the elaboration of the one factor Ricardian World, this section tries to make students clear about the following: <ul style="list-style-type: none"> <li>- The production possibilities in the Ricardian World</li> <li>- Relative demand and relative supply</li> <li>- Determination of terms of trade</li> <li>- Complete and incomplete specialization</li> <li>- And lastly, the gains from trade</li> </ul> </li> <li>● The unit also establishes the three basic questions that students have</li> </ul>

	<p>to keep in mind while studying trade theory. These questions are:</p> <ul style="list-style-type: none"> <li>- What is the ‘terms of trade’?</li> <li>- What is the equilibrium price ratio?</li> <li>- And last but not the least, whether the countries gain from trade or not</li> </ul>
<p><b>Unit 3: Factor Endowment &amp; Trade (Heckscher-Ohlin-Samuelson Model)</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>● Knowing Heckscher-Ohlin theorem and different definitions of relative factor abundance</li> <li>● Learning the concept of factor intensity reversal in the context of this theorem</li> <li>● Understanding Stolper-Samuelson theorem</li> <li>● Knowing Rybczynski’s theorem Getting an idea about the factor price equalization theorem</li> <li>● Learning the Leontief Paradox</li> </ul>	<ul style="list-style-type: none"> <li>● As opposed to classical trade models of Smith and Ricardo, Neo-classical trade model deals with a 2X2 framework (two factors – two commodities). Studying this model might help the students to get an idea about another source of comparative advantage – relative factor abundance</li> <li>● Elaboration of this model helps students to learn that a country specializes and exports that commodity which uses the abundant factor more intensively</li> <li>● Understanding the concept of factor intensity reversal students might get the idea of invalidity of Heckscher-Ohlin theorem in presence of factor intensity reversal</li> <li>● Students can understand the one-to-one correspondence between commodity price ratio and factor price ratio by studying Stolper-Samuelson theorem</li> <li>● Students can also get an idea about the one- to-one correspondence between factor endowment ratio and production proportion by studying the Rybczynski’s theorem</li> <li>● Factor price equalization theorem states that when trade takes place between two countries ultimately the factor prices in two countries will be equalized. Learning this theorem might help the students to conceptualize the process through which the factor prices are actually equalized in two countries under</li> </ul>

	<p>free trade</p> <ul style="list-style-type: none"> <li>• A brief empirical study in the end might foreground a paradox – namely Leontief Paradox – to the students</li> </ul>
<p><b>Unit 4: Trade Policy</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning the partial equilibrium analysis in presence of: <ul style="list-style-type: none"> <li>- Tariff and Quota</li> <li>- Trade subsidy</li> <li>- Voluntary export restraint</li> </ul> </li> <li>• Understanding the tariff-quota equivalence and nonequivalence</li> <li>• Knowing the monopoly effects of quota</li> <li>• Learning the general equilibrium analysis</li> <li>• Understanding the distinction between large and small country and the welfare effect of tariff on them</li> <li>• Learning to derive the tariff ridden Offer Curve, optimal tariff for a large country and the Metzler's Paradox</li> </ul>	<ul style="list-style-type: none"> <li>• Students can learn the equilibrium of one country in presence of tariff, quota, trade subsidy and voluntary export restraint. However these all are hindrances to free trade</li> <li>• By studying this unit students might understand when tariff and quotas are equivalent and when they are not. Students can also get an idea of the monopoly effects of quota</li> <li>• Students also learn to conceptualise the simultaneous equilibrium in both countries in presence of trade restrictions</li> <li>• Through the study of the distinctive features of large country and small country the students might understand the welfare effect of tariff on a small country</li> <li>• Students can also learn to derive the tariff ridden offer curve from this unit</li> <li>• The unit on the other hand teaches the students how to derive the optimal rate of tariff for a large country</li> <li>• In the end the section tries to provide the basic idea of Metzler's paradox to the students</li> </ul>
<p><b>Unit 6: Balance of Payments &amp; Exchange Rate</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Learning to determine the equilibrium income in an open economy</li> <li>• Knowing the Balance of Payment account in an open economy</li> <li>• Understanding the fixed and flexible exchange rate</li> </ul>	<ul style="list-style-type: none"> <li>• This unit deals with the macroeconomic analysis of an economy in presence of trade. This helps the students to know how the equilibrium income is determined in such a situation</li> <li>• Students might also get an idea of foreign trade multiplier with and without repercussion effects from the study of the macroeconomics of an open economy</li> </ul>

regimes	<ul style="list-style-type: none"> <li>• The study of balance of payments helps students to get an idea of the accounting structure of the BoP. It also helps the students to understand the ideas of autonomous and accommodating transactions</li> <li>• The study of fixed and flexible exchange rate regimes distinctively tries to make students to conceptualize the adjustment of demand and supply of foreign exchange</li> <li>• From this students also might get an understanding of the effect of devaluation</li> </ul>
<p><b>CC11 Outcome:</b> This course tries to provide an overview of international economic theories to the students. From this one might build an understanding of different theories of international trade elaborated by economists from classical and neo-classical schools of thoughts. This section also tries to explain how the macroeconomic structure of a country functions in presence of trade. Along with the theory part, this paper also tries to give a brief overview of the international trade policy that a country might follow.</p>	

