

St Aloysius College (Autonomous) Mangaluru

Re-accredited by NAAC "A" Grade

Course structure and syllabus of

B.Sc.

ECONOMICS

Under NEP Regulations, 2021



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Re-accredited by NAAC with 'A' Grade with CGPA 3.62/4

Recognised by UGC as "College with Potential for Excellence"

Conferred "College with "STAR STATUS" by DBT, Government of India.

Centre for Research Capacity Building under UGC-STRIDE

Date: 21-02-2022

NOTIFICATION

Sub: Syllabus of **B.Sc. ECONOMICS** under NEP Regulations, 2021. (As per Mangalore University guidelines)

Ref: 1. Decision of the Academic Council meeting held on 18-12-2021 vide Agenda No: 6 (2021-22)

2. Office Notification dated 21-02-2022

Pursuant to the above, the Syllabus of **B.Sc. ECONOMICS** under NEP Regulations, 2021 which was approved by the Academic Council at its meeting held on 18-12-2021 is hereby notified for implementation with effect from the academic year **2021-22**.

PRINCIPAL



REGISTRAR

To:

- 1. The Chairman/Dean/HOD
- 2. The Registrar Office
- 3. Library

The BoS in Economics was held on 20 November 2021.

| Sl. No | Category | Name/Address | | | | |
|--------|---|--|--|--|--|--|
| a) | Chairperson | Dr Priya S. Shetty | | | | |
| b) | Members of the Department | Dr Norbert Lobo Mr Alwyn Stephen Misquith Mr Reji P. John | | | | |
| c) | Subject expert | Mrs Kavitha B Dr Jayakumar Shetty Head, Department of Economics, SDM College, Ujire-574240 Email: ajkshetty@sdmcujire.in Mob: 9448154001 Dr Purushothama K V Principal, Pompei College, Kinnigoli Aikala- 574141 Email: purushothamakv@yahoo.co.in Mob:8217292402 | | | | |
| d) | Vice-Chancellor's Nominee (10.12.2019) | Dr Laxminarayana Bhat Principal Besant Evening College, Mangalore Email: laxminbhat64@gmail.com Mob: 481976995 | | | | |
| e) | Representative from Industry / Corporate Sector / Allied Area | Mr Norbert M Shenoy Managing Director, Arunanjali Securities Poonam Anand Nikethan,, Ground Floor, 8th cross, Gandhinagar, Urwa Mangalore - 575003 Email: arunanjali@yahoo.com Mob: 9019787658 | | | | |
| f) | Meritorious Alumnus | Dr Prakash Rao Head, Deparatment of Economics Poorna Prajna College, Udupi. Email: rao.pra@gmail.com Mob:9448027072 | | | | |
| g) | Student Representative | Ms Dafne Julia Menezes Reg No: 193071, III B.Sc Ms Joicy Olvita Pinto, Reg No; 191321, III B. A | | | | |

PREAMBLE

Education is the key to empower mankind. A holistic approach to educate people enables development of new knowledge, creates employable skill sets, right attitude and overall personality development. Educated citizens are the wealth of a nation. National Education Policy 2020 paves the way to make an attempt in this direction. Economics is a discipline which though speaks about household management, gives a greater horizon. It deals with the everyday aspects influencing consumption, production, exchange, distribution, trade and so on. Study of Economics is not only helpful to increase the standard of living of the individual and their households and also in the policy decisions for the economic development. This syllabus in tune with the goals of NEP adheres to the current needs of the students in the discipline of Economics. Overall, the objective of Economics is to improve well-being of nation and thereby developing Indian Economy, since it serves as a centre for developing ideas and innovations. It seeks to create students with the capacity of analytical thinking, model building, team work, collaboration, problem solving. It is hoped that a student after a rigorous training in the BA/B.Sc. Economics degree will have host of employment opportunities and will be an asset to the nation.

B.SC ECONOMICS

Bachelor of Arts and Science (B.A./B.Sc Basic/Honors) in Economics programme is designed with an option for multiple entry and exit. The students will be taught theory as well as the practical aspects of Economic Science. They would begin with fundamental concepts and then as they progress to higher semesters they would be introduced to more sophisticated and intricate concepts.

