ASANSOL GIRLS' COLLEGE

Department of Economics

Programme Specific Outcome (PSO) and Course Outcome (CO)

Programme Specific Outcome (PSO):

The programme enables the students:

PSO1: To acquire good knowledge and understanding in key areas of economics

PSO2: To analyze economic problems and develop correct solutions using various theories and laws.

PSO3: To develop problem solving skills.

PSO4: To design and conduct market surveys demonstrating their understanding of the economical tools and processes.

Course Outcome (CO)

Semester	Unit & Topic	Unit specific CO
Semester-I **(Major & Minor)**	Group-A(Micro Economics) Module: I a) Introduction: b) Demand: c) Supply & Market: d) Elasticity of demand	Students learn about C1: The general concepts of economics, C2: Theory of demand, Supply and Market C3: Knowledge about different concepts of Elasticity competition under market structure.
	Module: II a) Utility b) Indifference Curve c) Equilibrium e) Price effect f) Price effect, Income effect, Substitution effect & Slutsky's equation g) Derivation of demand curve h) Giffen's Paradox, Bandwagon effect, Snob effect, Veblen effect i)Relationship between Compensated demand curve and ordinary demand curve	C4: Different approaches of Utility like Cardinal and Ordinal C5: The Marshallian Approach C6: Indifference curve and Budget line C7: How the consumer attains Equilibrium C8: What are Price effect, Income effect, Substitution effect C9: Derivation of Slutsky's equation C10: Derivation of demand curve C11: Exceptional cases of Law of demand like, Giffen's Paradox, Bandwagon effect, Snob effect, Veblen effect C12: Relationship between Compensated demand curve and ordinary demand curve
	Module: III a) Production function b) Iso- quant and Iso-cost line c) Cost function	C13: Production Function C14: Isoquant and Iso Cost lines C15: Equilibrium of the Producer C16: Cost Function C17: Total Cost, Variable Cost and Fixed

		Cost C18: Average Cost, Average Variable Cost and Average Fixed Cost C19: Marginal Cost
	Group-B (Macro Economics) Module: I a) Different Concepts and Measurement of National Income b) The flow of product method and the flow of expenditure method; Concept of GNP deflator c) Interrelation between measures of National Income d) Identity of Saving and Investment e) National Income as a measure of Economic Welfare	Students gain information about C1: GNP, NNP, GDP, NDP, NI, DI C2: The flow of product method and the flow of expenditure method C3: Concept of GNP deflator C4: Interrelation between measures of National Income C5: What is Saving – Investment identity C6: Can National Income be a measure of Economic Welfare
	Module: II a) The classical quantity theory of money b) The Classical Theory of Rate of Interest c) Loanable fund theory d) Say's Law and Walras' law e) The Dichotomy between the real and monetary sectors Neutrality of money	C7: Classical theory of output and employment C8: What are the two versions of classical quantity theory of money C9: The Classical Theory of Rate of Interest and Loanable fund theory C10: What is Say's Law and Walras' law C11:Neutrality of money

	Module: III a) Keynesian Consumption Function and its properties b) Saving Function & its properties c) Determination of National Income d) Comparative static analysis e) Investment Multiplier f) Government Expenditure Multiplier g) Balanced Budget Multiplier h) The Paradox of Thrift	C12: Keynesian Consumption Function, Saving Function and their properties C13: How to determine National income C14: Comparative static analysis C15:What is Investment Multiplier, Government Expenditure Multiplier and Balanced Budget Multiplier C16: What is paradox of thrift
Basic Computer Applications **BSCECOSE101**	Module: I a) Introduction to Excel b) Sort c) Filter d) Conditional Formatting e) Charts	C1: Illustrate the basic knowledge regarding use of Excel for sorting and filtering data to prepare various chart. C2: Examine how to carry out statistical analysis using Excel C3: Line charts, column charts, pie charts, area charts and surface charts C4: It helps them to choose a Project based on techniques taught in this paper which will be helpful to them in further research.
	Module II a)Excel Basic needed for statistical analysis of data b) Pivot tables c) Tables d) Solver	C5: Extract the significance from a large, detailed data set C6: Create tables to analyse data in Excel C7: Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems. C8:Creating a top-ten list with values or percentages C9:Setting up subtotals ,Counting the number of unique items in a list C10:Using SUMIF and COUNTIF functions

Money and Banking BSCECOMDC111	Module I a. Money	Students gain information about C1: Evolution of Money C2: Concept of money C3: Functions of Money C4: Types of Money C5: Measures of Money Supply (M1, M2, M3 etc)
	Module II a. Banking b. Commercial Bank c. Central Bank	C6: Definition and functions of Commercial Banks. C7: Functions of Commercial Banks C8: Credit creation by Commercial banks C9: Major Developments in Commercial banking in India since independence. C10: Performance of Commercial banks in India. C11: Functions of Central Bank C12: Quantitative and Qualitative Credit Control Methods. C13: Functions of Reserve Bank of India
	Module III a. Banking Sector Reforms in India	C14: Banking Sector Reforms in India since 1991

Semester	Unit & Topic	Unit specific CO
Semester-II **BSCHECOC201** **Microeconomic Theory - II**	Module –I Imperfect Competition a) Theory of Monopoly b) Monopolistic Competition c) Theory of Oligopoly	Students get the idea of C1: Characteristics of different markets under imperfect competition which includes monopoly, monopolistic completion and oligopoly. C2: Short run and long run equilibrium of different markets under imperfect competition
	Module-II a) Demand for factors of production b) Theory of Wage c) Theory of Rent d) Theory of Interest e) Theory of Profit	C3: Different theories of factor pricing - rent, wages, interest and profit

	Module-III a) General Equilibrium and Economic Welfare b) Partial and general equilibrium c) Concept of Pareto optimum d) General Pareto optimality condition	 C4: General equilibrium and economic welfare C5: Partial equilibrium C6: What is Pareto Optimum? C6: Pareto optimality condition
Semester-II **BSCHECOC202** **Mathematical Economics - I**	Module-I a)Some Basic Mathematical Concepts with Economic Illustrations b) A.P. and G.P c) Types of function	Students get information on C1: Some basic mathematical concepts with economic illustration
	Module-II a) Calculus and its Applications in Economics b) Differential Calculus c) Integral Calculus	 C2: Calculus and its application in economics C3: Differential and integral calculus C4: Maxima and Minima

	d) Difference and Differential Equations	C5: Difference and differential equations
Microeconomic Theory - II BSCHECOGE202	Module –I Imperfect Competition a) Theory of Monopoly b) Monopolistic Competition c) Theory of Oligopoly	Students learn about C1: Characteristics of different markets under imperfect competition which includes monopoly, monopolistic completion and oligopoly. C2: Short run and long run equilibrium of different markets under imperfect competition
	Module-II a) Demand for factors of production b) Theory of Wage c) Theory of Rent d) Theory of Interest e) Theory of Profit	C3: Ricardian Theory of rent C4: Money wage and real wage C5: Factors Determining Real Wage-Role of Trade Unions in Wage Determination under competitive set up C6: Loanable fund and liquidity preference theory of interest C7: Theories of profit given by Schumpeter, Knight