<b>Semester V</b>	
Type of Course: CC13	
<b>Name of Course: Public Economics</b>	
<b>Course Objective:</b> After completion of this paper the students will be able to understand the basics of Public Economics	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>Unit 1: Nature and Scope of Public Economics</b> Objective: To learn:</p> <ul style="list-style-type: none"> <li>• The role of government in market economy</li> <li>• Externalities, Market Failure and Government Intervention</li> <li>• Coase Theorem</li> <li>• Public Expenditure to finance Development</li> </ul>	<ul style="list-style-type: none"> <li>• This unit will enable the students to understand the role of government in a market economy</li> <li>• As learnt in the previous courses, market economy allocates scarce resources efficiently</li> <li>• In this section you will get to know how in the presence of market failure, externalities, public and merit goods government intervene to ensure efficient allocation of resources</li> <li>• The role of public expenditure for financing development shall be emphasized in this unit</li> </ul>

<p><b>Unit 2: Theory of Public Good</b></p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To learn in details the characteristics of pure public goods</li> <li>• Knowing the distinction between public and private goods</li> <li>• Understanding Private and Public Provisioning of public goods – the equilibrium theories</li> </ul>	<ul style="list-style-type: none"> <li>• At the end of the unit students shall be able to distinguish between public and private goods</li> <li>• With the help of Lindahl and voting equilibrium models one will understand how the provisioning of public good is done by the government</li> <li>• Students shall be able to answer the questions of how to raise the cost of providing public good and how to distribute public good</li> <li>• They shall be able to analyse policy challenges facing governments around the world and learn about potential solutions to these challenges as well as obstacles in implementing them</li> </ul>
<p><b>Unit 3: Taxation</b></p> <ul style="list-style-type: none"> <li>• To learn the Principles of Taxation</li> </ul>	<ul style="list-style-type: none"> <li>• This unit will be useful to students in understanding the principles of taxation</li> <li>• Tax being one of the main revenue source of the government of finance its expenditure needs an explicit understanding</li> <li>• From this unit one will know <ul style="list-style-type: none"> <li>- The classification of taxes and the characteristics of a good tax system</li> <li>- The principles guided by which the government should impose tax</li> <li>- Concept of the incidence and burden of taxation</li> <li>- Comparison between direct and indirect tax</li> <li>- The optimal tax</li> </ul> </li> <li>• Students shall be able to formulate a perspective on how public policies on taxes are formulated</li> </ul>
<p><b>Unit 4: Public Expenditure and Public Debt</b></p>	<ul style="list-style-type: none"> <li>• At the end of the module one will attain the advantages and knowledge of public investments</li> </ul>

<p>Objective</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>● The meaning and classification of Public expenditure</li> <li>● Meaning and effect of public debt</li> <li>● Indian Public Finance</li> </ul>	<p>and other government expenditures.</p> <ul style="list-style-type: none"> <li>● Understand the causes of growing public expenditures for various programmes and policies within and outside the country</li> <li>● Understand the needs of public borrowing from all possible sources to meet necessary public investment/expenditures</li> <li>● Deliver effectively the preparation of budget and how they are passed in the house. Understand the changes in size and flexibility of state and central budget along with the role played by Finance Commission</li> </ul>
<p><b>CC12 Outcome:</b> The course investigates the role of public sector in economic area. On completion of this course, students would be able to know the scope and breadth of public economics. They will understand the core principles of efficiency and welfare distribution and their application to problems in public economics. One will be able to utilize the detailed skills and techniques to address and facilitate public economic policy, such as mechanism design schemes and setting of tax structures.</p>	

<b>Semester V</b>	
Type of Course: DSE 1A & DSE 1B	
<b>Name of Course: Discipline Specific Elective 1</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p><b>(1A) Economic Development and Policy in India - I</b></p> <p>Objective</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>● Issues in Growth, Development and Sustainability</li> <li>● Factors in Development</li> <li>● Population and Economic Development</li> <li>● Employment</li> <li>● Indian Development Experience <ul style="list-style-type: none"> <li>- Critical evaluation of growth, inequality, poverty and competitiveness, pre and post reforms era</li> <li>- Savings and investment</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● This course initially enables students to learn the basic concepts of development.</li> <li>● It envisages development vis-à-vis growth and sustainability</li> <li>● The course gives a profound knowledge on factors of development such as <ul style="list-style-type: none"> <li>- Capital formation (Physical and Human)</li> <li>- Technology</li> <li>- Institutions that play a key role in development with special reference to India</li> </ul> </li> <li>● It also develops the understanding of demographic</li> </ul>

