Date: 21-12-2022

NOTIFICATION

Sub: Syllabus of **B.Sc. ECONOMICS** under NEP Regulations, 2020.
(As per Mangalore University guidelines)

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

2. Decision of the Academic Council meeting held on 09-07-2022 vide
Agenda No: 14

3. Decision of the Academic Council meeting held on 25-02-2023 vide
Agenda No. 12

4. Decision of the Academic Council meeting held on 02-09-2024 vide
Agenda No. 3

5. Office Notification dated 21-02-2022

6. Office Notification dated 17-08-2022

7. Office Notification dated 30-03-2023

8. Office Notification dated 26-09-2023

Pursuant to the above, the Syllabus of **B.Sc. ECONOMICS** under NEP Regulations, 2020
which was approved by the Academic Council at its meeting held on 18-12-2021, 09-07-2021,
25-02-2023 & 02-09-2023 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

St Aloysius (Autonomous)
Mangaluru

Re-accredited by NAAC "A" Grade
Course structure and syllabus of
B.Sc.
ECONOMICS

Under NEP Regulations, 2021-22 Batch onwards

Sl. No	Category	Name/Address
a)	**Chairperson**	Dr Manohar V. Serrao
b)	**Members of the Department**	1. Dr P P. Sajimon 2. Mrs Kavitha B. 3. Ms Vinola Sandra Sequiera 4. Dr Florin S. Soans 5. Mr Alwyn Stephen Misquith 6. Mr Reji P. John 7. Mr Olwyn D'Souza 8. Mr Aviansh B. Kulal 9. Ms Carol D'Souza
c)	**Academic Advisors**	1. Prof. Jayavantha Nayak, HOD, Department of Economics, University College Hampanakatta, Mangaluru 575001. 2. Mr Callon D'Souza, Proprietor and Managing Director, Flora Tours and Travels, Bendoorwell, Mangaluru - 575002

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.

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.

I B.Sc. : I SEMESTER – ECONOMICS
Title of the Course: G 513 DC1.1: MICRO ECONOMICS
3   hours per week: Total hours: 42

LEARNING OBJECTIVES:
- To help students to acquire knowledge of some of the basic concepts, principles and theories of Micro Economics.
- To provide the foundation for the study of other branches of Economics.
- To develop analytical, reasoning and graphical presentation of skills.
- To enable the students to appreciate the utility of economics in day – today life.

LEARNING OUTCOME
- On successful completion of the course the student is expected to get a thorough understanding of the consumer behaviour and able to apply the knowledge   acquired in his / her day to day life in matters related to buying, selling, maximization of satisfaction, etc.

MODULE-I: NATURE OF ECONOMICS
Definition of Economics - wealth, welfare, scarcity & growth - Micro and Macro approach. Inductive and Deductive Method - Positive Vs. Normative Study - Static and Dynamic concepts. Basic Problems of the Economy – Production Possibility Curve

MODULE-II: UTILITY AND DEMAND ANALYSIS

Utility Analysis - Law of Diminishing Marginal Utility - Law of Equi-Marginal Utility - Demand – Demand Distinctions- Law of Demand - Factors Influencing Demand - Shifts in Demand - Meaning of Elasticity of Demand - Types – Price Elasticity –Forms, Determinants and Measurement – Importance- Income Elasticity – Cross Elasticity – Mathematical Problems related to demand, elasticity of demand , utility

MODULE-III: INDIFFERENCE CURVE ANALYSIS

Indifference Curve Analysis - Properties –Marginal Rate of Substitution - Budget Line -Income Effect - Price Effect and Substitution Effect - - Consumer's Equilibrium - Samuelson's Revealed Preference Theory – Marshall's concept of Consumer Surplus – mathematical problems

MODULE-IV: PRODUCTION ANALYSIS

Production function - short run and long run - Law of Variable Proportions - Economies and Diseconomies of Scale. lsoquants- properties – Producers surplus Mathematical problems