		andHawley
Semester-III **BSCHECOC301** **Statistical Methods-I**	Module-I a) meaning of statistics statistical data, classification of the statistical data b) presentation of statistical data c) methods of collection of data d) different types of diagrammatic presentation of data e) concepts of variables , attributes, f) frequency distribution(co different concepts - tally marks, frequency, frequency density, cumulative frequency) g) different types of diagrammatic presentation of frequency distribution	C1: understanding the meaning of statistics, statistical data and their classification C2: detailed explanation on different types of presentation of statistical data, construction of table, the important components of a table, importance of tabular representation of data C3: detail discussion on different methods of collection of data and their limitations C4: distribution how to represent data using different types of diagrams,how to do calculations for pie chart using examples C5 : proper understanding of the concepts of variables , attributes , discrete and continuous frequency C6 : proper understanding of the concepts related to frequency distribution like tally marks, frequency, frequency density, cumulative frequency, with examples C7 : detailed understanding and drawing of different diagrammatic presentation of frequency distribution like Histogram, Frequency Curve and frequency

		polygon, Ogives
	Module-II a) meaning of Central Tendency, it's measures b) Arithmetic Mean and it's properties c) Median and it's properties d) Mode and it's properties e) comparison and relation among mean, median and mode f) geometric mean and harmonic mean h) composite mean	C8 : proper understanding of the concept of Central Tendency, brief idea of it's different measures C9 : detailed understanding of the concept and definition of Arithmetic Mean for both discrete and continuous frequency distribution and detailed derivation of it's properties, with numerous examples and solving problems C10 : detailed understanding of the concept and definition and formula of Median for both discrete and continuous frequency distribution and detailed derivation of it's properties, with numerous examples and solving problems C11 : detailed understanding of the concept and definition and formula of Mode for both discrete and continuous frequency distribution and detailed derivation of it's properties, with numerous examples and solving problems C12 : a comparative study of the three measures of Central Tendency and the relation among them, solving problems using the relation C13 : proper understanding of the

		concepts and definitions and formula of geometric mean and harmonic mean, their uses, solving problems using these concepts C14 : the detailed understanding of the concept of composite mean, and solving problems with it
	Module-III a) meaning of dispersion b) absolute measures: Range, mean deviation, standard deviation, quartile deviation c) relative measures of dispersion d) Curve of concentration e) measuring economic inequality, Lorenz Curve, Gini co-efficient f) moments, central and non-central moments , and their relation g) skewness, it's measurs h) Kurtosis, it's measurs i) Sheppard's Correction	C15 : proper understanding of the concept of dispersion with digramatic explanation C16 : proper understanding of various absolute measures like Range, Mean Deviation, Standard Deviation, Quartile Deviation, their definitions and formulas with examples and solving problems using these measures C17 : understanding of the concept, definitions and formulas of the relative measures of dispersion with examples C18 : a brief knowledge of the curve of concentration C19 : detailed knowledge of Lorenz Curve and Gini co-efficient , how to calculate them and draw Lorenz Curve, in relation to measuring economic inequality C20 : detailed understanding of the concepts, definition and formula of moments, central and non-central moments, their uses and the relation between central and non-central moments C21 : proper understanding of the concept and definition of

		skewness, different types of skewness with diagrams, it's measures using moments, solving simple problems C22 : proper understanding of the concept and definition of Kurtosis, different types of Kurtosis with diagrams, it's measures using moments, solving simple problems C23 : brief idea of Sheppard's Correction, with simple examples
	Module-IV a) Scatter diagram b) simple correlation coefficient, it's properties, c) calculation of correlation coefficient for grouped data and ungrouped data d) Spearman's rank correlation coefficient (without tie) e) Kendall's rank correlation coefficient f) limitations of correlation coefficient g) simple regression analysis, regression lines, their properties, regression coefficients	C24 : proper understanding of scatter diagram , concepts of correlation and regression with reference to scatter diagram C25 : proper understanding of the concept, definition and formula of simple correlation coefficient, it's properties and their proof C26 : how to solve problems on correlation coefficient and calculate the correlation coefficient for both grouped and ungrouped data with examples and solving problems C27 : proper understanding of the concept of rank correlation, it's uses, and the formula of Spearman's rank correlation coefficient and Knowing how to solve problems C28 : understanding the concept and definition of Kendall's rank correlation coefficient and Knowing how to solve problems C29 : explaining the limitations of

		correlation coefficient and it's uses. C30 : detailed understanding of the concept of regression, regression lines, regression coefficients and detailed explanation and derivation of the properties of regression coefficients, Knowing how to solve problems
	Module-V a) purpose and uses of index number and problems of construction of index numbers b) different formula for price and quantity index numbers c) different tests for index numbers d) chain index and cost of living index	C31 : proper understanding of the concept of index number, it's uses and purpose in statistical analysis, brief idea about the problems in relation to the construction of index number C32 : idea of price and quantity index numbers, understanding the formulas for price and quantity index numbers, and knowing how to calculate them with examples and solving simple problems C33 : detailed explanation of different tests, like time reversal test , factor reversal test, circular test, with example and solving problems related to them C34 : detailed discussion of the Chain Base method of construction of index numbers with examples and their advantages and disadvantages, knowing how to construct this index mathematically using numerical problems. Detailed understanding of cost of living index number, detailed description about the steps for its construction and solving simple

		problems
Macroeconomic Theory-II **BSCHECOC302**	Module-I a) Empirical findings regarding Consumption Function b) Alternative Theories regarding its behaviour	Students learn about the C1: Consumption Function C2: Theories of consumption given by Keynes, Smithies, Dusenbery, Friedman and Ando-Modigliani
	Module-II a) The Keynesian analysis of Investment b) The Marginal Efficiency of Investment, and its relation with the amount of Investment c) Net Present Value criterion and Marginal Efficiency criterion of Investment d) The Fixed Accelerator Principle of Investment e) The Flexible Accelerator Principle of Investment	C3: The Investment Function C4: Keynesian analysis of Investment with its limitations C5: MEC criteria, MEI criteria and NPV criteria C6: Implications and Limitations of Fixed Accelerator Principle of Investment C7: Implications and Limitations of Multiplier accelerator theory
	Module-III a) Motives of holding money b) Keynesian liquidity preference theory c) The inventory theoretic approach to transaction demand for money d) credit creation by commercial banks e) money multiplier	C8:Transaction, Precautionary and Speculative demand for money C9: Liquidity trap analysis C10: Baumol and Tobininventory theoretic approach to transaction demand for money C11: Concepts of moneysupply,

	h) interest sensitivity of money supply	money multiplier
	Module-IV a) The Quantity Theory approach to Inflation b) Demand Pull Inflation, Cost Push & Mark Up inflation c) The Philips Curve d) Consequences of inflation e) Measures to control Inflation	C12: Theories of Inflation C13: Inflationary Gap analysis along with its shortcomings C14:Concepts of Cost Push & Mark Up inflation C15:Short-run and long-run Philips Curve and the trade-off between Inflation and Unemployment C16: Effects of inflation C17: How to control inflation
Development Economics BSCHECOC303	Module : I a) meaning of development b) different types of development c) growth and development d) different measures of development.	Students learn about C1 : Development and its importance in economics C2 : concepts of different types of development and differences among them C3 : concept of growth, difference between economic development and economic growth