<ul style="list-style-type: none"> <li>- Mobilization of internal and external finance</li> <li>- Monetary and fiscal policies</li> <li>- Center-state financial relations</li> </ul>	<p>trends and urbanization of India</p> <ul style="list-style-type: none"> <li>• The course then turns to provide students the understanding of <ul style="list-style-type: none"> <li>- Occupational structure in the organized and the unorganized sectors</li> <li>- under and disguised unemployment (rural and urban)</li> <li>- Employment schemes and their impact</li> </ul> </li> <li>• The course critically engages with Indian development experience in pre and post reform era by evaluating the key indicators of development <ul style="list-style-type: none"> <li>- Growth, inequality, poverty and competitiveness</li> <li>- Savings and investment</li> <li>- Mobilization of internal and external finance</li> <li>- Monetary and fiscal policies</li> <li>- Center-state financial relations</li> </ul> </li> </ul>
<p><b>(1B) Money and Banking Discipline</b></p> <p>Objective</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• The basic concepts that relate to the supply of Money</li> <li>• Financial Institutions, Markets, Instruments and Financial Innovations</li> <li>• Understanding the Interest Rates with special reference to India</li> <li>• Banking System with special focus on Indian</li> <li>• Central Banking and Monetary Policy of India</li> </ul>	<ul style="list-style-type: none"> <li>• Students will get the opportunity to learn the concept, functions, measurement of Money.</li> <li>• The course also takes up the theories of money supply determination</li> <li>• The course then turns to enlighten the students with <ul style="list-style-type: none"> <li>- Role of financial markets and institutions</li> <li>- Problem of asymmetric information: adverse selection and moral hazard</li> <li>- Financial crises</li> </ul> </li> <li>• The students also get to learn the Money and capital markets of</li> </ul>



	<p>India:</p> <ul style="list-style-type: none"> <li>- Organization, structure and reforms in India</li> <li>- Role of financial derivatives and other innovations</li> <li>• The course enables the students to learn the <ul style="list-style-type: none"> <li>- Determination</li> <li>- Sources of interest rate differentials</li> <li>- Theories of term structure of interest rates</li> <li>- Interest rates in India</li> </ul> </li> <li>• The course also gives clarity in understanding the balance sheet and portfolio management</li> <li>• Finally, it discusses in details the Indian banking system: <ul style="list-style-type: none"> <li>- Changing role and structure</li> <li>- Banking sector reforms</li> <li>- Functions, balance sheet, goals, targets, indicators and instruments of monetary control</li> <li>- Monetary management in an open economy</li> <li>- Current monetary policy of India</li> </ul> </li> </ul>
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**DSE 1 Outcome:** The course contains two options out of which students have to choose any one.

The **Economic Development and Policy in India - I** course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period.

The **Money and Banking Discipline** course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses 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.

**Semester V**

Type of Course: DSE 2A & DSE 2B	
Name of Course: Discipline Specific Elective 2	
Course Content	Course Outcome
<p><b>(2A) Public Finance</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● To learn the theory of public finance</li> <li>● To understand the issues from Indian Public Finance</li> </ul>	<ul style="list-style-type: none"> <li>● The students will have an overview of               <ul style="list-style-type: none"> <li>- Fiscal Functions</li> <li>- Tools of Normative Analysis</li> <li>- Pareto Efficiency</li> <li>- Equity and the Social Welfare</li> </ul> </li> <li>● The course will also take up in details the issues of               <ul style="list-style-type: none"> <li>- Market Failure</li> <li>- Public Good</li> <li>- Externalities</li> </ul> </li> <li>● The course also enables the students to deal with the elementary theories of Product and Factor Taxation (Excess Burden and Incidence)</li> <li>● The course then turns provide the knowledge of certain important aspects of Indian public finance by engaging with               <ul style="list-style-type: none"> <li>- Current Issues of India's Tax System</li> <li>- Working of Monetary and Fiscal Policies</li> <li>- Analysis of Budget and Deficits</li> <li>- Fiscal Federalism in India</li> <li>- State and Local Finance</li> </ul> </li> </ul>
<p><b>(2B) Environmental Economics</b></p> <p>Objective:</p> <ul style="list-style-type: none"> <li>● To learn what environmental economics is all about</li> <li>● To know about the Efficiency and Market Failure</li> </ul>	<p>The students will be acquainted with:</p> <ul style="list-style-type: none"> <li>● Review of microeconomics and welfare economics.</li> <li>● Interlinkages between the economy and environment</li> </ul>

<ul style="list-style-type: none"> <li>• To understand the Design and Implementation of Environmental Policy</li> <li>• To have an idea about International Environmental Problems</li> <li>• To get equipped regarding measurement of the values of Environmental Costs and Benefits</li> <li>• To understand the concept of sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• Pareto optimality and market failure in the presence of externalities</li> <li>• Property rights and the Coase theorem</li> <li>• Public goods/ bads and market failure</li> <li>• Pigouvian Fees – Single Polluter, Multiple Polluters, Fees vs Subsidies</li> <li>• Regulating Pollution: Command and Control, Economic Incentives</li> <li>• The Basic Theory of Tradeable Pollution Permits</li> <li>• Transboundary Pollution – Transboundary Pollution as a problem of international externalities</li> <li>• International Trade and Environment – Pollution Havens</li> <li>• International Environmental Agreements – Basic idea about Montereal and Kyoto Protocol and Talks on Climate Change</li> <li>• Concepts of Willingness to pay (WTP) and Willingness to accept compensation (WTAC), Difference between the two concepts</li> <li>• Direct and Indirect Methods of Valuation – Contingent valuation, Travel Cost, hedonic Pricing – basic concepts only (no econometric techniques) – when they should be used, what are the advantages and disadvantages of these methods</li> <li>• The concept and measurements of sustainable development</li> </ul>
<p><b>DSE 2 Outcome:</b> The course contains two options out of which students have to choose any one.</p> <p>The <b>Public Finance</b> course facilitates the learning of the theories of public finance</p>	

which will help the students to solve many real-life problems facing fiscal policy and government budgets.