MODULE – V: COST ANALYSIS

Costs Concepts and Classifications - Money Cost, Real Cost, Explicit Cost, Implicit Cost, Sunk Cost, Opportunity Cost, Incremental Cost, Private Cost, Social Cost; Cost in the Short Run- Fixed Cost, Variable Cost, Total Cost, Average Cost, Marginal Cost - Cost - Output Relations in Short and Long run. – Mathematical problems – Cost –benefit Analysis

MODULE – VI: SUPPLY AND REVENUE ANALYSIS

Supply - Law of Supply, Supply Function, Determinants- Exceptions Changes in Supply-Elasticity of Supply- Revenue- Total Revenue, Average Revenue, Marginal Revenue - Relationship between Average Revenue, and Marginal Revenue under Perfect Competition and Imperfect Competition - – Mathematical problems

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1. Ahuja H.L (2014) *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 Narain Agarwal Education Publishers.
16. Varian, H.R., *Intermediate Microeconomics: A Modern Approach*, New Delhi, Affiliated East-West Press.

I SEMESTER B.Sc.:

Title of the Course: G 513 DC2.1: MATHEMATICS FOR ECONOMICS

3hours per week   (Total: 42 hours)

LEARNING OBJECTIVES:

- To acquaint the students with elementary knowledge of mathematical techniques in Economics.

- To train them to use mathematical techniques in economics.

LEARNING OUTCOMES:

- The Student will be able:

- To Apply some mathematical methods to economic theories

- Using calculus and differential equations in the economic models

- Use economic integration in applications

MODULE I: LINEAR FUNCTIONS AND THEIR APPLICATION IN ECONOMIC ANALYSIS

Linear Function - Demand Function – Supply Function – Market Equilibrium – Taxation – Subsidy - Elasticity of Demand- National Income Determination

MODULE II: NON- LINEAR FUNCTIONS AND THEIR APPLICATION IN ECONOMIC ANALYSIS.

Quadratic Function – Simple and General Market Equilibrium – Production Possibility Curves – Power Function – Pareto's Distribution of Income – Logarithm and Anti-Logarithms- Exponential Function – Interest Compounding, Discounting

MODULE III: DIFFERENTIAL AND INTEGRAL CALCULUS AND THEIR APPLICATION IN ECONOMIC ANALYSIS.

Application of Derivatives in Economics – Cost – Average and Marginal Cost Relationship – Revenue – Average and Marginal Relationship –Equilibrium of the Firm under perfect competition, monopoly, price discrimination. Integral Calculus Definite Integration – Application to Economics – Consumers Surplus – Producers Surplus – Indefinite Integration – Cost and Revenue Analysis, National Income Analysis.

BOOKS FOR REFERENCES:

1. Allen, R.G.D. , 2007. : *Mathematical Analysis for Economists*, Macmillan, Mumbai

2. Bhardwaj, R.S., 2007: *Mathematics for Economics and Business*, 2nd Ed. Excell Books, NewDelhi.

3. Chiang, A.C. ,1985: *Fundamental Methods of Mathematical Economics*, 3rd Ed. McGraw Hill Mumbai.

4. Dinwiddy, C., 1967, *Elementary Methods of Mathematical Economics*, Oxford University Press

5. Dowling, E.T, 2005: *Introduction to Mathematical Economics*,2nd Ed. Schaum's Outline Series, MacGraw Hill, Mumbai.

6. Mehta & Madnani : 1992: . *Mathematics for Economists*, S. Chand, New Delhi.

7. Simon, Carl P. and Lawrence Blume , 2007 *: Mathematics for Economics*, Viva Books Pvt Ltd, NewDelhi.

8. Veerachamy, R., 2008 : *Quantitative Methods for Economists*, New Age International Publications, New Delhi.

9. Weber, Jean E. ,1982: *Mathematical Analysis* , Harper International.

10. Yamane, T., 2011: . *Mathematics for Economists*,2nd Ed. PHI Learning, NewDelhi.

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I SEMESTER – ECONOMICS (OE)

Title of the Course: G 513 OE1.1: DEVELOPMENT STUDIES

3 hours per week: Total hours: 42

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LEARNING OBJECTIVES:

- To learn the basic concepts of growth and development

- To know how the development process is made possible.