		C4 : how to measure the development of an economy, different indices for measuring development
	Module II a) characteristics of underdevelopment b) obstacles to development c) concept - trap models d) critical minimum effort thesis e) low level equilibrium trap model f) Model of Cumulative Causation	C5 : concept of underdevelopment, main features of underdevelopment C6 : major hindrances of development C7 : classification of different models of development, concept of trap models C8 : detailed explanation of critical minimum effort thesis , it's significance, criticism C9 : detailed explanation of low level equilibrium trap model with assumptions, it's importance and criticism C10 : detailed explanation of Cumulative Causation

	Module III a) Rostow's stage theory b) concept - balanced and unbalanced growth c) vicious circle of poverty d) balance growth by Nurkse e) unbalanced growth by Hirschman	C11 : concept of stage theory, the salient and distinct features of all five stages in Rostow's stage theory of growth C12 : concepts of balanced growth and unbalanced growth, their definition, the names of theories which supports these strategies. C13 : concept of vicious circle of poverty and the detailed explanation of the demand side and supply side view of this concept, it's critical analysis C14 : critical analysis of balanced growth model by Prof Nurkse C15 : detailed explanation of unbalanced growth theory by Prof Hirschman
	Module IV a) concept - surplus labour b) Lewis model of surplus labour c) concept - labour intensive and capital intensive technique d) A K. Sen's model of Choice of technique	C16 : concept of dual sector model, different types of dualism in development economics, and surplus labour. C17 : detailed explanation of Lewis model of surplus labour with assumptions C18 : definition and concepts of

		labour intensive and capital intensive technique C19: detailed explanation of A. K. Sen's model of Choice of technique.
Introductory Macroeconomics **BSCHECOGE301**	Module I a. Scope and nature of Macro Economics b. Targets & Instruments of macroeconomic policy	Students learn about C1:The various macroeconomic problems and Policies C2: The application of the Targets & Instruments of macroeconomic policy
	Module-II a. Circular flow of income – two sector model b. Concepts and Measurement c) Method of calculating national income	C3: Definition of national income C4: Concepts of GNP, NNP, GDP, NDP, NI, DI C5: The product method, income method and the expenditure method
	Module-III a. Aggregate demand, aggregate supply in the Simple Keynesian Model b. Keynesian Consumption Function and its properties c. Saving function d. Income and output determination in two sector model e. The multiplier	C6: How to determine National incomein the Simple Keynesian Model C7: Keynesian Consumption Function, Saving Function and their properties C8: Factors affecting Consumption Expenditure

		C9: MPC, APC C9:What is Investment Multiplier, Government Expenditure Multiplier and Balanced Budget Multiplier
	Module IV a) Classical theory of employment b) Equilibrium in classical system c) Say's law of market d) Theories of interest e)Criticism of classical model	C7: Classical theory of output and employment with its criticisms C8: Concept of full employment C9: What are the two versions of classical quantity theory of money C10: The Classical Theory of Rate of Interest and Loanable fund theory C11: Say's Law and Walras' law

Basic Computer Applications **BSCHECOSE301**	Module: I a) Introduction to Excel: b) Sort:: c) Filter: d) Conditional Formatting: e) Charts:	C1: Illustrate the basic knowledge regarding use of Excel for sorting and filtering data to prepare various chart. C2: Examine how to carry out statistical analysis using Excel C3: Highlight cells with a certain colour, depending on the cell's value. C4: Line charts, column charts, pie charts, area charts and surface charts
	Module: II a) Excel Basics needed for Statistical Analysis of the Data b) Pivot Tables c) Tables, Solver	C5: To extract the significance from a large, detailed data set. C6:Create tables to analyze data in Excel C7: Use Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems C8: It helps them to choose a Project based on techniques taught in this paper which will be helpful to them in further research

Statistical Methods-II **BSCHECOC401**	Module-I a) nature and decomposition of time series b) analysis of trends - polynomial and exponential c) non linear growth curves d) moving average method e) seasonal variation and its measurement f) solving numerical problems using 4 yearly, 5 yearly moving average and fitting the trend g) solving problems with seasonal index and seasonal fluctuations	C1 : definition, meaning and necessity of the time series, components of time series C2 : detailed explanation of polynomial and exponential trends with examples C3 : brief knowledge of non - linear growth curves C4 : detailed explanation of moving average method with examples and solving problems with this method C5 : detailed explanation of seasonal variation and the method of measuring seasonal variation C6 : How to solve numerical problems using 4 yearly, 5 yearly moving average method and how to fit trend line C7 : How to solve problems with seasonal index and seasonal fluctuations
	Module-II a) concepts: random experiment, outcome, events - mutually exclusive, exhaustive and equally likely. b) Definitions of probability - classical and axiomatic. c) theorems of total probability d) concept of conditional probability	C8: understanding the concepts and definitions of probability, random experiments, outcome, and different types of events and their explanation with examples C9 : understanding the concepts of classical definition and axiomatic definition of probability with examples

	and its definition e) theorems of compound probability f) concept of independence events g) Bayes' theorem	C10 : detailed explanations and the derivations of the theorems of total probability and solving problems using them C11 : detailed understanding of the concept and definition of conditional probability with examples and solving problems C12 : detailed explanations, implications and derivations of the theorems of compound probability with examples C13 : understanding of the concept of independent events with examples and solving problems with independent events in probability C14 : detailed explanation of the Bayes' theorem, it's statement and proof, solving problems
	Module-III a) definitions of random variables , probability distribution, probability function and distribution function - mass and density b) concept of expectation and variance of random variables	C15 : detailed understanding of the concept of random variables, probability distribution, probability mass function and probability density functions C16 : detailed understanding of the concept of expectation, variance of random variables, SRSWR and SRSWOR