PROGRAMME OUTCOMES

- PO 1: Facilitate the understanding of basic economic theories.
- PO 2: A comprehensive understanding of the various courses in the discipline.
- PO 3: Enable to apply quantitative techniques suitable for the discipline.
- PO 4: Analyse the policies of the government in solving economic problems.
- PO 5: Develop skills required to blend the subject learned and the real life situations.
- PO 6: Able to evaluate the working of the economy, its interconnection with the social, political, cultural, environmental, ethical issues in a comprehensive manner.

PROGRAMME SPECIFIC OUTCOMES

- PSO 1: Enable the students with the knowledge of Economics both theoretical and applied.
- PSO 2: Develop a comprehensive understanding of the various aspects of the branches of Economics related to micro and macro aspects.
- PSO 3: Understand the working of the domestic and foreign economy.
- PSO 4: Enable the students to apply the theoretical knowledge of Economics in applying to the real life situations.
- PSO 5: Analyse the issues related to various problems like unemployment, balance of payments, poverty, inequality, inflation facing the economy.
- PSO 6: Develop skills to integrate and organise the inter linkages between and among the varied divisions of the economy.
- PSO 7: Have a critical assessment of the working of the economy, the interconnections between the various sectors and the policies linked to the development.

B.Sc. ECONOMICS STRUCTURE UNDER NEP

| Course Code | Title of course | Category of course | Teaching hours per week | SEE | CIE | Total Marks | Credits | | | |
|--------------|--------------------------------------|-----------------------|-------------------------------|-----|-----|----------------|---------|--|--|--|
| SEMESTER I | | | | | | | | | | |
| G 513 DC1.1 | MICRO ECONOMICS | DSC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| G 513 DC2.1 | MATHEMATICS FOR ECONOMICS | DSC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| G 513 OE1.1 | DEVELOPMENT STUDIES | OEC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| Total credit | | | | | | | 9 | | | |
| SEMESTER II | | | | | | | | | | |
| G 513 DC1.2 | MACRO ECONOMICS | DSC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| G 513 DC2.2 | STATISTICS FOR ECONOMICS | DSC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| G 513 OE1.2 | ECONOMICS OF BUSINESS ENVIRONMENT | OEC | 3+0+0 | 60 | 40 | 100 | 3 | | | |
| Total credit | | | | | | | 9 | | | |

TEACHING METHODOLOGY:

- Emphasis to be given to teaching concepts.
- Theories and laws to be taught with the help of tables and diagrams or with mathematical expressions
- Discussions and workshops
- Oral presentations and Guest talks
- Assignments, seminars and project work
- * Review Quizzes

PATTERN OF EXAMINATION

Pattern of ${\bf 40:60}$ for CIA (Continuous internal assessment) and Semester End examinations

| PATTERN OF EVALUATION | | | | | |
|---|-------|--|--|--|--|
| Continuous Internal Evaluation (CIE) | Marks | | | | |
| Continuous & Comprehensive Evaluation (CCE) | 20 | | | | |
| Internal Assessment Tests (IAT) | 20 | | | | |
| Total of CIE (A+B) | 40 | | | | |
| Semester End Examination (SEE) | 60 | | | | |
| Total of CIE and SEE (A+B+C) | 100 | | | | |

| Outline for continuous assessment activities for C1 and C2 | | | | | | | |
|--|-----------|-----------|-------------|--|--|--|--|
| Activities | C1 | C2 | Total Marks | | | | |
| Session Test | 10 marks | 10 marks | 20 | | | | |
| Case study / Assignment / Field work / Project work/ Academic Quiz/ Review of the Book/ etc. | 10 marks | | 10 | | | | |
| Case study / Assignment / Field work / Project work/ Academic Quiz/ Review of the Book/ etc. | | 10 marks | 10 | | | | |
| Total | 20 marks | 20 marks | 40 | | | | |

END - SEMESTER -QUESTION PAPER PATTERN

(From 2021 - 2022 onwards)

PART A: ANSWER ANY FIVE OF THE FOLLOWING: 5 X 2= 10

(Out of EIGHT ANY FIVE with at least one question from each module)

PART B: ANSWER ANY FIVE OF THE FOLLOWING: 6X5=30

(Out of NINE ANY SIX with at least one question from each module)

PART B: ANSWER ANY FIVE OF THE FOLLOWING: 2X10=20

(Out of FOUR ANY TWO with not more than one question from each module)

TOTAL = 60marks/ 2.30 hours duration

INTERNAL -QUESTION PAPER PATTERN (From 2021 – 2022 onwards)

