St Aloysius College (Autonomous)
Mangaluru

Re-accredited by NAAC "A" Grade

Course structure and syllabus of

B.Sc.

ECONOMICS

Under NEP Regulations, 2021

ST ALOYSIUS COLLEGE(AUTONOMOUS)
MANGALURU – 575 003
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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:

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: 6.24(2021-22)
2. Decision of the Academic Council meeting held on 09-07-2022 vide
Agenda No: 14
3. Office Notification dated 21-02-2022
4. Office Notification dated 17-08-2022

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& 09-07-2022 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 MrAlwyn Stephen Misquith MrReji P. John MrsKavitha B
c)	**Subject expert**	Dr Jayakumar Shetty Head, Department of Economics, SDM College, Ujire-574240 Email: ajkshetty@sdmcujire.in Mob: 9448154001 DrPurushothama K V Principal, Pompei College, Kinnigoli Aikala- 574141 Email: purushothamakv@yahoo.co.in Mob:8217292402
d)	**Vice-Chancellor's Nominee** **(10.12.2019)**	DrLaxminarayanaBhat 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 PoonamAnandNikethan,, Ground Floor, 8th cross, Gandhinagar,Urwa Mangalore - 575003 Email: arunanjali@yahoo.com Mob: 9019787658
f)	**Meritorious Alumnus**	Dr Prakash Rao Head, Deparatment of Economics PoornaPrajna College, Udupi. Email: rao.pra@gmail.com Mob:9448027072
g)	**Student Representative**	1. MsDafne Julia Menezes Reg No: 193071, III B.Sc 2 .MsJoicyOlvita Pinto, Reg No; 191321, III B. A

The BoS in Economics was held on 18 June 2022.

Sl. No	Category	Name/Address
a)	**Chairperson**	Dr Priya S. Shetty
b)	**Members of the Department**	Dr Norbert Lobo MrAlwyn Stephen Misquith MrReji P. John MrsKavitha B
c)	**Subject expert**	Dr Jayakumar Shetty Head, Department of Economics, SDM College, Ujire-574240
d)	**Vice-Chancellor's Nominee**	DrLaxminarayanaBhat Principal Besant Evening College, Mangalore
e)	**Representative from Industry / Corporate Sector / Allied Area**	Mr Norbert M Shenoy Managing Director, Arunanjali Securities PoonamAnandNikethan,, Ground Floor, 8th cross, Gandhinagar,Urwa Mangalore - 575003
f)	**Meritorious Alumnus**	Dr Prakash Rao Head, Deparatment of Economics PoornaPrajna College, Udupi.
g)	**Student Representative**	1. MsDafne Julia Menezes Reg No: 193071 III B.Sc 2 .MsJoicyOlvita 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 I	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 I	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
SEMESTER III							
G 513 DC1.3	MICRO ECONOMICS II	DSC	3+0+0	60	40	100	3
G 513 DC2.3	BASIC ECONOMETRICS	DSC	3+0+0	60	40	100	3
G 513 OE1.3	ECONOMICS OF INSURANCE	OEC	3+0+0	60	40	100	3
Total credit							9
SEMESTER IV							
G 513 DC1.4	MACRO ECONOMICS II	DSC	3+0+0	60	40	100	3
G 513 DC2.4	APPLIED ECONOMETRICS	DSC	3+0+0	60	40	100	3
G 513 OE1.4	ENTREPRENEURIAL ECONOMICS	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 **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

(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 SIX OF THE FOLLOWING: 6X5=30

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

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

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

PART B: ANSWER ANY FOUR OF THE FOLLOWING: 4X5=20

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

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

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

TOTAL = 50 marks/ 1.30 hours duration

TITLE OF THE COURSE: G 513 DC1.1: MICRO ECONOMICS I
3 hours per week: Total hours: 42

COURSE 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 OUTCOME:

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

1. Analyse the economic behaviour of the consumer and thefirm.
2. Explain the relationship between various variables such as Input and output, costand 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, equi-marginal 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, iso-costline, 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.

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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.