	Module-IV a) concept of univariate and bivariate distribution, binomial distribution, poison distribution and normal distribution b) mean,variance and moment generating functions of binomial distribution c) mean,variance and moment generating function of Poisson distribution d) mean variance and moment generating function of normal distribution a)	C17: explanation and understanding of the concept and definition of univariate and bivariate distribution and binomial, Poisson and normal distribution C18: detailed derivation of mean, variance and moment generating function of binomial distribution C19: detailed derivation of mean, variance and moment generating function of Poisson distribution C20: detailed derivation of mean, variance and moment generating function of normal distribution
	Module-V a) concepts - population, sample, parameter , statistics , random sampling b) method of drawing random samples, concept of random numbers c) sampling distribution and it's two types d) standard error e) sampling distributions associated with Normal Population, expectation and standard error of sample mean	C21 : understanding the concepts and definitions of population, sample, parameter, statistic, random sampling C22 : detailed explanation of the method of drawing random samples and the concept of random numbers with examples C23 : proper understanding of sampling distribution and it's types C24 : understanding of concept and definition of standard error

	Module-VI a) estimation and properties perfect good estimator - unbiasedness, minimum variance, efficiency consistency b) main to simple method of point estimation c) maximum likelihood estimators and their properties d) null hypothesis and alternative hypothesis, confidence interval e) testing of hypothesis, p - value f) type one and type two errors g) simple mathematical examples of test for the mean and variance of a univariate normal population	C25 : detailed understanding of the concepts of sampling distribution with Normal population, expectation and standard error C26 : understanding the concepts and definitions of estimation, unbiasedness, minimum variance, efficiency consistency C27: concept of point estimation and it's method C28: detailed understanding and explanation of maximum likelihood estimators and their properties C29: proper understanding of the concepts - null hypothesis, alternative hypothesis, confidence interval with examples and solving some numerical problems C30: detailed understanding the concepts of testing of hypothesis, p value with examples and solving problems C31: proper understanding of the concepts of type one and type two error with examples C32: how to solve simple mathematical examples of test for the mean and variance of a univariate normal population

Indian Economics-I **Course Code: BSCHECOC402**	Module I a) Trends in national income, per capita income b) Changes in occupational pattern c) Sectoral distribution of national income	Students learn about C1: Structural Changes in per capita and national income in the Indian Economy C2: Changes in occupational pattern C3: Sectoral distribution of national income during the post-independence period
	Module II a) Farm size and Productivity b) Land reforms c) Green revolution d) Agricultural marketing e) Concepts of food security and public distribution system in India	C4: Farm size and productivity debate C5: Importance, Features, implementation, causes and impact of land reforms C6: Features, merits and demerits of Green revolution C7: Problems and prospects of Agricultural marketing C8: Concept of food security C9: Concept of public distribution system in India
	Module III a) Industrial policy resolution b) licensing policy c) New industrial policy, 1991 d) the EXIT policy e) SSIs and large scale industries in India- Present problems of and its remedies	C10: Industrial Policy Resolutions (1948, 1956) C11: Role of licensing policy C12: Need for New industrial policy, 1991 C13: Importance of EXIT policy C14: Problems and prospects of SSIs and large scale industries in India

	Module IV a) Trend of Population Growth in India in recent years b) Problems associated with population growth c) National population policy d) Demographic dividend	C15: Population Growth in India- Trends and problems C16: Brief outline of the National population policy C17: What is Demographic dividend
	Module V a) Poverty b) Nature and types of unemployment in India c) Problem of measurement of unemployment d) Unorganized labour market e) Female and child labour	C18: Concept and measurement of Poverty C19: Nature and types of unemployment in India C20: Measurement of unemployment in India C21: Present structure of Unorganized labour market C22: Participation of female and child labour
	Module VI a) Concept of black money b) estimates c) Sources d) impacts e) measures to tackle black money	C23: Existence of the Parallel Economy in India C24: Calculation of black money C25: Sources of black money C26: Effects of black money C27: How to control the creation of black money

Mathematical Economics-II **Course Code: BSCHECOC403**	Module I a) Scalar, Vector and Matrices b) different types of matrices c) different operations in Matrix d) transpose and determinant of a matrix e) minor, co-factor of elements of a matrix and inverse of a matrix f) properties of determinant and Bordered Hensian determinant g) Cramer's rule	C1 : concepts of Scalar, Vector and Matrices C2: different types of matrices - Diagonal, Triangular, Square, etc. C3 : different operations in matrix - addition, subtraction, multiplication C4 : how to calculate transpose and determinant of a matrix C5 : how to calculate, minor, co-factors of elements of a matrix and inverse of a matrix C6 : different properties of determinant and the concept of Bordered Hessian determinant C7 : concept and application of Cramer's rule in solving simultaneous equation
	Module II a) optimisation and linear programming b) LP problems - maximization and minimization c) graphical solution of LP problems	C8 : concept of linear programming and optimisation C9 : concept of LP problems, maximization, minimization

	d) slack variable e) basic feasible solution f) simplex method g) solving problems using simplex method h) economic interpretation of duality	C10 : how to perform a graphical solution of basic maximization and minimization problems C11 : concept of slack variable C12 : how to get a basic feasible solution for LP problems C13 : concept of Simplex Method, detailed explanation of this technique C14 : how to solve simple problems with the Simplex Method C15 : concept of duality, economic interpretation of duality
	Module III a) concept - Input Output Analysis b) Leontief Static Open Model (2 X 2) - concept , structure and assumptions c) solution in LSOM d) Hawkins Simon condition and its economic interpretation e) price system in LSOM f) economic implications of the price system in LSOM	C16: concept of input output model, it's structure and its classification. C17 : detailed explanation of Leontief Static Open Model (2 X 2), it's concept , structure and it's assumptions and their implications C18 : solving a few problems in LSOM with simple 2 X 2 structure

		C19 : statement of Hawkins - Simon condition and its implication, how to check H - S condition in problems, it's economic interpretation C20 : detailed explanation of the price system in LSOM, solving problems with price system C21 : detailed analysis of economic implications of the price system in LSOM
	Module IV a) game theory - concept and assumptions b) different types of games in economics c) two person zero sum game with saddle point d) two person zero sum game without saddle point e) concept of dominance f) non- zero sum game g) the problem of prisoners dilemma h) nash equilibrium i) nash equilibrium with dominant strategy j) sub- game perfect nash equilibrium	C22 : the concept of game theory with examples and it's assumptions and their implications C23 : knowledge of different types of games in economics with examples C24 : concept of saddle point , how to solve for saddle point in problems of two person zero sum game C25 : how to solve problems without saddle point in two person zero sum game C26 : concept of dominance and few examples to explain dominant strategy