PART A: ANSWER ANY TWO OF THE FOLLOWING: 2 X 5= 10

(Out of THREE ANY TWO with at least one question from each module)

PART B: ANSWER ANY TWO OF THE FOLLOWING: 2X10=20

(Out of THREE ANY TWO with at least one question from each module)

PART B: ANSWER ANY ONE OF THE FOLLOWING: 1X20=20

(Out of TWO ANY ONE with at least one question from each module)

TOTAL = 50 marks/ 1.30 hours duration

SEMESTER I

TITLE OF THE COURSE: MICRO ECONOMICS

3 hours per week: Total hours: 42

LEARNING OBJECTIVES:

- To acquire knowledge of some of the basic concepts, principles and theories of micro
 economics.
- To enable the students to appreciate the utility of economics in day to day life.
- To enable students to understand different types of market structures and their working.

COURSE OUTCOMES:

On Successful completion of the course, the student will be able to

- 1. Analyse the economic behaviour of the consumer and the firm.
- 2. Explain the relationship between various variables such as Input and output, cost and output, price of the product and quantity demand.
- 3. Product and Factor pricing under different market structure.

MODULE 1: INTRODUCTION TO ECONOMICS, DEMAND AND SUPPLY -14 hours

Chapter-1: Introduction to Economics: Nature, scope and definitions of economics, Basic concepts in economics, Importance of study of economics, Understanding the economy, Mankiw's ten principles of economics, Production possibility curve.

Chapter- 2: Demand: Meaning and determinants of demand, the Demand schedule, The Law of demand, Exceptions to the law of demand, Elasticity of demand: Meaning-Types: Price, Income and Cross Elasticity, Measurement of Elasticity of Demand.

Chapter- 3: Supply: Concept of Supply, the Law of supply, and Determinants of supply, Market equilibrium.

MODULE 2: THEORY OF DEMAND AND PRODUCTION -14 hours

Chapter-4: Cardinal Analysis: Utility: Law of diminishing marginal utility, equimarginal utility, consumer's equilibrium, Consumer surplus and its application, N-M utility Index

Chapter-5: Ordinal analysis: Meaning of Indifference curves- Indifference schedule Indifference map, properties of indifference curves, Budget line- Consumer's equilibrium, Income, price and substitution effects -inferior goods v/s Giffen goods,

Samuelson's Revealed Preference Theory.

Chapter-6: Production Function: Meaning, types of production function, The Law of Variable Proportion- the Law of Returns to Scale- Isoquants and its properties, isocostline, Least cost combination of Inputs.

MODULE 3: COST, REVENUE, PRICE AND OUTPUT DETERMINATION UNDER DIFFERENT MARKETS 14 hours

Chapter – 7: Cost Analysis: Cost concepts, Cost output relationship in the short-run and long- run.

Chapter - 8: Revenue Analysis: Total, Average and Marginal Revenue Curves

Chapter – 9: Price and Output determination under different markets: Meaning and features of perfect competitive market, Monopoly, Monopolistic competition and oligopoly, Price and Output determination under these markets.

REFERENCES

- 1. Ahuja H.L (2017) Advanced Economic Theory: Micro Economic Analysis, 21st Ed, New Delhi, S Chand and Co. Ltd.
- 2. Bilas, Richard A (2012) Microeconomic Theory: A Graphical Analysis, McGraw-Hill Book Co. Kogakusha Co. Ltd.
- 3. Case, K. E and Oster . S (2017) Principles of Economics, New Delhi, Pearson Education Pvt. Ltd.
- 4. Chauhan.S.P.S (2010), Micro Economics: An Advanced Treatise, PHI Ltd.
- 5. Deepashree (2011) Principles Of Micro Economics, 3rd Ed. Ane Books Pvt.Ltd
- 6. Dewett, KK (2012) Modern Economic Theory, New Delhi, Suthan Chand & Company Pvt Ltd.
- 7. Jhinghan, M.L (2016) Advanced Economic Theory: Micro and Macro Economics, 16th Ed., New Delhi, Vrinda Publications (P) Ltd.
- 8. Koutsoyiannis A (2016)Modern Micro Economics, 2nd edition, Hongkong, Macmillan Press.
- 9. Lipsey R G and K A Crystal (2011) Principles of Economics, 12th edition, New Delhi, Oxford University Press.