The **Environmental Economics** course will make the students aware about some environmental issues and its link with Economics. It will help the students to know why market failures occur or how market efficiencies are affected in presence of externalities created due to various environmental conditions. They will get an idea about various international environmental problems and the designing and implementation of different policies to deal with such problems. They will also learn about the measurement of environmental costs and benefits.

### Semester VI

Type of Course: CC13

#### Name of Course: Indian Economy

**Course Objective:** After completion of the course the learner will be able to know the current issues and problems facing Indian economy

Course Content	Course Outcome
<p><b>Unit 1: Economic Development since Independence</b></p> <p>Objective</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Growth and development under different policy regimes</li> <li>• Structural changes in the post-reforms period</li> <li>• Regional variation of growth and development</li> </ul>	<ul style="list-style-type: none"> <li>• In this unit students shall learn the various growth and development strategies that have been undertaken in India since independence.</li> <li>• One will gain knowledge on the objectives, achievements and failures of Indian planning</li> <li>• students will be able to analyze the structural transformation of India during the plan periods</li> <li>• Student shall critically analyze economic reforms</li> </ul>
<p><b>Unit 2: Population and Human Development</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>• To learn the trends and pattern of population growth in India</li> </ul>	<ul style="list-style-type: none"> <li>• At the end of the unit the students will gain knowledge on the demographic trends and issues of India</li> <li>• Students will learn the policies adopted in India to develop human resources</li> <li>• The unit shall provide knowledge on the education and health policies adopted in India (like RTE, 2009)</li> </ul>
<p><b>Unit 3: Growth and Distribution</b></p> <p>Objective</p> <p>To learn:</p>	<ul style="list-style-type: none"> <li>• This unit discusses the development issues facing the Indian economy</li> </ul>

<ul style="list-style-type: none"> <li>● Trends in GDP and Per-capita GDP</li> <li>● Growth, poverty and inequality</li> <li>● Youth unemployment</li> <li>● Policy perspective in growth and distribution</li> </ul>	<ul style="list-style-type: none"> <li>● Studying the trends in GDP and per-capita GDP will help the students to analyze the growth path of the Indian economy</li> <li>● In this unit you will be introduced to the poverty and inequality scenario of Indian economy over the last 7 decades</li> <li>● Given human resources is one of the important factors that fosters economic growth, this unit will also help the students to get an idea about the employment and unemployment situations in India</li> <li>● One shall also be able to critically evaluate the policy perspectives in growth and distribution</li> </ul>
<p><b>Unit 4: Economic Reforms in India</b></p> <p>Objective</p> <p>To Learn:</p> <ul style="list-style-type: none"> <li>● Banking sector reforms</li> <li>● Reforms in tax policy</li> <li>● Reforms in external sector</li> <li>● Reforms in labour market</li> </ul>	<ul style="list-style-type: none"> <li>● Reforms are aimed at bringing rapid economic growth</li> <li>● As the macroeconomic theories posits effective and collaborative working of various sectors like industrial sector, agricultural sector, trade, public sector, financial sector, etc. is needed for economic growth</li> <li>● In this unit students will gain knowledge on the reforms that have been targeted at various sectors in India over the years since independence</li> <li>● Students will learn how a structural transformation took place in India in 1991.</li> <li>● Learning the policy objectives will enable students to know how India transformed into a globally competitive economy</li> <li>● Students will also be able to critically evaluate the success of this reforms</li> </ul>
<p><b>CC13 Outcome:</b> On the completion of the course students will be able to develop ideas of the basic characteristics of Indian economy, its potential on natural resources. One</p>	

will understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. Students will be able to grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the ongoing planning and economic reforms taken by the government.

<b>Semester VI</b>	
Type of Course: CC14	
<b>Name of Course: Development Economics</b>	
<b>Course Objective:</b> After completion of the course the learner will be able to know the current theoretical and empirical issues and problems concerning economic development.	
Course Content	Course Outcome
<p><b>Unit 1: Meaning of Economic Development</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>● To understand the Income Approach and Capability Approach</li> <li>● To learn the Construction and</li> <li>● To study the Dependency school</li> </ul>	<ul style="list-style-type: none"> <li>● Students would get a clear idea to differentiate between the two approaches</li> <li>● Students learn how the HDI is constructed and also get to know other indices that measure development over the globe and compare and rank the nations on the basis of their individual development trajectory</li> </ul>
<p><b>Unit 2: Stages of Development and Structural Change</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>● To learn the sector thesis</li> <li>● To understand stages of growth</li> </ul>	<ul style="list-style-type: none"> <li>● Students will be endowed with the knowledge of sector thesis of Fisher and Clark</li> <li>● The unit provides the understanding of Rostow's stages of growth which he himself termed as 'a non-communist manifesto'</li> <li>● The conclusion of the unit deals with Rostow's stages of growth vis-à-vis Marxian theory of transition (classical reading)</li> </ul>
<p><b>Unit 3: Population and Economic Development</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>● To teach the basic concepts (Birth and Death Rates, mortality, fertility)</li> <li>● To learn the demographic transition theory</li> <li>● To learn the theory of Malthusian Population Trap</li> </ul>	<ul style="list-style-type: none"> <li>● The basic concepts of population help the students to easily go through the theories related to the population growth as now students are more accustomed to the terms</li> <li>● Students can now follow the demographic graph easily and can understand in which stage a nation is</li> <li>● The unit also enables the students to deal with Malthusian population</li> </ul>