		C27 : concept and definition of non - zero sum game with examples C28 : detailed explanation of prisoners dilemma and it's solution C29 : concept of Nash equilibrium with dominant strategy and it's application in problems of game C30 : how to solve for Nash equilibrium in game problems without dominant strategy C31 : concept of sub - game perfect nash equilibrium with examples
Development Economics **BSCHECOGE402**	Module I Concept of Economic Development a. Meaning of Development b. c. Different concepts of development –Sustainable development, Participatory development, Inclusive development, Human development d. Growth and Development e. Broad Indicators of Economic Development f. Per capita Income – PQLI g. Basic needs approach h. Human Development Index – Gender Development Index – Gender Empowerment Measure - Human Poverty Index-	Students learn about C1 : Development and it's importance in economics C2 : concepts of different types of development and differences among them C3 : concept of growth, difference between economic development and economic growth C4 : how to measure the

		development of an economy, different indices for measuring development
	Module II Underdevelopment a. Characteristics of underdevelopment b. Obstacles to underdevelopment	C5 : concept of underdevelopment, main features of underdevelopment C6 : major hindrances of development C7 : classification of different models of development, concept of trap models C8 : detailed explanation of critical minimum effort thesis , it's significance, criticism C9 : detailed explanation of low level equilibrium trap model with assumptions, it's importance and criticism C10 : detailed explanation of Cumulative Causation
	Module III Theories of Economic Growth a. Rostow's Stage Theory b. Vicious circle of poverty	C11 : concept of stage theory, the salient and distinct features of all

	and Balanced growth (Nurkse) c. Unbalanced growth (Hirschman)	five stages in Rostow's stage theory of growth C12 : concepts of balanced growth and unbalanced growth, their definition, the names of theories which supports these strategies. C13 : concept of vicious circle of poverty and the detailed explanation of the demand side and supply side view of this concept, it's critical analysis C14 : critical analysis of balanced growth model by Prof Nurkse C15 : detailed explanation of unbalanced growth theory by Prof Hirschman
	Module IV Labour Surplus Economy and Development Strategy a. Concept of surplus labour b. Surplus labour as potential saving c. Economic development with unlimited supplies of labour (Lewis Model)	C16 : concept of dual sector model, different types of dualism in development economics, and surplus labour. C17 : detailed explanation of Lewis model of surplus labour with assumptions C18 : definition and concepts of labour intensive and capital intensive technique

		C19: detailed explanation of A. K. Sen's model of Choice of technique.
Computer Applications in Economics **BSCHECOSE402**	Module I The Nature and Sources of Data for Economic Analysis a. Types of Data – Time Series, Cross Section b. Basic Data Presentation c. Introduction to Excel/Spreadsheet, Excel Basic d. Formulas and Functions e. Sort and Filter	C1: Illustrate the basic knowledge regarding use of Excel for sorting and filtering data to prepare various chart. C2: Examine how to carry out statistical analysis using Excel C3: Highlight cells with a certain colour, depending on the cell's value.
	Module II a. Graphical Representation of Data Sets - Pie Chart, Bar Chart, Histogram frequency Polygon, Ogive, Bivariate Scatter Diagram	C4: Line charts, column charts, pie charts, area charts and surface charts
	Module III a. Using Spreadsheet / Excel for Statistical Analysis Estimation of Descriptive Statistics Mean ,Median, Mode, Standard Deviation, Simple Correlation, Regression	C5: To extract the significance from a large, detailed data set. C6:Create tables to analyze data in Excel C7:Use Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems

		C8: It helps them to choose a Project based on techniques taught in this paper which will be helpful to them in further research
Public finance **BSCHECOC501**	Module I a. Definition and scope of public finance Types of fiscal functions b. allocation function, distribution function and stabilization function c. fiscal functions in a developing economy d. Concept of Public goods and private goods e. characteristics of public goods f. Externality – Types of externality- positive and negative externality g. Market failure	Students will gather information about C1: The nature , scope and significance of public finance C2: concept of public goods and private goods C3: Types of externality- Positive and Negative
	Module II a. Ability and benefit approaches of taxation b. cannons of taxation c. direct and indirect tax d. income versus expenditure tax e. Proportional, progressive and regressive taxation f. impact, shifting and incidence of taxes g. effects of taxation	C4:Concepts of Tax-Direct Tax and Indirect Tax, Cannons of Taxation C5: Concept of Ability and Benefit Approaches of taxation C6: Understand the problems of resource allocation in the presence of public good and externality C7: Getting knowledge about proportional, progressive and regressive taxation.

		C8:Effects of Tax-Impact, shifting and incidence of taxes
	Module III a. Internal and external public debt b. burden of public debt	C9: Concept of public debt C10:Help them to understand the issues of public debt and its implication on economic system
	Module IV a. Fiscal federalism in India b. Center-State Financial relations	C11: brief knowledge of the Centre-state financial relation and their implications in a federal structure
International Economics **BSCHECOC502**	Module I a. Basis of Trade b. gains from trade	To help the students to C1: Develop a strong foundation in the principles of international economics which will help them to know the trade policies at the national and international levels
	Module II Theory of Trade Adam Smith – a. Absolute Cost Advantage theory b. The Ricardian theory – generalization of Ricardian model c. The H-O Model-Physical and Price definition explanation of factor	C2: understand classical and modern theories of international trade. C3: It familiarizes students on trade policies on the one hand

	abundance d. Comparison of Comparative Advantage in the two (HO and Ricardo e. Commodity and Factor prices under trade-factor price equalization theorem f. Stolper-Samuelson Theoremgains from trade and income distribution in free trade, factor intensity reversal and factor Prices g. Leontief paradox h. Rybczynski theorem i. Demand Reversal j. Offer Curve k. Metzler Paradox	and on the other hand introduces open economy macroeconomics dealing with exchange rate determination in presence of 'expectation' and different polices to maintain stability in the external front. C4: Factor price equalization theorem, Stolper-Samuelson Theorem gains from trade and income distribution in free trade, factor intensity reversal and factor Prices-Leontief paradox, Rybczynski theorem, Demand Reversal, Offer Curve, Metzler Paradox.
	Module III Trade Intervention a. Theory of Tariff and income distribution b. Tariffs, terms of trade and domestic prices, tariffs and national income, the optimum tariff, other effects of tariffs c. Quotas and quantitative trade restrictions -effects of quotas and quantitative trade restrictions and balance of payments d. Trading state, the infant industry argument e. Problems of international reserves and liquidity and of development finance	C5:Tariffs terms of trade and domestic prices, tariffs and national income, the optimum tariff, other effects of tariffs C6: Effects of quotas and quantitative trade restrictions C7: Trading state, the infant industry argument. Problems of international reserves and liquidity and of development finance
	Module IV Balance of Payments and Problems of Adjustment a. The mechanism of adjustment under fixed exch. Rates b. automatic adjustment	C8: To understand the impact of the globalization on income, employment and distribution of income

	under Gold Standard c. expenditure reducing and Expenditure switching policies d. devaluation, the elasticity and absorption approaches e. direct controls f. mechanism of adjustment under flexible exchange rate and uncertainty, speculation and the stability of exchange rate and inflation g. costs and benefits of flexible exchange rates	C9: Rates – automatic adjustment under Gold Standard- expenditure reducing and Expenditure switching policies –devaluation C10: Direct controls-mechanism of adjustment under flexible exchange rate and uncertainty, speculation and the stability of exchange rate and inflation- costs and benefits of flexible exchange rates.
Classical Political Economy **BSCHECODSE501**	Module I Classical Background a. Chief features of classical system b. Adam Smith Labour Theory of Value c. The Ricardian one sector model d. Classicalpolitical economy and Marx-	C1 : understanding the basic features of the Classical system and their implications C2 : concept of labour theory of value and detailed understanding of labour theory of value by Adam Smith C3 : understanding the concept of subsistence level and steady state with detailed explanation of Ricardian One Sector Model along with its assumptions and their implications and the criticism against the theory . C4 : knowledge about Karl Marx and his life, education and his career in brief, his idea of socialism, labour exploitation and his economic and political philosophy in brief

