

**CHOICE BASED CREDIT AND SEMESTER SYSTEM FOR
UNDER GRADUATE (UG) PROGRAMME**

**ST.JOSEPH'S COLLEGE (AUTONOMOUS) DEVAGIRI,
CALCIUT, KERALA**

For
BA Economics (2019-2020 Admissions Onwards)
Under

**REGULATIONS FOR ST.JOSEPH'S CHOICE BASED CREDIT AND SEMESTER
SYSTEM FOR UNDER GRADUATE (UG) CURRICULUM -2019 (SJCBCSSUG 2019)**

1. Courses at a Glance

A glance at the core courses offered in the BA Economics is given in the table:

Semester	Course code	Name of Course
I		Microeconomics I
II		Microeconomics II
III		Quantitative Methods for Economic Analysis I
		Financial Economics
IV		Quantitative Methods for Economic Analysis II
		Development of Economic Thought
V		Macroeconomics I
		Mathematics for Economics
		International Economics
		Fiscal Economics
		OPEN COURSE - Economics in Everyday Life
VI		Macroeconomics II
		Mathematical Economics
		Indian Economic Development
		Economics of Growth and Development
		ELECTIVE: Basic Econometrics
		Project/Research methodology

CORE COURSES

Detailed Syllabi

Semester I

Course Category	Core Course 1
Course Title and Code	Microeconomics – I GECO1B01T
No. of Credits	5
No. of Contact Hours	6 Hours per week

MICROECONOMICS - I

This course is designed to expose first semester students, who may be new to economics, the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyse real-life situations.

Module I: Exploring the Subject Matter of Economics

Why study economics? Micro Versus Macro- Concepts of wealth, welfare, scarcity and growth - The scope and method of economics- Induction and deduction-Positive and normative economics-Value judgments- scarcity and choice- the basic problems of an economy- Production Possibility curve- basic competitive model- economic systems.

Module II: Demand and Supply Analysis

Concept of Demand- Law of Demand- Determinants of demand – Types of Demand – Demand Function – Market Demand Curve - Elasticity of Demand – Price, Income and Cross elasticity of demand –Measures of Elasticity of Demand. Demand Forecast Meaning- Factors influencing demand forecast. Concept of Supply – Law of Supply – Determinants of Supply – Supply Function – Elasticity of Supply – Market Supply Curve -Market Equilibrium.

Module III: Theory of Consumer Behaviour

Utility Analysis – Cardinal and Ordinal approaches – Law of Diminishing Marginal Utility – Law of Equi-marginal utility, indifference curve, properties of indifference curves – Price (Budget) line – Equilibrium of the Consumer with the help of indifference curves – Price, Income and Substitution effect- Derivation of individual demand curve for normal good – Decomposition of Price effect into income effect and substitution effect – Hicksian and Slutsky’s methods – Normal, inferior and Giffen goods – Application of Indifference Curves - Theory of Revealed Preference – Revealed Preference axioms - Consumer surplus - Marshall and Hicks.

Module IV: Theory of Production and Costs

Concept of Production – Production Function — short run versus long run production function- Law of Variable Proportions – TP, AP, MP and their interrelationships – Isoquants- Properties- MRTS - Isocost Curve –Producer Equilibrium- Law of Returns to Scale – Expansion Path – Internal and External Economies- Linearly Homogeneous Production Function - Cobb-Douglas production function

Module V: Theory of Costs

Cost function – Cost concepts- Explicit and implicit costs, opportunity cost, private cost, social cost, economic cost, accounting cost, sunk cost, fixed and variable cost, marginal and average cost -Short run and Long run cost curves - Modern theory of costs.

References:

1. Dominick Salvatore (2003): Microeconomics: Theory and Applications- 4thEdition, Oxford University Press.
2. Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 8th Edition, Pearson India.
3. Watson and Getz (2004): Price Theory and its Uses- 5thEdition, AITBS Publishers and Distributors.
4. A Koutsoyiannis (1979): Modern Microeconomics- 2ndEdition, Macmillan.
- 5 .G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- Tata McGraw-Hill.
6. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.
7. Watson and Getz -Price Theory and its Uses
8. . H.R Varian Intermediate Microeconomics- A Modern Approach.

Semester II

Course Category	Core Course 2
Course Title and Code	Micro Economics II GECO2B02T
No. of Credits	5
No. of Contact Hours	6 Hours per week

MICRO ECONOMICS – II

Preamble: This course is designed to introduce fundamental market concepts and structures. The emphasis of the course is to give conceptual clarity to the student coupled with the use of the principles Micro economic analysis to the decision making of firms and market. After completing this course, the student will be able to apply the principles of micro economics, to the decision making of firms and the functioning of the market.

Module I: Market Structure: Perfect Competition

Market-Functions-Market structure-Types of markets-Perfect competition-Characteristics-Demand AR and MR curves-Price determination in the market period- Short run equilibrium of the firm and industry-Shut down point-Long run equilibrium of the firm and industry-Constant, increasing and decreasing cost industries- efficiency of competitive market. Welfare effects of government intervention- Impact of a tax and subsidy.

Module II: Monopoly

Monopoly- Sources of monopoly-Types of monopoly-AR and MR curve of a monopolist - Short run and long run equilibrium- Supply curve of a monopolist- The multiplant firm- Monopoly power-Measurement of monopoly power-Social cost of monopoly- Regulation of monopoly - Price discrimination-First degree, second-degree and third degree- International price discrimination (Dumping- types)-Two part tariff, tying and bundling-Peakload pricing-Monopsony- Bilateral monopoly.

Module III: Monopolistic Competition and Oligopoly

Monopolistic competition- Features of monopolistic competition-Short run and long run equilibrium-Excess capacity-Product differentiation and selling costs-Oligopoly-Characteristics-Collusive versus non-collusive oligopoly-Cournot model- Kinked demand curve model - Cartel and price leadership.

Module IV: Pricing and Employment of Inputs

Competitive factor markets -Demand curve of the firm for one variable input-Demand curve of the firm for several variable inputs- Market demand curve for an input - Supply of inputs to a firm- The market supply of inputs- Equilibrium in a competitive factor market- Factor market with monopoly power- Factor market with monopsony power-Marginal Productivity theory of input demand.

References:

1. Dominick Salvatore (2003): Microeconomics: Theory and Applications- 4th Edition, Oxford University Press.
2. Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 8th Edition, Pearson India.
3. Watson and Getz (2004): Price Theory and its Uses- 5th Edition, AITBS Publishers and Distributors.
4. A Koutsoyiannis (1979): Modern Microeconomics- 2nd Edition, Macmillan.
5. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- Tata McGraw-Hill.
6. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.

Semester III

Course Category	Core Course 3
Course Title and Code	Quantitative Methods for Economic Analysis - I GECO3B03T
No. of Credits	4
No. of Contact Hours	5 Hours per week

QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS – I

Preamble: Students of economics should have sound quantitative skills to collect, analyse and interpret empirical data. They also require these skills for advanced studies in quantitative economics. Quantitative skills have become an essential toolkit for most branches of economics. This course is intended to provide students an introduction to quantitative methods and tools, that are used in the study of economics at the undergraduate level. The aim of this course is to develop skill in statistical and mathematical techniques that are required for a meaningful study of applied economics and for carrying out empirical their further study in most branches of economics.