<ul style="list-style-type: none"> <li>• Understanding the concept of optimum population</li> <li>• Study the Low Level Equilibrium Trap models</li> </ul>	<p>model and the idea of optimum population</p> <ul style="list-style-type: none"> <li>• Students read the model and also their criticism, they also get to understand the concepts of critical minimum effort theory given by Nelson and Leibenstein</li> </ul>
<p><b>Unit 4: Development Strategies</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>• To understand Poverty Trap model</li> <li>• To learn the Big Push theory</li> <li>• To understand the Balanced and Unbalanced Growth Theories</li> <li>• To be endowed with the knowledge of linkages</li> </ul>	<ul style="list-style-type: none"> <li>• Here students learn the important development strategies and also the arguments for and against such theories</li> <li>• One will gather the knowledge of Poverty Trap model pioneered by Nurkse and Big Push theory of development</li> <li>• The unit also helps the students to develop a clear understanding of balanced and unbalanced growth strategies</li> <li>• This unit elucidates the importance of forward and backward linkages in the process of development</li> </ul>
<p><b>Unit 5: Role of capital and Labour in Economic Development</b></p> <p>Objective</p> <ul style="list-style-type: none"> <li>• To learn the Role of capital in Economic Development</li> <li>• To learn the concepts of Surplus Labour and Disguised Unemployment</li> <li>• To understand the economic dualism: <ul style="list-style-type: none"> <li>• Lewis model</li> <li>• Harris- Todaro model</li> </ul> </li> <li>• To study Choice of Techniques</li> </ul>	<ul style="list-style-type: none"> <li>• The unit first gives a clear understanding of significance of capital output ratio, role of technology and technical progress</li> <li>• Studying the significance of labour with reference to the concept of surplus labour helps the students to understand the problem of disguised unemployment</li> <li>• Students get to understand the interdependence between the agricultural sector and the industrial sector on studying the Lewis model of economic development</li> <li>• The Harris- Todaro model help the students to get the concept of the rural- urban migration</li> <li>• The choice between labor and capital intensive techniques are made clear through this course and students get to understand how the technique to be used is decided</li> </ul>
<p><b>Unit 6: Poverty and Inequality</b></p>	<ul style="list-style-type: none"> <li>• From this course the students get</li> </ul>

<p>Objective</p> <ul style="list-style-type: none"> <li>• To study the Inequality axioms; a comparison of commonly used inequality measures</li> <li>• To learn the Gender Inequality, connections between inequality and development and the different Poverty measurements</li> </ul>	<p>the multidimensional concept of poverty and learn different measure to compute inequality and poverty, like the HPI</p> <ul style="list-style-type: none"> <li>• Along with this they also learn the problems related to the developing economies like the poverty traps and the vicious circle of Poverty</li> </ul>
<p><b>CC14 Outcome:</b> Through this course of economic development students cover a wide range of theories related to the development. Different approaches to define development and different indices to measure developmental trajectory are taught. The multidimensional poverty concepts and the different measures have also been covered. The course explains the demographic transition and deals with the problem of population growth. The course also covers the political institutions and the concepts of democracy and makes students aware of the Government failures and corruption.</p>	

Semester VI	
Type of Course: DSE 3A & 3B	
Name of Course: Discipline Specific Elective 3	
Course Content	Course Outcome
<p><b>(3A) Economic Development and Policy in India – II</b></p> <p>Objective</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Agricultural policies and performance</li> <li>• Industrial policies and performance</li> <li>• Foreign Trade: trends and policies</li> </ul>	<ul style="list-style-type: none"> <li>• The course first deals with the agricultural sector of India in retrospect: <ul style="list-style-type: none"> <li>- Production and productivity</li> <li>- Credit</li> <li>- Labour</li> <li>- Markets and pricing</li> <li>- Land reforms</li> <li>- Regional variations</li> </ul> </li> <li>• The course then turns to provide the understanding of Indian industrial sector in retrospect: <ul style="list-style-type: none"> <li>- Production trends</li> <li>- Small scale industries</li> <li>- Public sector undertakings</li> <li>- Foreign investment</li> </ul> </li> <li>• Finally, the course enables the students to build an understanding of Indian foreign trade policies and performance by critically</li> </ul>



	<p>evaluating certain key indicators:</p> <ul style="list-style-type: none"> <li>- Balance of trade and balance of payments</li> <li>- India and the World Trade Organization</li> </ul>
<p><b>(3B) Economic History of India (1857-1947)</b></p> <p>Objective:</p> <p>To Learn:</p> <ul style="list-style-type: none"> <li>• The economic characteristics of colonial India</li> <li>• The impact of British rule in India</li> <li>• Aspects of Economic Policies in British India</li> </ul>	<ul style="list-style-type: none"> <li>• At the end of the course students will get an idea on The Pre-British Indian economy</li> <li>• Students will acquire knowledge on features of British India <ul style="list-style-type: none"> <li>- Macroeconomic trends</li> <li>- Agriculture</li> <li>- Railways and Industries</li> <li>- Economy and State</li> </ul> </li> <li>• From the understanding of the fundamental features of colonial India, students can have a clear idea of economic exploitation in British India</li> <li>• It finally comments on the rationale of economic planning after independence</li> </ul>
<p><b>DSE 3 Outcome:</b> Like the previous course this one also provides the students with two options of comparative economic development and financial economics; between they need to choose one.</p> <p>Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy–I, the course of <b>Economic Development and Policy in India – II</b> helps the students to learn to examine sector-specific trends in key indicators and their implications in the post-Independence period</p> <p>From the second option of <b>Economic History of India (1857-1947)</b> students get to understand the analyses of the key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India’s economic development after independence in 1947</p>	