LEARNING OUTCOMES

- To understand the basic problems of different countries economy.

- To know the different model adopted by the various countries.

- To select appropriate model for the development and growth of the countries.

COURSE CONTENTS

MODULE I: CONCEPT OF GROWTH AND DEVELOPMENT

Chronology of economic development - Distinction between Economic Growth and Economic Development – Modern Version of Economic Development-Development as Freedom- Economic Progress and Economic welfare- Measurement of Economic Development - Gross National Product - Per Capita Income – Comparative Concept – Economic Welfare Criteria- Standard of Living Criteria- Physical Quality Life Index – Human Poverty Index - Human Development Index – Inequality-Adjusted Human Development Index- Gender Development Index- Gender Inequality Index- Multidimensional Poverty Index – Green Accounting – Gross Happiness Index - Mathematical calculations related to Indexes-Determinants of Economic Development- Evils of Economic Development – Sustainable development – Meaning, Objectives – Economic Growth and Income Distribution: The Kuznet's Hypothesis.

MODULE II: DEVELOPMENT MODELS

Classical theory of economic development – Adam Smith's Theory, David Ricardo's Theory - T. R Malthus, J. S Mill, Karl Marx and Schumpeterian Theory of Economic Development – theory of development Balanced and Unbalanced Growth Theories - Theory of Big Push – Rostow's Stages of economic growth- Dualistic theories – social, technological and financial dualism - Myrdal's Theory of Circular Causation – Nelson's Low level Equlilibrium Trap - Leibenstein's Theory of Critical Minimum Trap – Role of state in Economic development.

MODULE III:GROWTH MODELS

Neo-Classical growth models - Swan's Growth Model, Harrod – Domar Model, Solow's model of long-run growth, Growth models of Meade ,Kaldor Model of Income Distribution and Growth, Passinetti Model of Profit and Growth, The models of technical change, Steady state growth- Feldman model of Growth - Ranis and Fei Model, Jorgenson's Model, Two Gap Model, Romar's Endogenous Growth Model- Mathematical problems related to growth models.

MODULE IV : CAPITAL AND ECONOMIC DEVELOPMENT

 Role of Capital - COR, ICOR- Input-Output Analysis – Cost- Benefit Analysis- Shadow Accounting Prices - Capital formation – Importance of capital formation- Process of capital formation- Causes for low capital formation - Sources of Capital Formation - Domestic and External Sources – Technology and Economic Development - Capital Budgeting - Meaning - Objectives – Steps – Techniques – Pay- Back Period- Profitability Index - Average Rate of Return Method - Net – Present Value Method – Internal Rate of Return – Mathematical Problems Related to Techniques of Capital Budgeting.

MODULE V: HUMAN RESOURCE DEVELOPMENT

Population as Growth Promoting and Growth Retarding Factor - Theory of Demographic Transition – Optimum theory of population- Human Capital: Significance, Composition- Problems of Human Capital Formation – Criteria for investment in Human Capital- Disguised Unemployment as a source of Capital Formation - Need for Manpower Planning – Imbalance between Manpower Demand and Manpower Supply – Decentralised Strategy for Manpower Planning -Theories of Nurkse and Lewis- Man -Power Planning - Strategies for Man Power Planning – Harris and Todaro on Migration and Development.