	Module II Stages of Development a. Marxian theory of stages of growth b. Rostow's theory of stages of growth	C5 : detailed explanation of the theory of stages of growth by Karl Marx C6 : detailed explanation of the theory of stages of growth by Rostow
	Module III Marx's Theory of Value a. Qualitative and quantitative aspects of value b. Commodity fetishism c. Constant and variable capital, circuits of capital d. Surplus value e. Organic composition of capital	C7 : detailed understanding of the concepts like use value, exchange value, useful labour, abstract labour and the qualitative and quantitative aspects of value in production in Marxian Value theory C8 : detailed explanation of concept of commodity fetishism C9 : definition and explanation of concepts of constant capital and variable capital

		C10 : definition and understanding of the concept of various types of circuits of capital, detailed explanation of their chain C11 : definition and explanation of the concept of surplus value, it's origination, the concept of rate of exploitation C12: concept and understanding of the three components of value, and definition of organic composition of capital, rate of surplus value, etc.
	Module IV The Reproduction Schemes & Accumulation of Capital a. Industrial reserve army b. Accumulation and technological change	C13 : detailed explanation of Reserve army of labour, it's components with it's assumptions C14 : concept of capital accumulation, scheme of simple and expanded reproduction
	Module V Origin of Surplus Value and Profits a. The law of falling rate of profit b. Theories of Crisis: Under consumption, realization crisis, disproportionality crisis-	C15 : detailed explanation of law of falling rate of profit and derivation of the steady state C16 : definition and understanding of crisis and it's different types C17 : detailed explanation of under

		consumption crisis with it's origination C18 : C17 : detailed explanation of the disproportionality crisis with it's origination C17 : detailed explanation of the realization crisis with it's origination
Money and Financial Market of India **BSCHECODSE503**	Module-I a. Concept, Functions, measurement of money b. Theories of money supply determination	Students will learn about: C1: Concept of money C2: Functions of money C3: measurement of money C4: Theories of money supply
	Module-II a. Role of financial markets and institutions b. Problem of asymmetric information – Financial crisis c. Money and capital markets d. Organization, structure and reforms in India e. Role of financial derivatives and other innovations	C5: Financial Institutions, markets, Instruments and financial innovations C6: Concepts of adverse selection and moral hazard C7: Money and capital markets C8: Organization, structure and reforms in India

		C9: Role of financial derivatives and other innovations
	Module-III a. Indian banking system b. Changing role and structure c. Banking sector reforms	C10: Banking system of India C11: Role and structure banking system C12: Reforms of theBanking sector
	Module-IV a. RBI and its functions b. Instruments of monetary control c. Current monetary policy of India	C13: Functions of Central Bank C14: Credit control instruments C15: Monetary policy of India
Basic Econometrics **BSCHECOC601**	Module-I a. Concept b. Types of econometrics c. importance Econometrics in economics d. Classical Methodology of Econometrics	Students will know about C1: the theoretical and applied econometrics C2: Role of econometrics in economics C3: Classical Methodology of Econometrics
	Module-II a. Assumptions of CLSM b. Estimation of parameters in two variable case c. Properties of least-square estimators d. testing of regression coefficients e. BLUE f. Goodness of Fit	C4: The Classical Linear Regression Model (Two variable case) C5: Assumptions of The Classical Ordinary Least Square Method (CLSM) C6: Properties of least-square estimators

	g. the Coefficient of determination R^2 h. Numerical Problems	C7: How to test regression coefficients C8: BLUE C9: Goodness of Fit C10: calculation of Coefficient of determination R^2 C11: Numerical Problems
	Module-III a. The Classical Ordinary Least Square Method (CLSM) b. estimation of parameters with Two independent variables	C12: The Classical Linear Regression Model (Three variable case) C13: How to estimate parameters with Two independent variables
	Module-IV a. Definition b. Multicollinearity: Detection, Consequences, Remedies c. Heteroscedasticity: Detection, Consequences, Remedies d. Autocorrelation: Detection, Consequences, Remedies	C14: Violations of Classical Assumptions C15: How to detect Multicollinearity, Heteroscedasticity and Autocorrelation C16: Consequences of Multicollinearity, Heteroscedasticity and Autocorrelation C17: Remedies of Multicollinearity, Heteroscedasticity and Autocorrelation
Indian Economics-II **BSCHECOC602**	Module-I a. Planning in a mixed economy b. The Indian experience – Pre 1991 and Post 1991	Students will learn about

	plans c. Overall success and failures d. Critical Evaluation of functioning pattern of Planning Commission e. Objectives behind formation of NITI Aayog	C1: Nature of economic planning in India in the pre and post liberalization period C2: Achievements and failures of planning C3: Performance appraisal of Planning Commission C4: Reasons behind the formation of NITI Aayog
	Module-II a. Composition of Govt. revenue and expenditure b. Trends, problems c. Reforms in tax structure d. Centre – State financial relation	C5: Composition of Indian Tax Structure during Plan Period C6: Trends and Problems associated with Govt. revenue and expenditure C7:Tax Reforms C8: Centre-state financial problems
	Module-III a. Role of public sector in India during the plan period b. Problems and policies with special emphasis on disinvestment policy	C9: Importance of Public Sector in India in the plan period C10: Problems of public sector in India C11: Policies of public sector in India