<b>Semester VI</b>	
Type of Course: DSE 4A & 4B	
Name of Course: Discipline Specific Elective 4	
<b>Course Content</b>	<b>Course Outcome</b>
<b>(4A) Dissertation</b>	<ul style="list-style-type: none"> <li>• On successful completion of this</li> </ul>

<p>Objective:</p> <ul style="list-style-type: none"> <li>• A dissertation may be written on any issues pertaining to Indian economy and/or Global Economy in the present context or in the historical context. The students should be guided in how to analyze socio-economic data for this purpose</li> </ul>	<p>course, students will be able to analyze economic data and also to write on empirical problems of economic life especially with reference to India</p>
<p><b>(4B) Financial Economics</b></p> <p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Investment Theory and Portfolio Analysis</li> <li>• Options and Derivatives</li> <li>• Corporate Finance</li> </ul>	<p>On successful completion of this course, students will be able to:</p> <ul style="list-style-type: none"> <li>• Apply utility theory to describe and analyze investment decisions under risk aversion</li> <li>• Describe and apply modern portfolio theory</li> <li>• Describe, apply and criticize single and multiple factor models of risk and return</li> <li>• Describe, apply, compare and criticize the efficient markets hypothesis and behavioural finance theory</li> <li>• Identify and describe the risks of managing portfolios of fixed income securities</li> </ul>
<p><b>DSE 4 Outcome:</b> The course consists of two parts where the students have to choose any one.</p> <p>The <b>Dissertation</b> enables the students to handle with data and learn to analyze them on the basis of the theoretical tools learnt during the courses offered previously. It also useful for learning the basics of writing a research paper.</p> <p>From the second option of <b>Financial economics</b> students get to understand and apply investment decision under risk aversion, modern portfolio theory, single and multiple factor models of risk and return, risks of managing portfolios of fixed income securities.</p>	

**Course Outcome of Economics (Generic Elective) Curriculum under CBCS  
System  
(Semester-wise)**

<b>Semester I</b>	
<b>Introductory Microeconomics (HGE-1)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Exploring the subject matter of Economics</li> <li>• Supply and Demand: How Markets Work, Markets and Welfare</li> <li>• The Households</li> <li>• The Firm and Perfect Market Structure</li> </ul>	<ul style="list-style-type: none"> <li>• After completion of the course the students will be able to learn the basic idea of Microeconomics in particular and Economics in general</li> </ul>
<b>Semester II</b>	
<b>Introductory Macroeconomics (HGE-2)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• National Income Accounting, unemployment and open economy issues</li> <li>• Income Determination in the short-run               <ul style="list-style-type: none"> <li>○ Simple Keynesian Model</li> <li>○ IS-LM Model (concept of equilibrium)</li> </ul> </li> <li>• Money and Inflation</li> </ul>	<ul style="list-style-type: none"> <li>• After the completion of the course the learner will be able to be equipped with the knowledge of basic functioning of a market economy at the macro level including understanding of national income accounting</li> </ul>
<b>Semester III</b>	
<b>Intermediate Microeconomics – I (HGE-3A)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p>	<ul style="list-style-type: none"> <li>• After completion of the course the learner will be able to understand the fundamentals of microeconomic</li> </ul>

<ul style="list-style-type: none"> <li>• Consumer Theory <ul style="list-style-type: none"> <li>○ Cardinal Theory</li> <li>○ Ordinal Theory</li> </ul> </li> <li>• Production and Costs</li> <li>• Competitive Equilibrium</li> <li>• Input market in perfect competition</li> </ul>	theories in the context of a market economy
<b>Semester III</b>	
<b>Intermediate Macroeconomics – I (HGE-3B)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Income Determination in the short-run <ul style="list-style-type: none"> <li>○ IS-LM Model</li> </ul> </li> <li>• Aggregate Demand and Aggregate Supply <ul style="list-style-type: none"> <li>○ Complete Keynesian Model</li> </ul> </li> <li>• Inflation, Unemployment and Expectations</li> </ul>	<ul style="list-style-type: none"> <li>• After the completion of the course the learner will be able to understand the fundamental macroeconomic theories in the context of a market economy</li> </ul>
*One needs to choose any one from GE3A and GE3B in Semester III	
<b>Semester IV</b>	
<b>Intermediate Microeconomics – II (HGE-4A)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• General Equilibrium, Efficiency, and Welfare <ul style="list-style-type: none"> <li>○ Pareto Optimality</li> </ul> </li> <li>• Market Structure <ul style="list-style-type: none"> <li>○ Monopoly</li> <li>○ Non collusive Oligopoly</li> </ul> </li> <li>• Input Market under Imperfect Competition</li> </ul>	<ul style="list-style-type: none"> <li>• After completion of the course the students will be able to learn the fundamental theories of microeconomics</li> </ul>