MODULE VI: SECTORAL ASPECTS OF DEVELOPMENT

Nature and scope of agricultural economics- Nature of agricultural production as distinct from industry - Role of agriculture in economic development; Efficiency and productivity in agriculture – commercialisation and Modernisation of agriculture - New technology and sustainable agriculture – Mellor's Model of agricultural development – Schultz's Transformation of Traditional agriculture -Rationale and pattern of industrialization in developing countries; Role of Industry in economic Development - The choice of techniques and appropriate technology and employment; Terms of trade between agriculture and non-agricultural sectors.

BOOKS FOR REFERENCE:

1. Agarwal, A.N(2014)*Indian Economy : Problems of Development and Planning,39th Ed,* New Delhi, WishwaPrakashan.

2. Agrawal A.N and AgarwalMK(2017) Indian Economy, Problem and development and planning, 42nd Ed, London, New Age International Pvt Ltd Publishers.

3. Dhingra, I.C(2012)*The Indian Economy: Environment and Policy*, 27th Ed, New Delhi, Sultan Chand & Sons.

4. I.J. Ahluwalia and I.M.D. Little (1999)*India's Economic Reforms and Development,* New Delhi, OUP.

5. Jalan ,Bimal,(2004), *The Indian Economy:Problems and Prospects,* New Delhi, Penguinm.

6. Lekhi, R.K and JoginderSingh(2015) Agricultural Economics, Ludhiana, Kalyani Publishers.

7. Mahajan, Ashwani and GauravDutt(2013) *Indian Economy*, New Delhi, 68th Ed. S. Chand & Company Ltd.

8. Mahajan, Ashwani and GauravDutt, 2016: *Indian Economy*, New Delhi, 72nd Ed. New Delhi, S Chand & Company Ltd.

9. Misra, S.K. and V.K. Puri (2012)*Indian Economy 30th Ed.*, New Delhi, Himalaya Publishing House.

10. Misra, S.K. and V.K. Puri , (2016) *Indian Economy 34th Ed.*, Mumbai, Himalaya Publishing House.

11. SinhaYashwant, SrivastavVinayk(2017) Future of Indian Economy, New Delhi, Rupa and Co.

12. *Government of India: Economic Survey*(Annual) New Delhi, Ministry of Finance.

13. R.B.I.: RBI Bulletins.

14. Economic and Political Weekly, Various Issues.

15. Web-sites of Various Govt Departments and Institutions.

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I B.Sc. : II SEMESTER – ECONOMICS

Title of the Course: G 513 DC1.2: **MICRO ECONOMICS –I**

3 hours per week: Total hours: 42

LEARNING OBJECTIVES:

- The objective of the course is to acquaint the students with various market structures within which a firm operates. The course also deals with long-term decision making and market efficiency**.**
- To train students in basic macroeconomic concepts and theories.
- To enable the students to understand the working of the economy at the aggregate level.
- To equip the students with appropriate tools of analysis to deal with issues and problems of macroeconomic policy
- To assist the students to develop suitable solutions for practical policy purpose which are very much expected by the society.

LEARNING OUTCOMES:

On successful completion of the course the student is expected to get

- a thorough understanding of the various theories behind pricing of products and factors in different market environment;
- ability to identify and evaluate the main models of market structures and to appreciate the theories behind policy prescriptions.
- This course in Macroeconomics is expected to develop skill in economic reasoning. By the time, students complete this course, they would know the relevance of government decisions like Wage policy, monetary policy, the RBI policy, etc. in the day to day life.

MODULE- I : MARKET STRUCTURES AND PRODUCT PRICING   -12 Hours

Market - Market Structures - Perfect Competition - Features - Equilibrium of Firm and Industry – Effect of Changes in Demand and Supply on Equilibrium Price- Time Elements (Market period, Short period and long period) - Monopoly-Features and Types - Equilibrium under Monopoly - Control of Monopoly- Discriminating Monopoly – Types- Conditions -Price - Output determination - Mathematical Problems related to simple market model, general equilibrium model, perfect competition, monopoly and discriminatory monopoly