		C12: Disinvestment policy
	Module-IV a. Foreign trade policy 2009-2014 b. Position of India's trade balance c. Special economic zones d. Foreign investment flows since 1991	C13: India's Foreign Trade Policy 2009-14 C14: nature of trade balance of India C15: Arguments in favour of and against SEZs. C16: Foreign investment flows since 1991
Economics of Growth **BSCHECODSE601**	Module I a) Economics of Growth - concept b) Harrod's Model of growth c) Domar's Model of growth d) Comparative study of Harrod's and Domar's Model of growth e) Harrod - Domar Growth Model	Students will learn about C1 : concept and definition of growth, different types of growth theories, the importance of growth theories C2 : detailed explanation of Harrod's model of growth with it's assumptions and their implications and the derivation of the condition of steady state in this model C3 : detailed explanation of Domar's model of growth with it's assumptions and their implications and the derivation of the condition of steady state in this model C4 : a comparative study of Harrod's and Domar's Model of growth - their similarities, their differences, implications and their

		results C5 : detailed derivation condition of steady state and convergence and divergence of Harrod Domar growth model with it's assumptions and criticisms.
	Module II a) Solow Model of growth b) Absolute convergence c) Conditional convergence d) Condition of steady state e) Golden rule of Accumulation f) Transition in Golden rule of Accumulation	C6 : detailed explanation of the assumptions of Solow Model of growth and their implications, detailed derivation of the condition of steady state with and without depreciation of capital. C7 : concept and explanation of Absolute convergence with diagram in Solow Model of growth C8 : concept and explanation of Conditional convergence with diagram in Solow Model of growth C9 : detailed explanation of steady state with diagram and the showing the stability and uniqueness of the equilibrium C10 : concept and understanding of Golden Rule of Accumulation C11 : detailed explanation and derivation of the transition in Golden Rule of Accumulation

	Module III a) concept of endogenous growth model b) A K Sen's model of growth	C12 : concept of endogenous growth model, it's basic features and it's distinction from exogenous growth model C13 : detailed explanation of A.K. Sen's model of growth with it's assumptions, their implications, basic postulates of the theory and it's criticism
	Module IV a) trade as an engine of growth b) Prebish - Singer Thesis c) Import substitution and export promotion as strategy of trade, development and growth d) Import substitution vs Export promotion	C14 : understanding about the interlinkages among trade, development and growth in economics C15 : detailed explanation of Prebish Singer Thesis with it's assumptions C16 : concepts of import substitution and export promotion, their definitions and their linkages with growth and development through trade C17 : a comparative study of the import substitution and export promotion with their advantages and disadvantages
Project on Socio Economic Aspects	Module-I a. Abstract (between 100-200 words)	C1: Students learn the various steps of writing a project on different economic issues

BSCHECODSE604	with 5 to 7 key words b. Introduction (objectives and need/importance of the study) c. Review of Literature and identification of research gap d. Statement of the Problem e. Research Methodology f. Findings/Results & Discussion g.Policy recommendations/ Suggestions h. Conclusions i.Limitations of study j. Scope for Further Research	

Semester	**Unit & Topic**	**Unit specific CO**
Semester-I **Microeconomic Theory - I** **BSCPECOC101** **(Program)**	Module-I Consumer's Behaviour a. Utility: Total and Marginal Utility b. Law of Diminishing Marginal Utility c. Law of Demand. Relation between Law of Demand and Law of Diminishing Marginal Utility d. Indifference Curve: Definition and Characteristics e. Consumer's Equilibrium f. Income Effect and Substitution Effect and Price Effect g. Elasticity of Demand: Price Elasticity and Income Elasticity of Demand h. Measurement of Price Elasticity (Revenue Method and Point Method)	Students learn about C1: The general concepts of economics, C2: Theory of demand, Supply and Market C3: Knowledge about different concepts of Elasticity

	Module-II 1. a) Producer's Behaviour a. Production Function: AP, MP and their Derivation from TP Curve- 4 b. Return to Factor - 2 c. Cost of Production: Real Cost and Opportunity Cost-Fixed and Variable Cost-4 d. Shape of Cost Curves (short-run and long-run) - 4 e. Relation between Average Cost and Marginal Cost - 2 f. Total Revenue, Marginal Revenue and Average Revenue - 2 g. Relation between Total Revenue, Average Revenue and Marginal Revenue Curves- 2 h. Relation between Average Revenue, Marginal Revenue and Price Elasticity of Demand	C4: Different approaches of Utility like Cardinal and Ordinal C5: The Marshallian Approach C6: Indifference curve and Budget line C7: How the consumer attains Equilibrium C8: What are Price effect, Income effect, Substitution effect C9: Derivation of Slutsky's equation C10: Derivation of demand curve C11: Exceptional cases of Law of demand like, Giffen's Paradox, Bandwagon effect, Snob effect, Veblen effect C12: Relationship between Compensated demand curve and ordinary demand curve

Macroeconomic Theory BSCPECOC201 **(Program)**	Module-I 1. Scope and nature of Macro Economics with emphasis on a. Targets & Instruments of macroeconomic policy etc	Students gain information about C1: The various macroeconomic problems and policies C2: Instruments of macroeconomic policy
	Module-II a. Distinction between-Gross and Net National Income b. Different Methods of Measuring National Income	C3: Concepts of National Income - GNP, NNP, GDP, NDP, NI, DI C4: Product method, income method and the expenditure methods of Measuring National Income
	Module-III a. Keynesian Consumption Function and its properties b. Factors affecting Consumption Expenditure c. Saving Function & its properties d. Concept of paradox of thrift e. Determination of National Income f. Nature of equilibrium	C5: Keynesian Consumption Function and its properties C6: Factors determining Consumption Expenditure C7: Saving Function and its properties C8: How to determine National income in the Simple Keynesian Model C9: Concepts of unemployment, full employment and inflation

		C10: stability of equilibrium
	Module-IV a. The Classical view of Macro Economics in respect of the determination of Employment, Output and Prices b. The classical quantity theory of money (Both Fisher's and Cambridge Version) and its criticism c. The Classical Theory of Rate of Interest - The Complete Classical Model	C11: Classical theory of output and employment C12: What are the two versions of classical quantity theory of money C13: The Classical Theory of Rate of Interest and Loanable fund theory C14: The Complete Classical Model
	Module-IV a. Function of Money b. Value of Money c. Different Concepts of money	C15: What is money? C16: Role of Money C17: Concepts of Money-M1, M2 etc.