Module I: Introduction:

Statistics, Meaning. Collection and presentation of data. Tabular and diagrammatic representation of data. Use of statistics in decision making

Module II: Descriptive Statistics :

Measures of central tendency- arithmetic mean, Median, mode, geometric mean, harmonic mean. Positional values – Quartiles, deciles and percentiles. Measures of dispersion-Range, quartile deviation, mean deviation and standard deviation. Skewness and kurtosis- measures of skewness and kurtosis. Lorenz curve and Gini coefficient.

Module III: Correlation and regression analysis.

Correlation, meaning, types, methods of measuring correlation, scatter diagram, Karl Pearson's coefficient of correlation, Rank correlation. Regression, simple linear regression model, method of ordinary least squares, regression lines.

Module IV: Index numbers and time series analysis.

Index numbers-uses, weighted and unweighted index numbers, types of index numbers base shifting, splicing and deflating. Time series analysis- components of a time series, measurement of trend by moving average and method of least squares.

Module V: Vital statistics

meaning and uses-Fertility rate, crude birth rate, General fertility rate, specific fertility rate and net reproduction rate. Mortality rates – crude death rate, standard death rate, specific death rate, infant mortality rate and maternal mortality rate, sex ratio and couple protection rate.

References:

- 1) Murray R Spiegel, Larry J Stephens (2010) – Statistics, 4th edition, Schaum's outline series
- 2) N D Vohra (2013) _ Business Statistics , MC Graw hill
- 3) S P Gupta (2016) – Statistical Methods, sultan Chand and Sons.

Semester III

Course Category	Core Course 4
Course Title and Code	Financial Economics GECO3B04T
No. of Credits	4
No. of Contact Hours	4 Hours per week

FINANCIAL ECONOMICS

Module -1 Introduction to Financial System

Financial system – structure – functions – financial markets

Brief history of banking - Unit banking - Branch banking - Mixed banking - Commercial banks - Central bank and its functions- Development banks (IFCI, IDBI, SFC) - Recent trends in banking – (e-banking - Internet banking - Debit card - Credit card, ATM, EFTS - RTGS - Tele banking - E –Purse (*Concepts only*) - Banking ombudsman - Banking sector reforms.- NPA

Module -2 Insurance

Definition, Evolution, Principle, Risk and uncertainty – need for security against economic difficulties - Risk management process.

Types of insurance- Life Insurance: Kinds of Life insurance Policies- (Term insurance - Whole life - Endowment – Annuities) General Insurance: Health Insurance (Medical Insurance). Motor insurance Policies - Conditions - Settlement of claims – Insurance company operations in India (LIC, GIC, IRDAI)

Module -3 Financial markets

Money Market: Features of Indian Money Market – Functions – instruments (Call loans, Collateral loans, promissory notes, bills of exchange, treasury bill, certificate of deposit, commercial paper *Concepts only*) – acceptance market – **DFHI & RBI in Indian money market**

Capital Market: Functions – Structure – Instruments (Preference shares, Equity shares, Debentures or Bonds, Government securities, Euro Issues. *Concepts only*) – Capital Market Institutions (DIIs, FIIs, Mutual Funds)

Module -4 Primary & Secondary Markets In Capital Market

Primary Market (New issue market) : Functions – Intermediaries (Merchant Bankers/Lead Managers, Registrars to an Issue, Underwriters, Bankers to an Issue, Brokers to an Issue, Debenture Trustees. *Concepts only*) - Methods of Floating New Issues (Pure Prospectus method, Private Placement Method, IPO Method, Rights Issue Method, Bonus Issue Method, Book Building Method, Employee Stock Option (ESOP) *Concepts only*)

Secondary Market (Stock Exchanges) : Difference between Primary market and Secondary Market – Nature & functions of stock exchanges - Listing of Securities – Settlement & trading in stock exchange – players in stock exchanges (Speculators – Bulls, Bears, Lame Duck, Stag. *Concepts only*) – Kerb trading – Insider trading

Module -5 Indian Financial System

Origin and development of stock exchanges in India (BSE, NSE, OTCEI, SEBI) - Stock market index in India & abroad (SENSEX, NIFTY, NASDAQ, Dow Jones, FTSE, NIKKEI, ISE.

Concepts only) – Depositories in India (NSDL, CSDL) – Credit rating agencies in India (CRISIL, ICRI, CARE).

Assignment (Internship): Students may be directed to study the share holding pattern of any one share company in their domicile

References:

1. K.P.M. Sundaram and E.N.Sundaram - Modern Banking - Sulthan Chand and sons - New Delhi.
2. Sekhar and Sekhar - Banking and financial system - Margham publication - Chennai.
3. K.C. Mishra and Mangala Bakshi (2009), Insurance Business Environment and Insurance Company Operations, National Insurance Academy | Cengage Learning, New Delhi.
4. Dr. V.Balu - Banking and financial system Sri. Venkiteswara publications - Chennai.
5. Rejda, Principles of Risk Management and Insurance, 9th Edition, Pearson Education.
6. Mishra.M.N - Insurance, Principles and practices - Sulthanchand and company New Delhi.
7. Gupta.O.S - Life Insurance - Frank Brothers - New Delhi.
8. Pamda.G.S. - Principles and practise of insurance - Kalyani publishers - New Delhi.
9. Gordan K. Natarajan , “Financial Markets and Services”, Himalaya Publishing House, Mumbai (Latest Edition).
10. S. Gurusamy, ‘Capital Markets’, Vijay Nicole Imprints Private Limited, Chennai (Latest edition)
11. M.Y. Khan, ‘Indian Financial System’, Tata McGraw Hill Education Private Limited, New Delhi (Recent edition)
12. L.M. Bhole, ‘Financial Institutions and Markets-Structure, Growth and Innovations’, Tata McGraw Hill Publishing Company Limited, New Delhi (Latest edition)
13. Bharathi V Pathak (2003) Indian Financial System, Pierson Education, New Delhi.
14. Preethi Singh (2009) Dynamics of Indian Financial System, Markets, Institutions and services, Annes books Pvt. Ltd, New Delhi
15. Faboozi, J Frank, Modigliani Franco (2008): Capital markets – Institution & Instruments, 4th edition, Pierson Education, New Delhi.
16. Avadhani V A (1993) Investments & Securities Markets in India, Himalaya Publishing House, Mumbai
17. Machiraju M R, Indian financial system, Vikas Publishing House, New Delhi
18. Rajesh S Kothari, Financial Services in India, Concepts & Applications, Sage Publications.

Semester IV

Course Category	Core Course 5
Course Title and Code	Quantitative Methods for Economic Analysis II GECO4B05T
No. of Credits	4
No. of Contact Hours	5 Hours per week

QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS – II

Preamble: This course is designed to transmit the body of basic statistics and mathematics that enables the study of economic theory at the undergraduate level. The aim of this course is to equip the students to quantify economic variables and to enable them to apply statistical techniques in Economics. After completing this course, the student will be able to apply statistical and mathematical techniques in Economics.

Module I: Fundamentals of probability:

Basic probability concepts, meaning of probability, Mutually exclusive and collectively exhaustive events. Independent events. Approaches to assigning probabilities, classical probability, empirical probability, subjective probability. Rules for computing probabilities, additive rule, multiplicative rule, marginal, joint and conditional probabilities. Baye's theorem. Principles of counting, permutations and combinations.

Module II: Random variables:

Meaning, discrete and continuous random variables, probability density function, cumulative distribution function, joint probability distributions, marginal probability density function, conditional probability density function, statistical independence. Characteristics of probability density functions, expected value, variance, covariance, correlation coefficient, conditional expectation. Binomial distribution, Poisson distribution, Normal distribution, standard normal distribution, Chi-square distribution, t distribution and F distribution

Module III:

Sampling and sampling distributions: Meaning, sampling distribution of mean, central limit theorem, sampling distribution of proportions.