- 10. Maddala, G.S., and E. Miller, Microeconomics: Theory and Applications, Singapore, McGraw-Hill International Edition.
- 11. Pyndyck, R.S., and D.L. Rubinfeld (2012) Microeconomics, New Delhi, Pearson Education Singapore Pvt. Ltd.
- 12. Ronald Bracutigam David Besasko, Micro Economics, 4th Revised Ed., Wiley India Pvt.Ltd.
- 13. Salvatore Dominick (2009) Micro Economics: Theory and Applications, Oxford University Press Ltd.
- 14. Samuelson PA and Nordhaus WD (2010), Economics 19th Ed., , New Delhi, Tata Ma.Graw Hill publishing company Ltd.
- 15. Seth ML(2005), Principles of Economics, 13th Ed., Agra, Lakshmi NarainAgarwal Education Publishers.
- 16. Varian, H.R., Intermediate Microeconomics: A Modern Approach, New Delhi, Affiliated East-West Press.

SEMESTER I

TITLE OF THE COURSE: MATHEMATICS FOR ECONOMICS

3 hours per week: Total hours: 42

LEARNING OBJECTIVES:

- To acquaint the students with elementary knowledge of mathematical techniques in Economics.
- To train them to use mathematical techniques in economics.

COURSE OUTCOMES:

On Successful completion of the course, the student will be able to

- 1. Perform basic operations in Vectors and Matrix algebra.
- 2. Calculate limits, derivatives and integrals of functions of multiple variables.
- 3. Calculate Optima for constrained and unconstrained optimization problems encountered in Economics.

MODULE 1: BASICS OF MATHEMATICAL ECONOMICS, VECTORS, MATRICES AND THEIR APPLICATIONS - 14 hours

Chapter-1: Basics of Mathematical Economics: Nature of Mathematical Economics and its applications in Economic Analysis -Mathematical Model: Variables, Constants, Parameters, Equations and Identities- Sets: Set notation, operations, finite and infinite sets, laws of set operations.

Chapter-2: Relations and Functions: Ordered pairs, relations and functions - Meaning and types of functions- constant function, polynomial functions, rational functions and non-algebraic functions. Simultaneous Equations- **Vectors**-vector spaces, linear dependence.

Chapter-3: Matrices: Matrix Operations- Addition and Subtraction, Matrix Multiplication, Commutative, Associative and Distributive laws-Transpose - Inverse Matrix - Determinants: Properties, Rank of Matrix, Minor, Co-factor - Cramer's Rule, Derivation and its Applications in Economics

MODULE 2: COMPARATIVE STATICS AND DERIVATIVES - 14 hours

Chapter- 4: Nature of Comparative Statics, Rate of Change and the Derivative -The

concept of limit, limit theorems.

Chapter–5: Continuity and Differentiability of a function – rules of differentiation of a function, Constant Functions, Linear, Power, Sums and Differences of Functions, Product of Functions, Quotient of Functions, Chain Rule, Exponential and Logarithmic Functions.

Chapter–6: Functions of two or more variables - Partial derivatives, Higher order partial derivatives, the Chain rule and total derivatives- Maxima and minima – One and two variables- Differential equations- First order linear differential equations- Nonlinear first order differential equations- Second order linear differential equations.

MODULE 3: INTEGRATION AND OPTIMISATION TECHNIQUES - 14 hours

Chapter – 7: Concept of Integration -Rules of Integration – Definite Integrals – Area and summation – Indefinite Integration.

Chapter–8: Applications integrations in Economic Analysis-Consumers Surplus-Producers surplus-Obtaining primitive function from marginal function.

Chapter–9: Concept of optimisation - Unconstrained Optimisation - Lagrangian Multiplier, Constrained optimisation.

REFERENCES

- 1. Allen, R.G.D., (2007) Mathematical Analysis for Economists, Mumbai, Macmillan,
- 2. Bhardwaj, R.S(2007)Mathematics for Economics and Business, 2nd Ed, NewDelhi, Excell Books.
- 3. Chiang(1985) Fundamental Methods of Mathematical Economics, London, McGraw Hill book Co.
- 4. Chiang, A.C(1985) Fundamental Methods of Mathematical Economics, 3rd Ed, Mumbai, McGraw Hill.
- 5. Dinwiddy, C(1967)Elementary Methods of Mathematical Economics, Oxford University Press.
- 6. Dowling, E.T(2005) Introduction to Mathematical Economics, 2nd Ed, Mumbai, Schaum's Outline Series, MacGraw Hill.
- 7. Halden, K. and A.W. Pearson(2002) Introductory Mathematics for Economics and Business, Delhi, Macmillan Press Ltd.
- 8. Mehta & Madnani (1992) Mathematics for Economists, New Delhi, S. Chand.
- 9. Simon, Carl P. and Lawrence Blume (2007) Mathematics for Economics, NewDelhi, Viva Books Pvt Ltd.