MODULE- II : IMPERFECT COMPITITION

Monopolistic competition - equilibrium - -oligopoly and interdependence - kinked demand model - Cournot's duopoly model, Collusive oligopoly - price-leadership model – dominant firm, cartels, sales maximisation. Contestable markets theory. – Mathematical problems

MODULE: III : FACTOR PRICING

Wages - Nominal and Real Wages - Theories of Wages - Subsistence Theory of wages - Wage fund Theory – Rent- Theories of Rent - Ricardian Theory of Rent- Modern Theory of Rent- Quasi Rent – Theories of Interest - Classical Theory - Loanable Fund theory (Neoclassical theory) Keynes' Liquidity Preference Theory. Profit - Theories of Profit - Dynamic Theory - Innovation Theory - Risk Theory – Uncertainty Bearing Theory.

MODULE: IV : BASIC CONCEPTS OF MACRO ECONOMICS

Meaning- Scope, Uses and Limitations of Macro Economics - National Income -Meaning - definition - concepts of National Income - GNP -GDP - NNP - NDP- NI at Factor cost Personal Income and Disposable Income- Per capita Income (Real and Nominal) - National Income Deflator – Methods of Measuring National Income - Difficulties in Measuring National Income - Circular flow of income – mathematical problems on National income calculation

MODULE: V: THEORIES OF EMPLOYMENT

Meaning and types of Unemployment –Concept of Full Employment - Classical Theory of Employment – Classical Remedies for Unemployment- Say's Law of Markets- Keynesian Theory of Employment - consumption Function: Meaning, Determinants- Investment Function: Meaning of Autonomous and Induced Investment Determinants of Investment, - Multiplier – Operation of Multiplier – Assumptions of Multiplier- Determinants of Multiplier. The Principle of Accelerator – Super-multiplier – mathematical problems on National income determination, consumption function, national income distribution

MODULE: VI: BUSINESS CYCLES

Business Cycles –Meaning– Features - Phases- Causes – Measures to Control Business Cycles. Theories of Business Cycle - Hawtrey's Theory –Hayek's Theory –Schumpeter's Theory Definition of Inflation - Classification of Inflation - Causes - Types of inflation - Demand Pull Inflation, Cost-Push inflation, Mark- up inflation - Effect of inflation- Inflationary Gap – Phillips curve, the trade- off between inflation and unemployment - Deflation-meaning, causes and Effects. Concept of Stagflation

BOOKS FOR REFERENCE

1. Ahuja H.L (2014) *Advanced Economic Theory: Micro Economic Analysis*, 20th Ed., New Delhi, S Chand and Co. Ltd.
2. Burda Michael (2017) Macro Economics, 5th ed., Chennai, Oxford University Press.

3. Chauhan.S.P.S (2010) *Micro Economics: An Advanced Treatise*,PHI.

4. David Romer (2011) Advanced Macroeconomics, Irwin/McGraw-Hill.

5. Deepashree(2011) *Principles Of Micro Economics*, 3rd Ed., Ane Books Pvt.Ltd.

6. Dewett, KK (2012*) Modern Economic Theory,* New Delhi: Suthan Chand.

7. Jhinghan, M.L (2014) *Advanced Economic Theory: Micro and Macro Economics,* 12th Ed., New Delhi, Vrinda Publications (P) Ltd.