TITLE OF THE COURSE: G 513 DC 2.1: MATHEMATICS FOR ECONOMICS
3 hours per week: Total hours: 42

COURSE OBJECTIVES:

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

- To train them to use mathematical techniques in economics.

COURSE OUTCOME:

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 multiplevariables.

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 setoperations.

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 LogarithmicFunctions.

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 differentialequations.

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

TITLE OF THE PAPER:G 513 OE 1.1: DEVELOPMENT STUDIES
3 hours per week: Total: 42 hours

COURSE 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.

COURSE 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 I: 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.

Chapter3:Current Development Challenges- Poverty-Inequality- Migration- Conflict

MODULE II: 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

Chapter6: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 III: THEORIES AND CURRENT ISSUES IN DEVELOPMENT   14Hours

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

Chapter8: **The Industrial Revolution**: Genesis and Spread-International specialization of Labour/Industry- Industrial Labour ILO and its activities to promote labour standards

Chapter9: **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 NarainAgrawal 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. DebrajRay(1998)Development Economics, New Jersey, Princeton University Press.

6. JhinganM.L.(2011)*Economics of Development and Planning*, 40th Ed, New Delhi, Vrinda Publications

7. Lekhi, R.K and JoginderSingh(2014)Economics of Development and Planning, Ludhiana, Kalyani Publishers.

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

9. Meir, G.M(2000)*Leading Issues in Economic Development*7th 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. ShankaranS(2004)*Environmental Economics*, 3rd Ed, Madras, Margham Publications,

14. Todaro M.P(1985)*Economic Development in the Third World*, New York,Longman

15. Todaro M.P, and Stepan C Smith (2006) *Economic Development*, New York, Addison – Wesley Series in Economics.

16. Recent Human Development Reports

17 SubrataGhatakh (2003), Introduction to Development Economics, Routledge

18 DaronAcemoglu and James Robinson, (1994), Economic Origins of Dictatorship and Democracy, Cambridge University Press

B.Sc SEMESTER II
TITLE OF THE COURSE: G 513 DC1.2: MACRO ECONOMICS I
3 hours per week: Total hours: 42

COURSE 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 OUTCOME:

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

- Explain the concept of National Income and methods of itsestimation

- Analyse the relationship between Macroeconomicvariables

- Understand the determination of income and employment under Classical andKeynesian 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 flowvariables.

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 MoneyMarket.

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 AcceleratorAnalysis -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; Monetarypolicy 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.

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7. DewettKK , M H Navalur & Bahl KK (2012) Modern Economic Theory, New Delhi, Suthan Chand & Company.

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

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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, Galgotiapublications.

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

B.Sc SEMESTERII

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 understandeconomic problems.

COURSE OUTCOME:

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

1. Calculate basic descriptive and inferentialstatistics.
2. Interpret descriptive and inferential statistics.
3. Explain the process of hypothesistesting.

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- R**egression**–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-SquareMethod.

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 andContinuous.

Chapter – 8: Probability Distributions - Probability Density Functions and Cumulative Distribution Functions – Expected values and Moments - TheBinomial 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.

REFERENCES:

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   V. K. Kapoor(2010) 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.

TITLE OF THE COURSE: G 513 OE 1.2: ECONOMICS OF BUSINESS ENVIRONMENT

3 hours per week: Total: 42 hours

COURSE 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 Policies

COURSE OUTCOME:

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 ENVIRONMENT14Hours

Chapter1: Introduction: Meaning and definition, objectives, importance and uses of study of businessenvironment. 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 II: NON-ECONOMIC ENVIRONMENT14 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 III: 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-Contact law- Competition policy and law- Patents& Trademarks- Industrial Policy-An overview Labor 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
(latest policies 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.

REFERENCES:

1. Adhikari M. (2018): Economic Environment of Business, Sulthan Chand and Sons, New Delhi.
2. Agarwal, Raj (2018): Business Environment, Excel Publications, New Delhi.
3. Fernado, A C.(2011):Business Environment, Pearson Education India, Delhi.
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.

B.Sc. SEMESTER III

TITLE OF THE COURSE: G 513 DC1.3: MICRO ECONOMCS II
3 hours per week: Total hours: 42

COURSE 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.
- To enable students to understand different types of market structures and their working.
- To help students to understand the concept of distribution.