- 10. Veerachamy(2008) Quantitative Methods for Economists, New Delhi, New Age International Publications.
- $11.\,Weber,\,Jean\,\,E(1982) Mathematical\,\,Analysis\,,\,Harper\,\,International.$
- 12. Yamane, T.(2011) Mathematics for Economists, 2nd Ed, New Delhi, PHI Learning

OEC: SEMESTER I

TITLE OF THE PAPER: DEVELOPMENT STUDIES

3 hours per week: Total: 42 hours

Learning Objectives:

- To learn the basic concepts of growth and development.
- To know how the development process is made possible.
- To convey knowledge about theoretical framework of Growth and Development under different Schools of economic thought.
- This course exposes students to some of the key ideas and concepts in the areas of economic growth, human development and globalisation.

Learning Outcomes

- Students will develop a critical understanding of the contemporary issues in Indian economic development.
- Students will thus be better prepared to face the professional world and can use this knowledge base in a variety of jobs, including in the corporate,

MODULE 1: DEVELOPMENT: MEANING AND CURRENT CHALLENGES

- 14 Hours

Chapter 1: Meaning of Growth: The concept of Growth-Distinction between Economic Growth and Economic Development Transition from quantitative to qualitative indices

Chapter 2: Modern economic growth: Characteristics of modern economic growth: Scope of Modern Economic Growth -Modern Version of Economic Development--Common characteristics and dissimilarities among developing countries.

Chapter 3: Current Development Challenges- Poverty-Inequality- Migration- Conflict

MODULE 2: APPROACHES TO DEVELOPMENT

14 hours

Chapter 4: Development and Ethics-Concept and meaning-Principles and importance of Development Ethics

Chapter 5: - Measurement of Economic Development-PQLI-Gender Development Index-Multidimensional Poverty Index-HDI-Mathematical calculations related to Indexes

Chapter 6: Theories of Development-: Adam Smith -Solow's Model of long-run growth, -Nurkse Theory of Disguised Unemployment -Shumpter -Leibenstein's Critical Minimum Effort Thesis; Feldman Model of Growth- Economic Growth and Income Distribution.

MODULE 3: THEORIES AND CURRENT ISSUES IN DEVELOPMENT 14 hours

Chapter 7: Theories of Development: Theorizing Development –Modernization Theory, Dependency Theory- Capitalist World System- The evolution of thought on poverty reduction-Colonial Regimes and Their Legacies

Chapter 8: The Industrial Revolution: Genesis and Spread-International specialization of Labour/Industry- Industrial Labour ILO and its activities to promote labour standards

Chapter 9: Sustainable development; Increasing degradation of natural environment – water and air pollution and deforestation-Depletion of global commons-Sustainable development – concept and measures- SDGs- Climate Change – Causes, Impact, Measures of Mitigation and Adaptations

REFERENCES:

- 1. Agrawal, R.C(2015) Economics of Development and Planning, Agra, Lakshmi Narain Agrawal Publishers.
- 2. Ahuja H. L (2016) Development Economic: A critical study of economic growth, development and environment, New Delhi, S. Chand Publications.
- 3. Baldwin R E, Economic Development: Theory, History, Policy, Asia Publishing House
- 4. Debaraj Ray (2009) Development Economics, New Delhi, Oxford University Press.
- 5. Debraj Ray(1998)Development Economics, New Jersey, Princeton University Press.
- 6. Jhingan M.L.(2011)Economics of Development and Planning, 40th Ed, New Delhi, Vrinda Publications
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- 9. Meir, G.M(2000)Leading Issues in Economic Development7th Ed, New Delhi, Oxford University Press.
- 10. Meir, G.M. & Baldwin R.E(1970) Economic Development, Bombay, Asia Publishing House,