8. K KDewett , M H Navalur & K KBahl (2012*) Modern Economic Theory,* New Delhi, Suthan Chand & Company.

9. Lipsey R G and K A Crystal (2011*) Principles of Economics*, 12th edition, New Delhi Oxford University Press.

10. Samuelson P.A and Nordhaus W.D (2017) Economics, 19th Ed., New Delhi, Tata McGraw Hill Publishing Company Ltd.

11. Samuelson PA and Nordhaus WD (2010) *Economics* 19th Ed., Tata Ma.Graw Hill publishing company ltd, New Delhi

12. Seth M.L (2014) Macro Economics, 30th Ed., Agra, Lakshmi Narayan Agarwal Educational Publishers.

13. Shapiro Edward (2016): *Macro-economic analysis,* 5th ed, new delhi, galgotia publications.

14. Vaish M.C.(2010) *Macro Economic Theory*, 14th Ed., New Delhi: Vikas Publishing House.

15. Salvatore Dominick (2009) , Micro Economics Theory and Applications, Oxford University Press Ltd.

16. Koutsoyiannis A (2008) Modern Micro Economics, 2nd edition, Macmillan Press, Hongkong.

17. Mankiw, N. Gregory (2006): Macroeconomics, New York, WH Freeman Ltd.

18. Shapiro Edward (2003), *Macro Economic Analysis,* 5th Ed., New York, Harcourt Brace Jovanovich, Inc .

19. Maddala, G.S., and E. Miller (1989) *Microeconomics: Theory and Applications*, Singapore ,McGraw Hill International Edition.

20. Jingan M.L (1987) *Macro Economic Theory*, New Delhi, Konark Publishers.

21. Bilas, Richard A, *Microeconomic Theory: A Graphical Analysis*, McGraw-Hill Book Co. Kogakusha Co. Ltd.

TITLE OF THE COURSE: G 513 DC2.2: STATISTICS FOR ECONOMICS

3 hours per week: Total hours: 42

COURSE OBJECTIVES:

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

COURSE OUTCOME:

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

- Calculate basic descriptive and inferential statistics.

- Interpret descriptive and inferential statistics.

- Explain the process of hypothesis testing.

MODULE I: DATA COLLECTION   14 Hours

Chapter1:Basic Concepts: Population and Sample, Parameter and Statistic; Data Collection: Primary and Secondary Data, Methods of Collection of Primary Data.

Chapter 2: **Sample Design**: Census method, sample Method, Essentials of Sampling. Sampling Methods – Merits and Limitations of Sampling.

Chapter 3: **Presentation of Data**: Frequency Distribution; Cumulative Frequency; Graphic and Diagrammatic Representation of Data.

MODULE - I1: MEASURES OF CENTRAL TENDENCY AND DISPERSION 14 Hours

Chapter-4:Measures of Central Tendency: Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean Measurement and Applications in Economics

Chapter-5:Measures of Dispersion: Meaning and Significance of Measure of Dispersion- Measurement and Applications of Range , Quartile Deviation, Mean Deviation , Standard Deviation , Variance and Coefficient of Variation, Lorenz Curve

Chapter- 6:Correlation: Meaning and Types of Correlation, Methods of Computation of Correlation Coefficient –Karl Pearson's Method, Spearman's Rank Correlation.

MODULE – III : REGRESSION, TIME SERIES ANALYSIS AND INDEX NUMBERS14 Hours

Chapter- 7: Regression: Method-Regression–Meaning and Importance of Regression Analysis, Simple Regression Lines and Equations and Forecasting (Two Variables Only)

Chapter -8: Time Series: Nature and Decomposition of Time Series -Analysis of Trend -Moving Average Method, Least-Square Method

Chapter -9: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.

REFERENCES:

1. Anderson, Sweeney & Williams: (2002) *Statistics for Business & Economics*, Thomson South-Western, Bangalore.

2. Douglas, A Lind, William G. Marchal and Samuel A. Wathen(2012): *Statistical Techniques in Business and Economics*, 15 th Ed, NewDelhi, TMH.

3. Gupta S P. (2012) *Statistical Methods*, S. Chand and Company, New Delhi.

4. Gupta, S.C. and V. K. Kapoor(2010) *Fundamentals of Mathematical Statistics*,10th Ed, New Delhi, Sultan Chand and Sons.