Module IV: Estimation theory:

Estimate and estimator, point estimator, confidence interval estimator, properties of estimators, Confidence interval for mean, proportion.

Module V: Hypothesis testing:

Steps in hypothesis testing, formulation of null and alternative hypothesis, level of significance, Type I and Type II error, P value, power of the test. Testing population means, testing population proportions, comparing two populations- comparing two means, comparing two variances, comparing two proportions. Testing of correlation coefficients. Comparing means of more than two populations- one way ANOVA. Chi-square procedure, Chi-square goodness of fit, Chi-square independence test.

References:

- 1) Neil A Weiss (2017) – Introductory statistics, 10th edition, Pearson
- 2) Amir D Aczel, Jayavel Sounderpandian, Palanisamy SARAVANAN AND Rohit Joshi (2012) – Complete Business Statistics, 7th edition, Tata McGrawhill
- 3) Douglas A Lind, William G Marchal and Samuel W Wathen (2008) – Statistical techniques in Business and Economics, 13th edition, Tata McGrawhill.
- 4) David R Anderson, Dennis J Sweeney and Thomas A Williams (2011) – Statistics for busiess and Economics , 110th edition Cengage.
- 5) 5 Murray R Spiegel, John Schiller and R Alu Srinivasan (2004) – Probability and statistics , 2nd edition, Tata Mchraw hill
- 6) Robert V Hogg, Elliot A Tanis and Jagan Mohan Rao (2005) – Probability and statistical inference, 7th edition, Pearson.

Semester IV

Course Category	Core Course 6
Course Title and Code	Development of Economic Thought GECO4B06T
No. of Credits	4
No. of Contact Hours	4 Hours per week

DEVELOPMENT OF ECONOMIC THOUGHT

Preamble: This course presents review of the history of economic thinking and economic analysis.: The main goal of this course is to provide students with understanding of historical evolution of economic thought. In addition students are also led to familiarize with

- i) Developments in major field of economics,
- ii) Schools of thought in economics
- iii) Works of some great economist from antiquity to contemporary times.

By the end of this course student will be able to identify the major ideas associated with each group or thinker studied, and thereby the origins of contemporary theory are better comprehended. They are expected to place the theories and ideas studied within the context of the times in which they developed, evaluate different streams of economic thinking as well some personalities who had a major impact on the history of economic thought. Students are also expected to identify theories that radically differ from modern mainstream theory, and thereby recognize that the theoretical basis of economics has been, and continues to be, contested.

Module I: Ancient and Medieval Economic Thought..

Significance to the study of economic thought. Ancient economic thought - Economic ideas of Aristotle and Plato. Medieval economic thought – St.Thomas Aquinas

Module II: Mercantilism and Physiocracy.

Factors that give rise to mercantilism, Major economic ideas. Leading mercantilists and their ideas. Physiocracy- Factors responsible for the rise of Physiocracy. Main economic ideas – Natural order, Net product, The circulation of wealth. Quesnay’s Tableau Economique. Leading physiocrats and their ideas.

Module III: The Classical school.

Essential ideas of classical school . Economic philosophy and economic policy. Adam Smith- Naturalism and optimism, Doctrine of Laissez faire, Role of the government, Economic ideas – Labour, productive and onproductive labour, division of labour, capital accumulation, Process of growth, Theory of value, theory of distribution, theory of international trade. David Ricardo – Theory of value, Theory of distribution, Theory of Rent, Theory of growth, Theory of international trade. Thomas Robert Malthus – Theory of population, Theory of glut. J S Mill – Major economic ideas. J B Say – Say’s law of markets. Jeremy Bentham – Utilitarianism.

Module IV: Historical Nationalist and socialist critics.

Background of historical school. Critical and positive ideas of historical school. Roscher, Hildebrand, Schmoller. Nationalist critics- Background – Adam Muller, Frederich List- List’s ideas on protectionism. Socialist critics- forms of socialism. Early socialists – Saint Simon,

Sismondi. Utopian socialists – Fourier, Robert Owen, Louis Blanc, Proudhon. Scientific socialism – Karl Marx, Main ideas – Materialistic interpretation of history, Mode of production and social formations. Labour theory of value, theory of surplus value, Crisis and disintegration of capitalism.

Module V: Marginal Revolution.

Essential ideas of marginalist school. Ideas of Jevons, Menger and Walras. The Austrian school – Wieser and Bohn-Bawerk. Neoclassical school – Wicksell, Clark, Fisher. Alfred Marshall – Major contributions of Marshall.

Module VI: Keynesian Economics:

Background of Keynesian revolution, Keynes's critique of classical economics, General Theory of Employment, Interest and Money. Aggregate demand and its components, consumption function, investment function, Equilibrium income determination and investment multiplier. Demand for money and interest rate determination. The role of policy. Post Keynesian developments(very brief description)

Module IV: Indian Economic Thought

Early Indian economic thought - Chanakya's Arthashastra – Recent Indian Economic ideas R C Dutt, Dadabhai Naoroji, Ranade, Gopal Krishna Gokhale, Gandhian economics.

References:

1. Stanley L Brue and Randy R Grant (2007) – The history of economic thought, 7th edition, Thomson
2. Mark Blaug (1997) – Economic theory in retrospect, 5th edition, Cambridge university press.
3. E K Hunt and Mark Lautzenheiser (2011) – History of economic thought-A critical perspective, 3rd edition.
4. Ernesto Screpanti and Stefano Zamagni (2005) – An outline of the history of economic thought, 2nd edition, Oxford.
5. Paul M Sweezy (2016) -The theory of capitalist development, Aakar Books
6. R R Paul (2010) – History of economic thought, Kalyani Publishers.

Semester V

Course Category	Core Course 7
Course Title and Code	Macro Economics 1 GECO5B07T
No. of Credits	4
No. of Contact Hours	6 Hours per week

MACROECONOMICS I

Preamble: Macroeconomics emerged as a separate discipline following the failure of classical economics to diagnose the reasons of the Great Depression in the 1930s. ‘The General Theory of Employment, Interest and Money’ published by John Maynard Keynes in 1936 was the influential book which laid the foundation of Macroeconomics. Today, principles of macroeconomics help us understand the trends in aggregate variables like national income, employment, price level and investment. It also helps us explore and understand the determinants of short run fluctuations and long run movements in these variables. The course is designed to give a rigorous overview of macroeconomics to the undergraduate students. It will give the necessary ideas and tools to understand the working of an economy at the aggregate level. The course is also expected to give an idea about the need for and the way in which government intervention is required in a modern economy. After completing this course, the student will be able to appreciate the context in which Macroeconomics emerged as a separate discipline. The student will be able to explain how output and employment are determined in classical and Keynesian systems. Student should also be able to explain why actual output will fall short of the productive capacity of the economy.

Module I :Introduction to Macroeconomics

Nature, scope and limitations of macroeconomics – Macroeconomic model – Types of variables: Stock and flow, endogenous and exogenous, ex-ante and ex-post – static, comparative static and dynamic – equilibrium and disequilibrium - Circular flow of income and output-national income and its measurement-Production approach, Expenditure approach, Income approach--Real and Nominal GDP.