<ul style="list-style-type: none"> <li>○ Monopsony, bilateral monopoly in labour market</li> <li>○ Externalities</li> <li>○ Public goods and markets with asymmetric information</li> </ul>	
<b>Semester IV</b>	
<b>Intermediate Macroeconomics – II (HGE-4B)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Schools of Macroeconomic Thoughts <ul style="list-style-type: none"> <li>○ Classical System</li> <li>○ Keynes vs. Classics</li> </ul> </li> <li>• Macroeconomic Foundations <ul style="list-style-type: none"> <li>○ Consumption Functions</li> <li>○ Investment Function</li> <li>○ Demand for Money</li> </ul> </li> <li>• Monetary Policy</li> <li>• Economic Growth <ul style="list-style-type: none"> <li>○ Harrod- Domar Model</li> <li>○ Solow one sector growth model</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• After completion of the course the students will develop the analytical skills to engage critically with the fundamental theories of macroeconomics vis-à-vis the real-life economic problems</li> </ul>
*One needs to choose any one from GE4A and GE4B in Semester IV	

**Course Outcome of Economics (General) Curriculum under CBCS System  
(Semester-wise)**

<b>Semester I</b>	
<b>Principles of Microeconomics – I (GCC-1)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Introduction <ul style="list-style-type: none"> <li>○ Scarcity and Choice</li> <li>○ Opportunity cost</li> <li>○ Production possibility frontier</li> <li>○ Theory of Demand and Supply</li> </ul> </li> <li>• Consumer Theory <ul style="list-style-type: none"> <li>○ Budget Constraint</li> <li>○ Preferences</li> <li>○ Choice</li> </ul> </li> <li>• Production and Costs</li> <li>• Perfect Competition</li> </ul>	<ul style="list-style-type: none"> <li>• After completion of the course the learners will be able to understand the basic functioning of individual economic agents in a market economy</li> </ul>
<b>Semester II</b>	
<b>Principles of Macroeconomics – I (GCC-4)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• National Income Accounting</li> <li>• Determination of GDP</li> <li>• National Income Determination in an Open Economy with Government</li> <li>• Money in a Modern Economy</li> </ul>	<p>After the completion of the course the learner will be able to:</p> <ul style="list-style-type: none"> <li>• Learn the basic variables of a market economy at the macro level.</li> <li>• Learn the concepts like national income and money in modern market economy</li> </ul>
<b>Semester III</b>	
<b>Principles of Microeconomics – II (GCC-7)</b>	
<b>Course Content</b>	<b>Course Outcome</b>

<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Market Structures <ul style="list-style-type: none"> <li>○ Theory of a Monopoly Firm</li> <li>○ Imperfect Competition</li> </ul> </li> <li>• Consumer and Producer Theory <ul style="list-style-type: none"> <li>○ Consumer and Producer Theory in Action: Externalities, marginal cost pricing, internalizing externalities, public goods</li> <li>○ Markets and Market Failure</li> </ul> </li> <li>• Income Distribution and Factor pricing</li> <li>• International Trade <ul style="list-style-type: none"> <li>○ Absolute advantage, comparative advantage, terms of trade, sources of comparative advantage, trade barriers, free trade/ protectionism</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• This is a sequel to Principles of Microeconomics–I covered in the first semester. This course will enable the students to develop the understanding of microeconomic theories as well.</li> </ul>
<b>Semester III</b>	
<b>Financial Economics (GSEC-1)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Deterministic cash-flow streams</li> <li>• Single-period random cash flows</li> </ul>	<ul style="list-style-type: none"> <li>• This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business</li> </ul>

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<b>Semester IV</b>	
<b>Principles of Macroeconomics - II</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• IS-LM Analysis</li> <li>• GDP and Price Level in Short Run and Long Run <ul style="list-style-type: none"> <li>○ Aggregate demand and aggregate supply</li> <li>○ Multiplier Analysis with AD curve and changes in price levels</li> <li>○ Aggregate supply in the SR and LR</li> </ul> </li> <li>• Inflation and Unemployment <ul style="list-style-type: none"> <li>○ Concept</li> <li>○ SR and LR Phillips curve</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• This is a sequel to Principles of Macroeconomics–I. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy</li> </ul>
<b>Semester IV</b>	
<b>Statistical Tools for Data Analysis – I (GSEC-2)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Sources of data <ul style="list-style-type: none"> <li>○ Population census versus sample surveys</li> <li>○ Random sampling</li> </ul> </li> <li>• Univariate frequency distributions</li> <li>• Measures of central tendency</li> <li>• Measures of dispersion</li> <li>• Skewness and Kurtosis</li> </ul>	<ul style="list-style-type: none"> <li>• This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analyzed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyze data</li> </ul>
<b>Semester V</b>	



<b>Development and Policy in India – I (GDSE-1A)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Issues in Growth, Development and Sustainability</li> <li>• Factors in Development <ul style="list-style-type: none"> <li>○ Capital formation (physical and human)</li> <li>○ Technology</li> <li>○ Institutions</li> </ul> </li> <li>• Population and Economic Development</li> <li>• Employment <ul style="list-style-type: none"> <li>○ Organized and the Unorganized sectors</li> <li>○ Under and disguised unemployment (rural and urban)</li> <li>○ Employment schemes and their impact</li> </ul> </li> <li>• Indian Development Experience</li> </ul>	<ul style="list-style-type: none"> <li>• This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period</li> </ul>
<b>Semester V</b>	
<b>Money and Banking (GDSE-1B)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Money <ul style="list-style-type: none"> <li>○ Concept, functions, measurement</li> <li>○ Theories of money supply determination</li> </ul> </li> <li>• Financial Institutions, Markets, Instruments and Financial Innovations <ul style="list-style-type: none"> <li>○ Role of financial markets and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses 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</li> </ul>