5. Nagar, A.L. & P.D. Sharma. (1987): *Statistical Methods of Economic Analysis*, S Chand &Co.New Delhi,

6. Pillai R.S.N. and V. Bagavathi(2013) *Statistics: Theory and Practice*, New Delhi, Sulthan Chand.

7. VeerachamyR.(2019): *Quantitative Methods for Economics*, New Age International (P) Ltd., New Delhi.

OEC: SEMESTER II

TITLE OF THE COURSE G 513 OE1.2: ECONOMICS OF BUSINESS ENVIRONMENT

3 hours per week: Total hours: 42

COURSE OBJECTIVES:

- To enable the students to gain knowledge about the various tools, techniques and concepts of business economics.
- To understand the process of decision making by the consumers and producers.

COURSE OUTCOME:

- Acquired the concepts, tools and techniques of economics in analyzing and interpreting the business decisions.
- Developed the insight of the functioning of the economy

MODULE 1: INTRODUCTION TO BUSINESS ECONOMICS14 Hours

Chapter 1: **Nature and scope of business economics**: Nature of Business Economics-Meaning and definitions- Subject matter of business economics-Significance of business economics-Methods –Deductive and Inductive.

Chapter 2:Economic laws and business environment: Nature of economic laws-Factors determining business-Business objectives-Role and responsibilities of a Business Economist.

Chapter 3: **Demand and supply analysis:**Law of diminishing marginal utility-Determinants of demand -Law of demand- - Price elasticity of demand-Law of supply-Elasticity of supply-Demand Forecasting-meaning and significant.

Practicum: 1. Prepare a demand schedule based on selected product in the market.

2. Group discussion on human and non- human factors of business

MODULE 2: PRODUCTION AND MARKET   14 Hours

Chapter 4: Production analysis: Production function-Law of variable proportion

-Laws of returns to scale. Marginal rate of substitution-isoquant curve.

Chapter 5:Market analysis: Perfect competition- features-Monopoly- features-Monopolistic competition – features-Price discrimination-meaning and types-Oligopoly -features

Chapter 6: Business cycles: Meaning and features- Phases of business cycle-Causes of business cycle-Control of business cycle

Practicum: 1. Group discussion on abuses of monopoly

2. Visit to a firm to study oligopolistic trends

MODULE 3: DEMAND FORECASTING AND CAPITAL BUDGETING   14 Hours

Chapter 7: Demand forecasting: Meaning and objectives-Methods of demand forecasting-Criteria of a good forecasting method

Chapter 8: Capital budgeting: Meaning of capital budgeting: Need for capital budgeting: Steps involved in capital budgeting: Methods of capital budgeting

Chapter 9: Investment management: Profit planning-Risk analysis-Techniques of strategic management.

Practicum: 1. Prepare a strategic roadmap for a hypothetical organization

2. Conduct a case study to explain simulation technique of demand forecasting

REFERENCES:

1. AhujaH.L(2019): Business Economics, Sultanchand& Sons, New Delhi

2. Dwivedi D.N (2019): Managerial Economics, Vikas Publishing House Pvt. Ltd., New Delhi.

3. KoutsoyiannisA(2016) *Modern Micro Economics*,2nd edition, London, Macmillan Press Ltd.

4. Lipsey R G and K A Crystal (2011*)* Principles of Economics, 12th edition, New Delhi OUP.

5. Mehta P.L (2018): Managerial Economics, Sultanchand& Sons, New Delhi.

6. MithaniD.M.(2019): Managerial Economics, Himalaya Publishing House, Mumbai.

7. Peterso H. Craig and W.Cris Lewis (2018): Managerial Economics, Pearson Education, Singapore.

8. Pyndyck, R.S., and D.L. Rubinfeld (2012) *Microeconomics*, New Delhi, Pearson Education Singapore Pvt. Ltd.

9. Salvotore Dominic (2017): Managerial Economics, Macgraw Hill, New York.

10. Sundharam K.P.M. &Sundharam E.N. (2018) Business Economics, Sultanchand& Sons, New Delhi.

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