Module II: Classical macroeconomics

Classical Economy – Say’s Law of Market – Wage-price flexibility – Classical model of output and employment – Classical theory of price level determination – Quantity theory of Money – Fisher’s Equation of Exchange – Cash Balance Approach - Neutrality of Money – Money illusion-Classical dichotomy-Classical response to the Great Depression-Crisis in the discipline of Economics

Module III: Keynesian macroeconomics

Effective demand - Aggregate demand and aggregate supply – Consumption, Investment and Government Expenditure (C+I+G) - Autonomous Consumption and Induced Consumption-Keynesian Consumption function-investment function-MEC and MEI- Sticky prices and wages-Assumption of fix price-Keynesian Cross model and determination of equilibrium output-Multiplier-Inflationary and Deflationary gaps-Fiscal Policy-Understanding fiscal policy using

Keynesian Cross model-tax multiplier-government expenditure multiplier-balanced budget multiplier.

Module IV: Money

Nature of money-types-functions-time preference-interest rate: real and nominal- bond-relationship between bond price and interest rate-Theories of Demand for money-Liquidity Preference theory and Keynesian Liquidity Trap-Friedman's re-statement of Quantity Theory of Money. Theories of Supply of money-Measuring supply of money-High powered money-money multiplier.

Suggested Readings:

1. Edward Shapiro – 'Macro economics' Oxford University press.
2. Gregory Mankiw – 'Macro economics' – 6th Edn. Tata McGraw Hill.
3. Richard T. Froyen – 'Macro economics', Pearson education.
4. Eugene Diulio – Macro economic Theory, Shaum's Outline series. Tata McGraw Hill
5. Errol D'Souza – 'Macro Economics' – Pearson Education 2008.
6. Abhijit Kundu (2009) : Methodology and Perspectives of Social Science – Pearson Education 8
7. Dornbusch, Fischer and Startz-MacroEconomics-Tata McGraw –Hill

Additional References:

1. Lipsey R. and A Chrystal – Economics (11th Edition) Oxford University Press New Delhi.
2. Nicoli Natrass and G. Visakh Varma, 'Macroeconomics simplified: understanding Keynesian and Classical Macroeconomic Systems', Sage India Publications, 2014

Semester V

Course Category	Core Course 8
Course Title and Code	Mathematics for Economics GECO5B08T
No. of Credits	4
No. of Contact Hours	6 Hours per week

MATHEMATICS FOR ECONOMICS

Module 1: Graphs and Functions

Constants, parameters and Variables, Types of Variables, Types of Functions-Linear & Non-Linear (**Quadratic and Cubic, Logarithmic and Exponential, Inverse**) Intercept and slope of different functions Solution of linear and Simultaneous Equations

Module II: Matrix Algebra

Concept and types of Matrices, , Matrix Operation- Addition, subtraction, multiplication (up to 3x3)- Determinants (up to order 3x 3), Properties of determinants, Rank of matrix, Adjoint and inverse of Matrix, Matrix formulation of a problem, Matrix formulation a system of equations, Solution to linear equations, Cramer's rule and Inverse method, Uses of Matrices in Economics

Module III: Differential Calculus

Limits and Continuity of Functions, Rate of Change and Derivative, Rules of Differentiation, differentiation of an implicit function, Derivative of Logarithmic and Exponential Functions. Higher Order Derivatives, Uses of Derivatives in Economics- Increasing and decreasing functions, Convexity and Concavity of Functions- Optimization of Functions (with one independent variable)- Maxima and Minima of Functions, Point of Inflection, Curve Sketching

Module IV Multivariate Calculus

Types of Multivariable Functions, Partial Derivatives and Rules of Partial Differentiation, Higher-order Partial Derivatives – Direct and Cross, Concept of Total Differentials – Higher Order Total Differential. Total Derivative and Implicit Differentiation– Homogenous Function and Euler's Theorem, Optimization of Multivariable Functions, Constrained Optimisation with Lagrange Multipliers- Jacobian Determinant- Hessian Determinant and Higher order Hessian

Module V Integral Calculus

Concept of Integrals- Definite and indefinite Integrals, Rules of Integration, Properties of Integrals, Uses of Definite Integrals-Area under a Curve - Consumer Surplus and Producer Surplus.

References:

1. Mike Rosser and Piotr Lis,(2016) Basic Mathematics for Economists, third Edition, Rutledge.
2. Edward T Dowling,(2012) Introduction to Mathematical Economics, third Edition, Schaum's Outline series
3. Geoff Renshaw, (2009) Maths for Economics, Second edition, Oxford University press
4. Alpha C Chiang and Kevin Wainwright, (2005) Fundamental Methods of Mathematical Economics, Fourth Edition, McGraw-Hill
5. Teresa Bradley and Paul Patton,(2008) Essential Mathematics for Economics and Business, Second Edition, Wiley
6. Knut Sydsaeter, Peter Hammond and Arne Strom, (2012) Essential Mathematics for Economic Analysis, Fourth Edition, Pearson
7. Larry J. Goldstein, David C. Lay, David I. Schneider and Nakhle H. Asmar (2018) Calculus and its Applications, 14th edition, Pearson

Semester V

Course Category	Core Course 9
Course Title and Code	International Economics GECO5B09T
No. of Credits	4
No. of Contact Hours	5 Hours per week

INTERNATIONAL ECONOMICS

Preamble: International economics deals with the economic relations among nations --- both trade and financial relations—A good understanding in international economics is necessary for a student of economics and those who wish to work in these areas or governmental organizations. The basic aim of this introductory course on international economics is to present before the students the questions, and answers, related to international economic relations. The students are expected to acquire skill that will help them to take rational decisions in issues related to international economics.

Module I: Introduction to International Economics

Subject matter and importance of International Economics - Internal trade and international trade - Importance of International trade – International trade and economic development – Basic concepts- Terms of trade.

Module II :Theories of International Trade:

Mercantilist approach to trade –Classical Theory: Absolute and Comparative Cost Advantage theories - Hecksher – Ohlin Theory and Leontief Paradox.

Module III: Theory of Commercial Policy:

Free trade - Arguments for and against free trade – Protection - Arguments for and against protection - Methods of Trade Restriction : Tariff and non-tariff trade barriers - Types of tariffs – New protectionism - export subsidy and countervailing duties - Dumping and anti-dumping duties – Economic Integration – WTO, EU, NAFTA, ASEAN, SAARC.

Module IV: Foreign Exchange

Foreign exchange market – functions - Defining foreign exchange and exchange rate – Exchange rate concepts – exchange rate changes (devaluation, revaluation, depreciation, appreciation- over valuation and undervaluation) – Different systems of exchange rate determination - fixed and flexible exchange rate – Hybrid exchange rate systems – Managed floating – Theories of exchange rate – Mint Parity theory – Purchasing Power Parity Theory – Balance of Payments Theory - Components of Foreign exchange .

Module V: Balance of Payments

Defining Balance of Trade and Balance of Payments - Structure of balance of payments – Equilibrium and disequilibrium in BOP – Measures to correct BOP disequilibrium –

India's BOP since 1991 – International financial flows – Foreign Direct Investment and Portfolio Investment – Currency Convertibility – IMF-Role and Functions.

References

1. Salvatore, Dominick, _;International Economics', Wiley India, NewDelhi.
2. C.P. Kindle Berger, _International Economics'
3. Bo Soderstein and Geoffrey Reed, _International Economics', Macmillan
4. Carbaugh, _International Economics', CengageLearning
4. Francis Cherumilam - _International Economics'
5. Mannur, H.G. _International Economics'
6. Errol D'Souza, _Macro Economics', Pearson Education 2008 (For BOP in India)
7. RBI Bulletin, Various issues.