<p>institutions</p> <ul style="list-style-type: none"> <li>○ Problem of asymmetric information: adverse selection and moral hazard</li> <li>○ Financial crises</li> <li>● Money and capital markets <ul style="list-style-type: none"> <li>○ Organization, structure and reforms in India</li> <li>○ Role of financial derivatives and other innovations</li> </ul> </li> <li>● Interest Rates <ul style="list-style-type: none"> <li>○ Theories of term structure of interest rates</li> <li>○ Interest rates in India</li> </ul> </li> <li>● Banking System <ul style="list-style-type: none"> <li>○ Balance sheet and portfolio management</li> <li>○ Indian banking system: Changing role and structure</li> <li>○ Banking sector reforms in India</li> </ul> </li> <li>● Central Banking and Monetary Policy</li> </ul>	
<b>Semester V</b>	
<b>Statistical Tools for Data Analysis – II (GSEC-3)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>● Bivariate frequency distribution</li> <li>● Correlation and regression</li> <li>● Rank correlation</li> <li>● Basics of index numbers <ul style="list-style-type: none"> <li>○ Price and quantity index numbers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● This paper is a sequel to Statistical Tools for Data Analysis – I. It will teach the students how to use bivariate data and how to construct different index numbers</li> </ul>
<b>Semester VI</b>	
<b>Economic Development and Policy in India – II (GDSE-3A)</b>	

<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Agriculture: Policies and Performance</li> <li>• Industry: Policies and Performance</li> <li>• Foreign Trade: Trends and Policies</li> </ul>	<ul style="list-style-type: none"> <li>• Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy-I, this course examines sector-specific trends in key indicators and their implications in the post-Independence period</li> </ul>
<b>Semester VI</b>	
<b>Economic History of India (1857-1947) (GDSE-3B)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Introduction: Background and Introduction of Colonial India</li> <li>• Macro Trends <ul style="list-style-type: none"> <li>○ National Income</li> <li>○ Population</li> <li>○ Occupational structure</li> </ul> </li> <li>• Agriculture</li> <li>• Railways and Industry</li> <li>• Economy and State in the Imperial Context</li> </ul>	<ul style="list-style-type: none"> <li>• This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India's economic development after independence in 1947</li> </ul>
<b>Semester VI</b>	
<b>Introduction to Indian Public Finance (GSEC-4)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective:</p> <p>To learn:</p> <ul style="list-style-type: none"> <li>• Concepts <ul style="list-style-type: none"> <li>○ Fiscal Policy, need for government spending, area of government spending in India</li> <li>○ Capital Expenditure, Revenue Expenditure, Plan Expenditure</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• This course is intended to equip students with some of the current conceptual issues and empirical trends pertaining to fiscal policy and budget making in India</li> </ul>

<p>and Non-Plan Expenditure</p> <ul style="list-style-type: none"><li>○ Deficits – fiscal, primary and revenue, impact of fiscal deficits on economy, need to control fiscal deficits</li><li>○ Capital Receipts, Revenue Receipts, Tax and Non-Tax Revenue, Direct and Indirect Taxes, Goods and Service Tax (GST)</li></ul> <ul style="list-style-type: none"><li>● Understanding Union Budget<ul style="list-style-type: none"><li>○ What is budget?</li><li>○ Trends in different deficits in budget in India</li><li>○ Trends of different receipts in budget in India</li><li>○ Trends of different expenditures in budget in India</li></ul></li></ul>	
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**Course Outcome of Economics (Generic Elective) General Curriculum under  
CBCS System  
(Semester-wise)**

<b>Semester V</b>	
<b>Introductory Microeconomics (GGE-1)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• Exploring the subject matter of Economics</li> <li>• Supply and Demand: How Markets Work, Markets and Welfare</li> <li>• The Households               <ul style="list-style-type: none"> <li>○ Theory of consumer's behavior</li> <li>○ Labour-Leisure choice problem</li> </ul> </li> <li>• The Firm and Perfect Market Structure</li> <li>• Imperfect Market Structure               <ul style="list-style-type: none"> <li>○ Monopoly</li> <li>○ Other various types of imperfect competition</li> </ul> </li> <li>• Input Markets</li> </ul>	<ul style="list-style-type: none"> <li>• After completion of the course the learners will be able to learn the basic idea of Microeconomics in particular and Economics in general</li> </ul>
<b>Semester VI</b>	
<b>Introductory Macroeconomics (GGE-2)</b>	
<b>Course Content</b>	<b>Course Outcome</b>
<p>Objective: To learn:</p> <ul style="list-style-type: none"> <li>• National Income Accounting, unemployment and open economy issues</li> <li>• Money and Inflation</li> </ul>	<ul style="list-style-type: none"> <li>• After the completion of the course the learner will be able to be equipped with the knowledge of basic functioning of a market economy at the macro level including understanding of national income accounting</li> </ul>