- 11. Misra, S.K. and V.K. Puri (2016) Economics of Development and Planning, 16th Ed., New Delhi, Himalaya Publishing House.
- 12. Misra, S.K. and V.K. Puri(2012)Economics of Development and Planning, New Delhi, Himalaya Publishing House.
- 13. Recent Human Development Reports
- 14. Shankaran S(2004) Environmental Economics, 3rd Ed, Madras, Margham Publications,
- 15. Todaro M.P(1985) Economic Development in the Third World, New York, Longman
- 16. Todaro M.P, and Stepan C Smith (2006) Economic Development, New York, Addison Wesley Series in Economics.
- 17. Subrata Ghatakh (2003), Introduction to Development Economics, Routledge
- 18. Daron Acemoglu and James Robinson, (1994), Economic Origins of Dictatorship and , Democracy, Cambridge University Press

SEMESTER II

TITLE OF THE COURSE: MACRO ECONOMICS

3 hours per week: Total hours: 42

LEARNING OBJECTIVES:

- To enable the students to understand the working of the economy at the aggregate level.
- To train students in basic macroeconomic concepts and theories.
- To equip the students with appropriate tools of analysis to deal with issues and problems of macroeconomic policy.

COURSE OUTCOMES:

On Successful completion of the course, the student will be able to

- Explain the concept of National Income and methods of its estimation
- Analyse the relationship between Macroeconomic variables
- Understand the determination of income and employment under Classical and Keynesian framework

MODULE 1: INTRODUCTION TO MACROECONOMICS AND NATIONAL INCOME ACCOUNTING - 14 hours

- **Chapter-1: Introduction to Macroeconomics:** Nature of macroeconomics and its significance, Indicators of macro economic activity Key concepts: Stock and flow variables.
- Chapter-2: Building Blocks of Macroeconomic Analysis: Aggregate Demand (AD) curve, Aggregate Supply (AS) curve, Sources of shift in AD an AS, Equilibrium in National Income and Price level, Unemployment and National Income, Inflation and Unemployment, Circular flow of Income, Goods market and Money Market.
- Chapter-3: National Income Accounting: Measurement of macro variables and economic performance: National income accounting Important Concepts: GNP, GDP, NNP, NDP, NI, PI, DPI- Real GDP versus Nominal GDP- GDP deflator- Method of estimating national income- Expenditure method- Income method-Value added or Net product method- Difficulties in national income accounting- Trends in GDP in India -GNP and Quality of Life Net Economic Welfare Green Income.

MODULE 2: CLASSICAL AND KEYNESIAN MACROECONOMICS - 14 hours

- Chapter- 4: Classical Theory: Introduction to classical theory of employment Basic assumptions of the classical school- Say's law of market- Determinants of output, employment, savings, investment, wages, prices, interest rate Equilibrium output and employment-Implications of classical full- employment model-Critical evaluation.
- **Chapter 5: Keynesian Macroeconomics:** Principle of effective demand- Keynesian theory of output, income and employment- Equilibrium income and output in simple two sector model, Three sector & four sector models.
- Chapter- 6: Keyes Psychological Law of Consumption: An Overview of Post Keynesian theories of consumption: absolute income, relative income, permanent income & life cycle hypothesis- Multiplier and Accelerator Analysis -Marginal efficiency of capital- Relevance and critique of Keynesian Macroeconomics.

MODULE 3: RECENT DEBATES IN MACROECONOMICS - 14 hours

- **Chapter 7:** Supply side Economics
- **Chapter 8:** Money market and goods market equilibrium-IS-LM model-Business cycle- Concept and theories.
- **Chapter- 9:** Macroeconomic policies; Monetary policy and fiscal policy-Relative effectiveness of monetary and fiscal policies.

REFERENCES

- 1. Ahuja H.L (2014) Advanced Economic Theory: Micro Economic Analysis, 20th Ed., New Delhi, S Chand and Co. Ltd.
- **2.** Bilas, Richard A, Microeconomic Theory: A Graphical Analysis, McGraw-Hill Book Co. Kogakusha Co. Ltd.
- 3. Burda Michael (2017) Macro Economics, 5th ed., Chennai, Oxford University Press.
- 4. Chauhan.S.P.S (2010) Micro Economics: An Advanced Treatise, PHI.
- 5. David Romer (2011) Advanced Macro economics, Irwin/McGraw-Hill.
- 6. Deepashree(2011) Principles Of Micro Economics, 3rd Ed., Ane Books Pvt.Ltd.
- 7. Dewett KK, M H Navalur & Bahl KK (2012) Modern Economic Theory, New Delhi, Suthan Chand & Company.
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- 9. Jhinghan, M.L (2014) Advanced Economic Theory: Micro and Macro Economics, 12th Ed., New Delhi, Vrinda Publications (P) Ltd.