Semester V

Course Category	Core Course 10
Course Title and Code	Fiscal Economics GECO5B10T
No. of Credits	4
No. of Contact Hours	5 Hours per week

FISCAL ECONOMICS

Preamble: Fiscal economics deals with the fisc (treasury) of the country. It is related to decision making in the public sector or finance of the government. The basic aim of this course is to introduce students to the application of the techniques, methods and principles of Economics for decision making in fiscal economics. After completing this course students are expected to learn how the principles of economics can be applied to sound decision making in public finance. They are expected to learn to analyse the financial activities of a government and to understand the important economic issues that government agents face. Training in fiscal economics will help students in higher studies.

Module I: Meaning and scope of fiscal economics

Origin, growth, meaning and scope of public finance- Public and private finance- Principle of MSA-Public goods and private goods-mixed goods and merit goods (concepts only with examples)

Module II: Public expenditure and cost benefit analysis

Meaning and importance of public expenditure with special reference to India-Wagner's, Peacock-Wiseman Hypothesis-Canons of Public expenditure-effects of public expenditure on the economy of India-investment evaluation, project evaluation and cost benefit analysis with suitable examples.

Module III: Public revenue and Income tax calculation

Sources of Public revenue-tax and non tax- classification of taxes-canons and principles of taxation- Ability to pay- cost of service and Benefit- impact, incidence and shifting of tax burden- effects of taxation- major taxes in India like income tax, GST- calculation of personal and corporation of personal and corporation income tax(with suitable examples).

Module IV: Public Debt and Budget in India

Public Debt and Debt management in India- Debt redemption- Budgeting in India- importance-types- Principles- procedures of budgeting- revenue and capital budgets- zero base budgeting-performance budgeting- primary deficit- revenue and capital deficit- budget deficit- fiscal policy with reference to India- contra cyclical fiscal policy- deficit financing and black money in India.

Module V: Federal and local finance in India

Meaning and importance of federal finance - function of finance commissions- jurisdictions of finance commission – Centre, State financial relations- NITI Aayog -Local finances- functions and revenues.

Assignments and Seminars

1. Discuss recent central, state and local governments' budget.
2. Calculate income tax of an employee.
3. Prepare and calculate corporation tax of a company.
4. Visit any project in the locality and calculate cost benefit analysis.
5. Discuss about local finance and project.
6. Study about war finance.
7. Consider parallel economy of India.
8. Impact of revenue and expenditure of immigrants and emigrants on the economy of Kerala.
9. Fiscal and monetary policy of India.
10. Discuss Railway Budget.
11. Changes in the financial system of post reform in India.
12. Social Audit system
13. Computation of Net price of a commodity or service by using GST

References:

1. Musgrave and Musgrave
2. Public Finance by Um Kapila
3. Public Finance by Dutt and Sundaram
4. Public Finance by K.K. Dewett.
5. Goods and Service Tax (GST) (2019)-Concept & Status.-Central Board of Indirect Taxes and Customs (CBIC) India

Semester VI

Course Category	Core Course 11
Course Title and Code	Macro Economics II GECO6B11T
No. of Credits	4
No. of Contact Hours	5 Hours per week

MACRO ECONOMICS II

Preamble: IS-LM framework is a versatile tool used in understanding the working of modern economies. Hence it is widely used in policy formulation too. Phillips curve also was used widely for policy formulation, until it collapsed following the stagflation of 1970s. New concepts like NAIRU developed afterwards. Market economies have always experienced cyclical fluctuations in economic activity. Fiscal and monetary policies have been effectively employed by governments to fight such fluctuations. The objective of this course is to give a rigorous overview of macroeconomics to the undergraduate students. The course is designed to give the necessary ideas and tools to understand the working of an economy at the aggregate level. The course is also expected to give an idea about the need for and way in which government intervention is required in a modern economy. After completing this course a student should be able to derive IS-LM curves and use the framework to explain the working of an economy. A student should also be able to explain the way fiscal and monetary policy works, using the ISLM framework. Student should also be able to explain the concept and measurement of inflation and unemployment. Similarly, a student should also be able to explain the trade-off between inflation and unemployment as predicted by the Phillips curve and its collapse after the stagflation of 1970s.

Module I :ISLM Model

Goods market equilibrium using IS curve-derivation and shifts-Money market equilibrium using LM curve-derivation and shifts-equilibrium using IS and LM. AD AS analysis

Module II:Theories of Inflation and Unemployment

Inflation–Types of Inflation –Headline and core inflation-Measurement of inflation in India-WPI-CPI-PPI-GDP deflator.Effects of inflation- Sacrifice ratio-Theories of inflation- Demand-pull versus cost-push inflation- Measures to control inflation.Unemployment – Types of unemployment- Measurement of unemployment-Cost of unemployment and Okun’s law.Phillips curve –Short Run and Long run Phillips curve – Stagflation of 1970s-reasons-NAIRU.

Module III:Short Run Analysis

Business Cycles-Phases-Theories of trade cycles- Hawtrey’s theory- Hayek’s theory- Keynesian theory-Monetarist interpretation of trade cycles-Contra-cyclical policy measures-Monetary, fiscal, and incomes policy - Meaning and Instruments.

Module IV:Fiscal and Monetary Policy

Fiscal policy-tools-effectiveness-Monetary policy-tools-effectiveness-Interaction between fiscal and monetary policy. Unconventional Monetary Policy-Quantitative easing-Transmission mechanism.Great recession of 2008 and use of monetary and fiscal policy.

References

- 1.Edward Shapiro – ‘Macro economics’ Oxford University press.
- 2.GregoryMankiw – ‘Macro economics’ – 6th Edn. Tata McGraw Hill.
3. Richard T. Froyen – ‘Macro economics’, Pearson education.
4. Eugene Diulio – Macro economic Theory, Shaum’s Outline series. Tata McGraw Hill
- 5.Errol D’Souza – ‘Macro Economics’ – Pearson Education 2008.
- 6.AbhijitKundu (2009) : Methodology and Perspectives of Social Science – Pearson Education 8
7. Dornbusch, Fischer and Startz-MacroEconomics-Tata McGraw –Hill

Additional Reference

1. Lipsey R. and A Chrystal – Economics (11th Edition) Oxford University Press New Delhi.
2. NicoliNattrass and G.VisakhVarma, ‘Macroeconomics simplified: understanding Keynesian and Classical Macroeconomic Systems’, Sage India Publications, 2014

Semester VI

Course Category	Core Course 12
Course Title and Code	Mathematical Economics GECO6B12T
No. of Credits	4
No. of Contact Hours	5 Hours per week

MATHEMATICAL ECONOMICS

Preamble: Mathematical economics is an approach where mathematical symbols and theorems are used for economic analysis. Modern economics is analytical and mathematical in structure. Thus the language of mathematics has deeply influenced the whole body of the science of economics. Every student of economics must possess a good proficiency in the fundamental methods of mathematical economics. One of the significant developments in Economics is the increased application of quantitative methods and econometrics. A reasonable understanding of econometric principles is indispensable for further studies in economics. This course is aimed at introducing students to the most fundamental aspects of mathematical economics and econometrics. The objective is to develop skills in these. It also aims at developing critical thinking, and problem-solving, empirical research and model building capabilities of the student which will help them to build and test models in economics and related fields. The course will also assist them in higher studies in economics..

Module I: Introduction to Mathematical Economics (10 %weightage)

Mathematical Economics: Meaning and Importance- Mathematical Representation of Economic Models- Economic functions: Demand function, Supply function, Utility function, Consumption function, Production function, Cost function, Revenue function, Profit function, saving function, Investment function

Module II: Marginal Concepts (25 %weightage)

Marginal utility, Marginal propensity to Consume, Marginal propensity to Save, Marginal product, Marginal Cost, Marginal Revenue, Marginal Rate of Substitution, Marginal Rate of Technical Substitution. Relationship between Average Revenue and Marginal Revenue- Relationship between Average Cost and Marginal Cost - Elasticity: Price elasticity, Income elasticity, Cross elasticity.