Microeconomic Theory-II **BSCPECOC301** **(Program)**	Module-I a. Concept of market, Different Types of market b. Perfect competition: Features, Short run and long run equilibrium c. Monopoly: Characteristics, Short run and long run equilibrium under monopoly d. Price Discrimination in monopoly e. Monopolistic competition, Oligopoly	C1: Characteristics of different markets under perfect and imperfect competition including monopoly, monopolistic competition and oligopoly. C2: Short run and long run equilibrium of different markets under perfect and imperfect competition C3: Concept of Price Discrimination
	Module-II a. Marginal Productivity Theory of Distribution b. Rent: Ricardian Theory c. Wage: Distinction between Money Wage and Real Wage d. Interest: Real and Money Interest, theories of interest e. Profit: Alternative theories	C4: Factor Price Determination C5: Ricardian Theory of rent C6: Money wage and real wage C7: Factors Determining Real Wage-Role of Trade Unions in Wage Determination under competitive set up C8: Loanable fund and liquidity preference theory of interest. C9: Theories of profit given by Schumpeter, Knight and Hawley

Data Collection and Data Processing **Course Code: BSCPECOSE301** **(Program)**	Module: I a) Collection and presentation of data. b) Various Methods –Collection of Secondary Data – Criterion of Secondary Data Collection. c) Methods of presentation of data: d) Frequency distribution:	C1: Population Census vs sample survey, random sampling (concept only) - Collection of Primary Data C2: Understand methods of presentation of data in textual, tabular and diagrammatic form. C3: Frequency distribution of attribute and variable (Both discrete and continuous variable) Diagrammatic representation of a frequency distribution: Case of a discrete variable (Column diagram, frequency polygon and step diagram). Case of a continuous variable (Histogram and ogive)
	Module- II a) Data Processing Introduction to Data Processing – Steps of Data Processing – Problems associated with Data Processing	C4: Understand steps and problems associated with data processing and the analysis of various forms of data (quantitative, qualitative; cross section, time series) C5: To do Project based on techniques taught in this paper which will be helpful to them in further research.

Indian Economics **BSCPECOC401** **(Program)**	Module-I a. The structure of Indian Economy b. Trends of India's per capita income – c. Objectives, achievements and failures of India's Five year Plans (broad outline) d. Niti Aayog: Objectives and functions	Students will learn about C1: Sectoral composition, rural-urban dimension of national income C2: Demography- the trends and pattern of population growth –age distribution & Demographic dividend C3: Achievements and failures of planning C4: Performance appraisal of Planning Commission C5: Reasons behind the formation of NITI Aayog
	Module-II a. Characteristics of Indian Agriculture b. Causes of Low Productivity c. Land Reforms d. New technology and Green Revolution and its effects e. Effects of Economic Reforms on Indian Agriculture	C6: Features of Indian Agriculture C7: Farm size and productivity debate C8: Importance, Features, implementation, causes and impact of land reforms C9: Features, merits and demerits of Green revolution C10: Economic Reforms and Indian Agriculture

	Module-III a. Structure of Indian industry b. Role of Cottage, Small-scale and Large scale Industries in India's development c. Problems and strategies of industrial development	C11: Structure of Indian industry C12: Importance of Cottage, Small-scale and Large scale Industries in India's development C13: Problems and prospects of industrial development
	Module-IV a. Revenue account and capital account b. Sources of Revenue of Union and State Governments c. Direct and indirect tax d. Union-State Financial Relation e. Finance Commission of India	C14: Revenue and expenses of Central and state Government C15: Direct and Indirect Tax-major heads of expenditures, plan vs. non plan expenditures C16: Centre-state financial problems C9: Role of Finance Commission of India
Basic Knowledge in Computer **BSCPECOSE401** **(Program)**	Module: I a) Introduction to Excel b) short c) Filter d) conditional formatting e) Charts	C1: Illustrate the basic knowledge regarding use of Excel for sorting and filtering data to prepare various chart C2: Examine how to carry out statistical analysis using Excel C3: Highlight cells with a certain colour, depending on the cell's value

		C4: Line charts, column charts, pie charts, area charts and surface charts
	Module: II a) Excel Basics needed for Statistical Analysis of the Data b) Pivot Tables c) Tables, Solver	C5: To extract the significance from a large, detailed data set C6:Create tables to analyze data in Excel C7:Use Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems C8: It helps them to choose a Project based on techniques taught in this paper which will be helpful to them in further research
Banking Sector **BSCPECODSE501** **(Program)**	Module: I a. Definition and Functions of Commercial Banks b. Credit Creation by Commercial Banks c. Functions of Central Banks, Credit control methods of central bank. d. Limitations of different credit control methods	C1: Functions of Commercial Bank C2: Functions of Central Bank C3: Role of commercial banks in economic development C4: Credit control instruments of central bank C5: Different credit control methods

	Module: II a. Definition of NBFIs, Distinction between Commercial Banks and NBFIs b. Role of NBFIs in economic development of India c. Different NBFIs working in India	C6: Definition of Non-bank Financial Intermediaries in India (NBFIs) C7: Difference between Commercial Banks and NBFIs C8: Functions of of NBFIs C9: Different NBFIs operating in India.
Computer Application in Economics **BSCPECOSE501** **(Program)**	Module-I a. Types of Data – Time Series, Cross Section – Basic Data Presentation; b. Introduction to Excel/Spreadsheet, Excel Basic, Formulas and Functions, Sort and Filter	C1: Illustrate the basic knowledge regarding use of Excel for sorting and filtering data to prepare various chart C2: Examine how to carry out statistical analysis using Excel C3: Highlight cells with a certain colour, depending on the cell's value

	Module-II a. Graphical Representation of Data Sets -Pie Chart, Bar Chart, Histogram frequency Polygon, Ogive, Bivariate Scatter Diagram	C4: Line charts, column charts, pie charts, area charts and surface charts
	Module-III a. Using Spreadsheet / Excel for Statistical Analysis Estimation of Descriptive Statistics- Mean, Median, Mode	C5: To extract the significance from a large, detailed data set. C6:Create tables to analyze data in Excel C7:Use Excel tool called solver to use techniques from the operations research to find optimal solutions for all kind of decision problems C8: It helps them to choose a Project based on techniques taught in this paper which will be helpful to them in further research
Public Finance **BSCPECODSE602** **(Program)**	Module-I a. The nature, scope and significance of public finance b. Concept of Public goods and private goods c. Characteristics of private goods and public goods. Externality d. Types of externality-positive and negative externality (concept only)	Students learn about C1: The nature , scope and significance of public finance C2: concept of public goods and private goods C3: Types of externality-Positive and Negative

	Module-II a. Concept of Tax b. Direct tax and Indirect tax c. Cannons of Taxation d. Ability and Benefit approaches of taxation e. Income versus expenditure tax – Proportional, progressive and regressive taxation f. impact, shifting and incidence of taxes g. effects of taxation	C4:Concepts of Tax-Direct Tax and Indirect Tax, Cannons of Taxation C5: Concept of Ability and Benefit Approaches of taxation C6: Understand the problems of resource allocation in the presence of public good and externality C7: Getting knowledge about proportional, progressive and regressive taxation C8:Effects of Tax-Impact, shifting and incidence of taxes
	Module-III a. internal and external public debt b. burden of public debt	C9: Concept of public debt C10:Help Them to understand the issues of public debt and its implication on economic system
	Module-IV a. Features of India's Federal finance b. Center-state financial relations-	C11: brief knowledge of the Centre-state financial relation and their implications in a federal structure

Project on Economic Issues **BSCPECOSE601** **(Program)**		Module-I a. Introduction (Objective and the need of the study) b. Literature survey c. Data and Methodology d. Results e. Conclusions f. Policy recommendations	Students learn the various steps of writing a project on different economic issues