- 10. Koutsoyiannis A (2008) Modern Micro Economics, 2nd edition, Macmillan Press, Hongkong.
- 11. Lipsey R G and K A Crystal (2011) Principles of Economics, 12th edition, New Delhi Oxford University Press.
- 12. Maddala, G.S., and E. Miller (1989) Microeconomics: Theory and Applications, Singapore ,McGraw Hill International Edition.
- 13. Mankiw, N. Gregory (2006): Macroeconomics, New York, WH Freeman Ltd.
- 14. Salvatore Dominick (2009) , Micro Economics Theory and Applications, Oxford University Press Ltd.
- 15. Samuelson P. A and Nordhaus W.D (2017) Economics, 19th Ed., New Delhi, Tata McGraw Hill Publishing Company Ltd.
- 16. Samuelson PA and Nordhaus WD (2010) Economics 19th Ed., Tata Ma.Graw Hill publishing company ltd, New Delhi
- 17. Seth M.L (2014) Macro Economics, 30th Ed., Agra, Lakshmi Narayan Agarwal Educational Publishers.
- 18. Shapiro Edward (2016): Macroeconomic Analysis, 5th ed, New Delhi, Galgotia publications.
- 19. Vaish M.C.(2010) Macro Economic Theory, 14th Ed., New Delhi: Vikas Publishing House.

SEMESTER II

TITLE OF THE COURSE: STATISTICS FOR ECONOMICS

3 hours per week: Total hours: 42

LEARNING OBJECTIVES:

 To train students in statistical techniques in order to understand economic problems.

COURSE OUTCOMES:

On Successful completion of the course, the student will be able to

- 1. Calculate basic descriptive and inferential statistics.
- 2. Interpret descriptive and inferential statistics.
- 3. Explain the process of hypothesis testing.

MODULE - 1: BASICS OF STATISTICS FOR ECONOMICS, MEASURES OF CENTRAL TENDENCY AND DISPERSION - 14 hours

- Chapter-1: Basics of Statistics for Economics: Importance of Statistics in Economics-Descriptive and Inferential statistics -Data - Elements, Variables, and Observations, Scales of Measurement - Qualitative and Quantitative Data- Cross-Sectional and Time Series data- Data sources - Computers and Statistical Analysis.
- Chapter-2: Measures of Central Tendency: Arithmetic mean, median, mode,
 Geometric mean and Harmonic mean measurement and applications in
 Economics.
- **Chapter-3: Measures of Dispersion-** Meaning and significance of measures of dispersion Measurement and applications of range, quartile deviation, mean deviation, standard deviation, variance and coefficient of variation.

MODULE - 2 : CORRELATION, REGRESSION, TIME SERIES ANALYSIS AND INDEX NUMBERS - 14 hours

Chapter- 4 :Correlation and Regression: Meaning and types of correlation, methods of computation of correlation coefficient –Karl Pearson's method, Spearman's rank correlation method- Regression–meaning and importance of regression analysis, simple regression lines and equations and forecasting (two variables only).

Chapter - 5 : Time Series: Nature and Decomposition of Time Series - Analysis of Trend - Moving Average Method, Least-Square Method.

Chapter – 6: Index Numbers: Nature and Purpose of Index Numbers - Types of Index Numbers: Price Index - Quantity Index, Link and Chain Index - Simple and Aggregate Index Numbers - Laspeyre's Index, Paasche's Index, Marshall and Edgeworth's Index - Fisher's Index - Time- Reversal and Factor Reversal Tests-Deflation and Splicing of Index Numbers - Problems in the Construction of Index Numbers - Limitation of Index Numbers.

MODULE - 3 : INTRODUCTION TO PROBABILITY DISTRIBUTIONS AND HYPOTHESIS TESTING - 14 hours

- **Chapter 7: Probability:** Basic Concepts- Properties of Probability- Expected Values, Conditional Probability Random Variables: Discrete and Continuous.
- **Chapter 8: Probability Distributions** Probability Density Functions and Cumulative Distribution Functions Expected values and Moments The Binomial Probability Distribution, Poisson and Normal Distribution.
- **Chapter 9: Hypothesis Testing:** Meaning of Hypothesis testing-Null and Alternative hypothesis, level of significance, One-tailed and two-tailed tests, Type I, Type II errors- Approaches to Hypothesis Testing Confidence Interval Approach -Test of Significance Approach.