Module III: Optimisation(25 % weightage)

Optimisation of single / multi variable functions - Constrained optimisation with Lagrange Multiplier – significance of Lagrange Multiplier.
Economic applications: Utility Maximisation, Cost Minimisation, Profit Maximisation.

Module IV: Production Function, Linear Programming and Input Output analysis (25 % weightage)

Production function- homogeneous and non-homogeneous. Degree of homogeneity and returns to scale - Properties of Cobb-Douglas production function. Production possibility curve.

Linear programming: – Basic concept, Nature of feasible, basic and optimal solution; Graphic solution. Input-output analysis – Matrix of technical coefficients – the Leontief matrix – computation of total demand for a two/ three sector economy.

Module V: Market Equilibrium (15 % weightage)

Market Equilibrium: Perfect Competition- Monopoly- Discriminating Monopoly

Note to faculty / question paper setter: 1. Kindly give due consideration and adhere to the weightages indicated in the syllabus while setting question paper..

References:

1. Dowling E.T, Introduction to Mathematical Economics, 2nd Edition, Schaum's Outline Series, McGraw-Hill, New York, 2003 (ETD)
2. Chiang A.C. and K. Wainwright, Fundamental Methods of Mathematical Economics, Tata McGraw-Hill Education; Fourth edition (2013)
3. Henderson, J. M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
4. James Bradfield, Jeffrey Baldani, An Introduction to Mathematical Economics, Cengage Learning India Pvt Ltd (2008)
5. A. Koutsoyiannis, Modern Microeconomics, Palgrave Macmillan; 2nd Revised edition (2003) (– see mathematical appendices for each topic)

Semester VI

Course Category	Core Course 13
Course Title and Code	India's Economic Development: National and Regional GECO6B13T
No. of Credits	4
No. of Contact Hours	5 Hours per week

INDIA'S ECONOMIC DEVELOPMENT: NATIONAL AND REGIONAL

Preamble: The course is designed to expose the learners to some of the key issues facing the Indian economy both at national and regional levels. In this process, as young adults, students are expected to be sensitised about these issues, appreciate and learn to critically assess the role of the government in various economic spheres. The learners are also exposed to numerical information relating to various aspects of Indian economy and India's economic policies. They are expected to develop analytical skills, interpret the economic events and visualise the economic future of India. For all these to happen, teachers are requested to take special care to instruct the students to read the suggested reference books, collect clippings and articles from newspapers and magazines and also develop the habit of following economic survey, economic review and RBI Bulletin. Besides, as against the conventional assignments, each module has '**Suggested Additional Activities**' at the end. Teachers need to encourage the learners to explore beyond the texts while attempting these activities.

Report Based on Study Tour: *A study tour is recommended because it may add direct experience to learners about different economic culture of the country. All the final year students need to prepare a report of the tour that includes the places they visited, its importance etc and submit it to the Head of the Department soon after the completion of the tour.*

Module I : Development Policies And Experience(1947-1990).

Low Level of Economic Development under the Colonial Rule- Development and Structural Change of Indian Economy Since Independence: Economic policies Perused between 1950's and 1980's: Mixed Economic framework; Market intervention policy and import substitution; Objectives and strategy of planning: Failures and achievements of plans – Performance of 11th plan – Current plan.

Suggested Additional Activities

1. Find out and prepare a list of items that India used to import and export during 1950-51 and 1990-91
 - a. Observe the difference
 - b. Do you see the impact of self-reliance? Discuss. Details can be collected from latest Economic Survey.
2. Find out the Deputy Chairman and members of the first Planning Commission of India
3. Find out the commodities which India Government permitted to import till 1980.
4. Explain how import substitution can protect domestic industry?

Module II : Economic Reforms since 1991

Background for the introduction of New Economic Reforms of 1991; Liberalisation, Privatisation and Globalisation: An Appraisal- Indian Economy during Reforms with Special focus on trends in FDI, FII and Disinvestment- Centre-State Financial Relations: Finance Commission, its structure and Functioning (with emphasis on Latest Finance Commission).

Suggested Additional Activities

1. Prepare arguments for and against subsidies. Explain your view.
2. Do you think only loss making companies should be privatised? Why?
3. Construct a pie chart for the sectoral contribution of GDP for the period 1950-51 and 2012-13.
4. What would you observe? Is there a structural change? Explain in your own words.
5. Prepare a list showing the latest data on the number of banks- nationalized, private, foreign and New Generation Banks.
6. Discuss the different formulae used for Finance Commission awards.
7. Find out who all are there in the First Finance Commission of India.

Module III: Gross Domestic Product and Sectors.

a. Indian Agriculture: The place of Agriculture in the National Economy; Recent Trends in Investment, Credit and Agricultural Subsidy Policy, Agricultural Marketing and Price- New Agricultural Strategy of 1960s (Green Revolution)- Food Security, PDS and TPDS in India; The Need, Scope and Appraisal of Land Reforms in a Developing Country like India.

b. Indian Industries: Review of Industrial Growth under Planning- Industrial Structure: Traditional, SSI, Village, Cottage and Modern Industries- Industrial Sickness- Industrial Policy Resolutions: 1956, 1977, 1980, 1991; an Analysis of Current Industrial Policy- Infrastructure Development in India.

Suggested Additional Activities.

1. Why, despite the implementation of green revolution, 65% of our population continued to be engaged in the agricultural sector till 1990?
2. Why was public sector given a leading role in industrial development during the plan period?
3. Losses incurred by public sector undertakings are to be met out of the public budget"- Do you agree with this statement? Discuss.
4. Find out the method of estimating inflation in India. Compare it with other countries.

Module IV: Current Challenges Facing the Indian Economy.

a. Poverty: Who are Poor?, Causes and Measurement of Poverty, Number of Poor in India; Policies and Programmes Towards Poverty Alleviation with Special Emphasis on Recent Policies like- Food as a Right: The Food Security Act of 2013 & MGNREGS.

b. Unemployment: Nature, Trends and Estimates of Unemployment in India, Informalisation of Indian Work Force; Employment Prospective of the latest Five Year Plan; Recent Schemes to Reduce Unemployment and Underemployment.

Suggested Additional Activities.

1. Find out from your parents and teachers types of tax payments they are making. Classify the taxes and observe the differences.
2. On the basis of the definition of poverty line, analyse whether categorisation of people into BPL/APL is done in the correct way. Explain in your own words.

3. Analyse whether the dream programme of MGNREGP is carrying out in the right way. If „No“, suggest ways to make the programme more effective.
4. In some communities, you might have noticed that even if the males do not earn high income, they do not send women to work. Why?
5. Prepare a list of recent schemes and objectives to strengthen the rural areas from the government website <http://www.rural.nic.in>

Module V: Kerala's Economic Development

Growth and Structure- Primary, Secondary and Tertiary Sectors-Economic Development Vs Social Development-Poverty Profile of Kerala- Indicators of Human Development: PQLI and HDI- Demographic Transition of Kerala- Trends in Employment and Unemployment in Kerala- Sustainability of -Kerala Model of Development with a Special Mention on Recent Sen-Bhagawati Debate- Decentralised Planning and Development of Kerala- Land Reforms in Kerala- Migration: Concepts in Migration- Emigration to the Gulf- Remittance and its Impact on the Economy of Kerala- Return Migration: Causes, Problems and Policies.