REFERENCE

- 1. Douglas, A Lind, William G. Marchal, and Samuel A. Wathen(2012)Statistical Techniques in Business and Economics, 15 th Ed, NewDelhi, TMH.
- 2. Gupta, S.C. and <u>V. K. Kapoor(2010)</u> Fundamentals of Mathematical Statistics,10th Ed, New Delhi, Sultan Chand and Sons.
- 3. Gupta, S.P(2011) Statistical Methods, Sultan Chand and Sons.
- 4. Nagar, A.L. & P.D. Sharma, Statistical Methods of Economic Analysis, New Delhi, S Chand & Co.
- 5. Pillai R.S.N. and V. Bagavathi(2013) Statistics: Theory and Practice, New Delhi, Sulthan Chand.

OEC: SEMESTER II

TITLE OF THE COURSE: ECONOMICS OF BUSINESS ENVIRONMENT

3 hours per week: Total: 42 hours

Learning Objectives:

- To learn the basic concepts of Business Environment /.
- To know how the development process is made possible in Business.
- To convey knowledge about theoretical framework of Budget and Polcies

LEARNING OUTCOMES

At the end of the course the student should be able to:

- Explain the elements of Business environment.
- Identify the environmental constraints in the growth of a business firm.
- Analyze the ways to utilise the current environmental conditions to achieve higher business growth.

MODULE 1: INTRODUCTION TO BUSINESS ENVIRONMENT 14 hours

Chapter1: Introduction: Meaning and definition, objectives, importance and uses of study of business environment. Environmental analysis-Meaning, process of environmental analysis, limitations of environmental analysis, environmental factors-The Micro environment of business and the macro environment of business.

Chapter 2: Economic Environment: Meaning of Economic Environment-Characteristics of Indian economy-Impact of Liberalization Privatization & Globalization of Indian Business. Monetary policy–Meaning, objectives-Fiscal policy–Meaning, objectives, budget and importance-EXIM policy –meaning and objectives- Industrial policy–meaning, objectives (Latest Policy Measures).

Chapter3: Global Business Environment: Meaning: Globalization: Nature and Impact of globalization: Challenges of international business: GATT and WTO and its implications on Indian economy.

Practicum

- 1. Identification of the impact of business environment through surveys
- 2. Group discussion on WTO and its impact on Indian business

MODULE 2: NON-ECONOMIC ENVIRONMENT

14 hours

Chapter 4: Social and Cultural Environment: Business and Society- Social Objectives of Business-Corporate Social Responsibility- Consumer Rights& Corporate Governance-Business Ethics

Chapter 5: Technological Environment: Meaning-Technological changes— R&D in India-Public and Private Investment in R and D.

Chapter 6: Financial Environment: Introduction and Meaning-An Over view of Indian Financial System-Financial Institutions and their Roles-Role of Foreign Direct Investment and its impact on Indian Business

Practicum: Students are expected to analyze the major economic and financial indicators Such as GDP, Inflation, CPI, BSE, NSE, Currency, Gold rate, Oil barrel price etc., for a particular period of time and submit the report on the same.

MODULE 3: GOVERNMENT AND BUSINESS IN INDIA 14 hours

Chapter 7: Political Environment: Introduction and Meaning Political Environment and the Economic system -Government and Business Relationship in India- Provisions of Indian Constitution for Business

Chapter 8: Legal Environmental Business: Indian Company Law-Contract Law-Competition policy and law- Patents & Trademarks- Industrial Policy-An overview Labour Laws & Social Security, Environmental Laws.

Chapter 9: Current Issues: Ease of Doing Business-Performance of MSMEs-Make in India,-Development of economic and social infrastructure National Monetisation Pipeline

(The teacher should include the latest policy of the government)

Practicum: Students are expected to give a report on how the economic environment has affected the performance of any five large Indian Business Houses.

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- 4. Francis Cherunilam (2017): Business Environment, Himalaya Publishing House, Mumbai.
- 5. Pailwar V.K (2014): Business Environment, Prentice Hall India Learning Ltd, Delhi.
- 6. Sivayya K.V and V B M Das. (2013): Indian Industrial Economy, Sulthan Chand Publications, Delhi.