Suggested Additional Activities.

1. Find out the history of emigration from Kerala.
2. Foreign remittance is the backbone of Kerala's socio-economic development". Discuss.
3. What is Nitaqat and Saudization? In what ways it is harmful to the economy of Kerala.
4. Find out the reasons for the existing controversy in poverty estimation.
5. Observe the functioning of „ayalkoottams“ (SHGs) in your locality and write how far it is successful in empowering women.

References:

1. Economic development in India-Problems and Prospects, N.P. Abdul (Ed), Regal Publications, New Delhi
2. Indian Economy, Gopalji Gupta, PEARSON, New Delhi.
3. Ahulwalia, I.J. and I.M.D. Little (Eds) (1999), *India's Economic Reforms and Development*, (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
4. Bardhan, P.K. (1999), *The Political Economy of Development in India*, Oxford University Press, New Delhi
5. Chakravarty S, (1987), *Development Planning: The Indian Experience*, Oxford University Press, and New Delhi
6. Acharya Shanker, Mohan Rakesh (Eds) (2011), *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi
7. Uma, Kapila (2013), *Indian Economy: Performance & Policies*, Academic Foundation, New Delhi.
8. Amit Badhuri, *Development with Dignity* (2005), NBT New Delhi.
9. Brahmananda, P.R. and V.R. Panchmukhi (Eds) (1987), *The Development Process of Indian Economy*, Himalaya Publishing House, Bombay.
10. M.P Todaro, *Economic Growth* (2nd Edition), PEARSON, New Delhi
11. Jalan, B. (1992), *The Indian Economy – Problems and Prospects*, Viking, New Delhi.
12. Joshi, V. and I.M.D. Little (1999), *India: Macro Economics and Political Economy, 1964-1991*, Oxford University Press, New Delhi.
13. Kaushik Basu (Ed) (2004), *India's Emerging Economy*, Oxford University Press, New

Delhi.

16. Centre for Development Studies, 1977, Poverty, Unemployment and Development Policy: A case study of selected issues with reference to Kerala, Orient Longman, Bombay.
17. B.A. Paksh (Ed) 2004, "Kerala Economic Development: Performance and Problems in the post liberalization period, Sage Publications, New Delhi.
18. B.N Ghosh & Patmaja D. Namboodiri, 2009 (Eds), The Economy of Kerala Yesterday, Today and Tomorrow, Serial Publications, New Delhi.
19. K.C. Zachariah, K.P. Kannan, S. Irudaya Rajan, 2002 (Ed). Kerala's Gulf Connections, C.D.S, Trivandrum.
20. Rajasenan, D. and Gerard De Groot (Ed) 2005, Kerala Economy: Trajectories, Challenges and Implications, CUST, Kochi.

Semester VI

Course Category	Core Course 14
Course Title and Code	Economics of Growth and Development GECO6B14T
No. of Credits	4
No. of Contact Hours	5 Hours per week

ECONOMICS OF GROWTH AND DEVELOPMENT

Preamble: This course is designed to introduce students to the exciting and challenging subject of economics of growth and development, which draws from several branches of economics. It intends to provide the theoretical framework for growth and development discourses under different schools of economic thoughts and also into better insights and knowledge on issues and challenges on economic development. It also aims to equip students with the ability to analyze the factors affecting the long run economic growth, both from a positive and negative sense.. After completing this course the student should also be able use theories of growth and development to analyze the problems of the developing world. The students are expected to develop an interrelated to approach to resource use.

Module I: Subject matter of development economics – Meaning of the terms growth and development. The views of Sen and Goulet. Development gap and income distribution in the world economy, International inequality and global inequality. Lorenz curve and Gini ratio. Kuznets inverted U hypothesis. Per capita income as an indicator of development. Alternative measures of development-HDI, HPI, GDI, GEM. PQLI, .Multidimensional poverty index, vicious circle of poverty. Characteristics of underdeveloped countries.

Module II: Facts about economic growth. Harrod Domar Growth model. Neoclassical growth model- Solow model of growth- Production function, investment function, capital accumulation and steady state. Dynamics of the model-change in saving rate, population growth, Technological progress. Convergence in the Solow model. Endogenous growth theory- AK model.

Module III: Concepts and strategies of growth. Rostow's stages of growth. Theory of big push. Balanced growth. Unbalanced growth. Low level equilibrium trap, Lewis model , Fei-Ranis model, Critical minimum effort. Dualism-Technological and financial.

Module IV: Development and environment. Sustainable development. The environmental Kuznets curve. Global warming. Limits to growth. Earth summit.

References:

- 1) Charles I Jones & Dietrich Vollreth (2013) – Introduction to economic growth, 3rd edition. W W Norton &Co
- 2) David N Weil (2012) – Economic growth, 3rd edition , Pearson.
- 3) A P Thirlwall (2011) – Economics of Development, 9th edition, Palgrave.

- 4) Todaro & Smith (2017) – Economic Development, 12th edition. Pearson.
- 5) Subrata Ghatak (2003) – Introduction to development economics, 4th edition, Routledge.
- 6) Debraj Ray (1999) – Development economics, 1st edition, OUP.
- 7) Hendrik Van Den Berg (2016) - Economic growth and development, 3rd edition. World scientific publishing Co.
- 8) E Wayne Nafziger (2005) – Economic Development, 4th edition, Cambridge University Press.

Semester VI

Course Category	Core Course 15/Project
Course Title and Code	Project work GECO6B15P
No. of Credits	2
No. of Contact Hours	1 Hours per week

Semester VI

Course Category	Elective Course
Course Title and Code	Basic Econometrics GECO6E16T
No. of Credits	2
No. of Contact Hours	4 Hours per week

BASIC ECONOMETRICS

Preamble: This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models etc. The aim of this course is to provide a foundation in econometric analysis and develop skills required for empirical research in economics. Topics include specification and selection of regression models, dynamic econometric models, advanced methods in regression analysis and econometric problems.

Module I: Nature and Scope of Econometrics

Econometrics, economic theory and mathematical economics-Methodology of econometrics-Desirable properties of an Econometric model – Limitations of Econometrics.

Module II: Simple Linear Regression Model

The concept of PRF -Significance of stochastic error term-The SRF-Problem of estimation-Method of ordinary least squares-Assumptions underlying the method of least squares-Properties of estimators- Gauss Markov theorem- Coefficient of determination, r^2 -Normality assumption- Hypothesis testing- t and F tests. P value. Practical versus statistical significance.

Module III: Extensions of the Two Variable Regression Model

Functional forms of regression models, log-log, log-lin, lin-log and reciprocal models.

Module IV: Multiple Regression Analysis

The three variable model-OLS estimation of partial regression coefficients-Multiple coefficient of determination R^2 and adjusted R^2 -Hypothesis testing- Testing the overall significance of the regression model- F test-Testing the equality of two regression coefficients-Restricted least squares. Dummy variables and their uses.

Module V: Econometric Problems

Multicollinearity- Nature, consequences, detection and remedial measures-Autocorrelation- Nature, consequences, detection, and remedial measures- Heteroskedasticity-Nature, consequences, detection and remedial measures.

References

- 1: Damodar N Gujarati and Dawn C Porter(2009)- Basic Econometrics, Fifth edition, McGraw Hill International Edition .
- 2: James H Stock and Mark W Watson (2017) - Introduction to Econometrics, third edition, Pearson, Addison Wesley.
3. Carter Hill,William Griffiths and Guay Lim (2011) – Principles of Econometrics, 4th edition, John Wiley&Sons
- 4: Jeffrey M Wooldridge (2018) – Introductory Econometrics, a Modern Approach, 7th edition, Thomson South Western.
- 5: Robert S Pindyck and Daniel L Rubinfeld (1998) – Econometric Models and Economic Forecasts, Fourth edition, McGraw Hill international edition.
6. Dimitrios Asteriou and Robert Hall (2015) – Applied econometrics, 3nd edition, Oxford university press
7. Maddala G S (2002), Introduction to Econometrics, 3rd edition, John Wiley & Sons, NewYork
8. Greene, W. (1997), Econometric Analysis, Prentice Hall, New York.
- 9.Ramanathan, Ramu (2002), Introductory Econometrics with Applications, Thomson Learning Inc, Singapore.
10. Johnston J. and J. D. Nardo (1997), Econometric Methods, McGraw Hill, New York.
- 11.Kmenta, J. (1997), Elements of Econometrics, Michigan Press, New York.

OPEN COURSES
(For Non-economics Students)
Semester V

Course Category	Open Course
Course Title and Code	Economics of Everyday Life GECO5D11T
No. of Credits	2
No. of Contact Hours	2 Hours per week

ECONOMICS OF EVERYDAYLIFE

Objective: This course is an open course which will be offered to only those students for whom Economics is not the core course. The purpose of this paper is to introduce a non- economics students to the subject matter of economics by familiarizing with the most basic concepts of economics. Special attention is given to include concepts that are used in everyday life.

Module I: Basic Concepts and the Methods of Economics

What is economics- Definitions of economics- Basic problems of an economy- how the basic problems are solved by different economic systems – Microeconomics and Macroeconomics

Module II: Micro economic Concepts

Demand –demand function, demand schedule, demand curve. Supply –supply function, supply curve- market equilibrium. Elasticity: price, income, cross - Determinants of elasticity. Competition Vs. Monopoly. Multinational Corporations. Cartels – Mergers – Acquisitions

Module I:: Macro Economic Concepts

National income - GNP, GDP, Per Capita income. Fiscal and monetary policies: meaning and instruments, bank rate, repo rates, reverse repo rate. (concepts only. Inflation – meaning, types and effects. Budget - Revenue Expenditure and capital expenditure – Deficit: Revenue Deficit, Fiscal Deficit. Balance of trade and balance of payments - Current account and capital account.FDI and FPI.

Reference

1. 1 .Dominick Salvatore : Microeconomics : Theory and Applications‘,;Oxford University press, New delhi
2. 2.GregoryMankiw, ‘_Macro economics‘ – 6th Edn. Tata McGraw Hill. 3. Errol D‘Souza – ‘_Macro Economics‘ – Pearson Education 2008.
3. 4.B. Alvin Prakash, ‘_The Indian Economy Since 1991: Economic Reforms and Performance‘, Pearson Education India
4. 5.Subrato Ghatak ‘_Introduction to Development Economics‘ - Routledge
5. 6Lekhy -Public Finance and Public Economics – Kalyani publications
6. Indian Economy Since Independence 24/ed , Kapila U, Academic Foundation, New Delhi

Oxford Dictionary of Economics

7. The Penguin Dictionary of Economics

8. The New Palgrave Dictionary of Economics

(<http://www.dictionaryofeconomics.com/dictionary>)

COMPLEMENTARY COURSES

(Non-Economic Students)

Semester I

Essentials of Economics - Micro

Course Category: Complementary Course
Course Title and Code: Essentials of Economics I-Micro (GECO1C01T)
No. of Credits: 2
No. of Contact Hours: 3

Module I: Basics of Economics

Economics-Definitions- Importance of economics-relation with other social sciences-
Basic Problems of an economy - Micro versus Macro

Module II: Theory of Demand

Utility, utility function, marginal utility, law of diminishing marginal utility- demand, law of
demand. Elasticity of demand - Types

Module III: Theory of Supply

Cost, cost function, opportunity cost, variable cost, fixed cost, total cost, marginal cost,
average cost, supply, supply function, supply curve, Elasticity of supply- Equilibrium price,
market and its classification

Module IV: Production and distribution

Factors of Production-Production function, types of production function (short run and long
run), economies of scale- Distribution-Marginal productivity theory.

Reference:

1. Dominick Salvatore 'Microeconomic Theory', Schuam's Outline Series

Semester II
Essentials of Economics-Macro

Course Category: Complementary Course
Course Title and Code: Essentials of Economics II-Macro (GECO2C02T)
No. of Credits: 2
No. of Contact Hours: 3

Module I: National Income Concepts and Meaning

National Income-Meaning and Significance- GDP and GNP, NDP and NNP. GDP at factor cost and market price, GNP at market price and factor cost, NDP at market price and factor cost, NNP at market price and factor cost. Personal Income, disposable income, per-capita income. Importance of the estimation of national income, difficulties in estimation of national income

Module II: Classical Versus Keynesian economics

Assumptions of Classical economists-Say's Law of Market, Full employment, wage-price flexibility -Keynesian revolution-major concepts of Keynes- Effective demand, consumption, savings, under-employment equilibrium, wage price rigidity- Post-Keynesian developments (Brief introduction only).

Reference

1. Diwedi DN 'Macroeconomics Theory and Policy'. *Tata McGraw-Hill*

Semester III
Essentials of Economics-Money, Banking, Finance and Trade

Course Category: Complementary Course
Course Title and Code: Essentials of Economics III-Money, Banking, Finance and Trade (GECO3C03T)
No. of Credits: 2
No. of Contact Hours: 3

Module I: Money

Definitions and functions of money- demand for and supply of money- Fischer's quantity theory of money- inflation and deflation - Types, Causes and effects.

Module II Banking

Role and functions of commercial banks and Central Bank-monetary policy and its instruments.

Module III: Public Finance

Meaning and Significance- Public and private finance-Principle of Maximum Social Advantage- Public revenue- public expenditure-public debt- budget- Fiscal Policy-FRBM Act- Finance Commission- Terms of References and Recommendations of 14th and 15th Finance Commission.

Module IV: Trade

Internal and External Trade- balance of trade and balance of payments-foreign exchange rate, devaluation- revaluation-depreciation-appreciation.

Reference

1. Diwedi DN 'Macroeconomics Theory and Policy' *Tata McGraw-Hill*
2. Salvator D and EA Diulio – Principals of Economics Schuam's Outline Series
3. Salvator D – International Economics Schuam's Outline Series

Semester IV
Essentials of Economics-Indian Economy

Course Category: Complementary Course
Course Title and Code: Essentials of Economics IV-Indian Economy, (GECO4C04T)
No. of Credits: 2
No. of Contact Hours: 3

Module I: India as a Developing Economy

Indian economy- growth and development under different policy regimes- Demographic trends and issues -education- health and malnutrition - Trends and policies on poverty; inequality and unemployment - Role of NITI Aayog

Module II: Major Sectors of Indian Economy

Agricultural sector - Importance, contribution and problems - green revolution, land reforms
Industry: importance, contribution and problems. Services: contribution. Impact of economic reforms on major sectors.

Module III: Planning

Economic planning and its objectives; five year planning in India – achievements and failures

Module IV: Kerala Economy

Unique features, sectoral contribution, land reforms, decentralized planning, people's planning, achievements and challenges in Health and Educational Sectors, Role of Migration and remittances, tourism and development

Reference

1. Uma Kapila – (Ed) Indian Economy Since Independence – Academic Foundation – New Delhi
2. Keralapadhanam - KSSP Kozhikode