COURSE OUTCOMES:

CO 1:Identify the facets of an economic problem.
CO 2:Learn basic economic concepts and terms.
CO 3:Explain the operation of a market system.
CO 4:Analyze the production and cost relationship of a business firm.
CO 5:Evaluate the market decisions under different structure.
CO 6:Use basic cost benefit calculations as a means of decision making.

MODULE I: Basic Concepts in Economics: -14 Hours

Chapter 1: Nature and Scope of Micro Economics: Meaning, definitions, nature, scope, uses and limitations of micro economics.Concepts of equilibrium - Stable and unstable, static and dynamic, partial and general.

Chapter 2: Thinking like Economist: Thinking like an economist, the economist as scientist, the economist as policy adviser, Economic policy.

Chapter 3: Economic Systems: Types of economic activities- organization of economic activities- Circular flow of economic activities.Evaluation of the present economic system.

MODULE II: Theories of Distribution: - 14Hours

Chapter 4: Theories of Rent: Theories of Distribution: Functional and Personal Distribution- Rent: Ricardian theory of rent – Modern Theory of Rent – Concept of Quasi-rent.

Chapter 5: Theories of Wages and Interest: The marginal productivity theory of wages, Interest: Loanable Funds Theory of Interest – Keynes' Liquidity Preference Theory of Interest.

Chapter 6: Theories of Profit: The Innovations Theory of Profit – The Dynamic Theory of Profit - The Risk theory of profit - Uncertainty Theory of Profit.

MODULE III: Market Theories &Behavioural Economics: - 14Hours

Chapter 7: Market Theories: Perfect and imperfect markets,Kinked demand curve, Cournot's and Bertrand model, price leadership and cartels.

Chapter 8: Uncertainty Economics: Individual behavior toward risk, Expected utility and uncertainty equivalence approaches, N-M utility index, prospect theory, risk and risk aversion, sensitivity analysis. Gambling and insurance, cost and risk, risk pooling and risk spreading.

Chapter 9: Behavioural Economics: Asymmetric information: market for lemons, moral hazard and adverse selection, signaling and screening. The efficient market hypothesis, role of time and emotions in economic decision: role of constraints and information, satisficing and bounded rationality.

REFERENCES:

1. AhujaH.L(2009) *Principles of Micro Economics*, 17th Ed, New Delhi, S Chand and Co. Ltd.

2. AhujaH.L(2014) *Advanced Economic Theory : Micro Economic Analysis*. 21th Ed. New Delhi: S Chand and Co. Ltd.

3. Case, K. E and Oster. S (2017) *Principles of Economics*, New Delhi, Pearson Education Pvt. Ltd.

4. Chauhan(2009) Macro economics part II, New Delhi, PHI learning Pvt. Ltd.

5. Dewett, KK (2012*) Modern Economic Theory* New Delhi, Suthan Chand & Company.

6. Jhinghan, M.L (2004): *Advanced Economic Theory: Micro and Macro Economics.* 12th Ed.. New Delhi: Vrinda Publications (P) Ltd.

7. Jhinghan, M.L (2016) Advanced *Economic Theory: Micro and Macro Economics,* 16th Ed., New Delhi,Vrinda Publications (P) Ltd.

8. KoutsoyiannisA(1983) *: Modern Micro Economics*,2nd edition, Hongkong, Macmillan Press Ltd.

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

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

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

12. Salvatore Dominick (2009) , *Micro Economics- Theory and Applications*, Oxford University Press.

13. Samuelson PA and Nordhaus WD(2009): *Economics* 19th Ed. , Tata Ma.Graw Hill Publishing Company ltd, New Delhi

14. Seth ML(1996): *Principles of Economics13th Ed,* Agra, Lakshmi NarainAgarwal Education Publishers.

15. Varian, H.R.(2019), *Intermediate Microeconomics: A Modern Approach*, New Delhi, Affiliated East-West Press.

TITLE OF THE COURSE: G 513 DC2.3: BASIC ECONOMETRICS

3 hours per week: Total hours: 42

COURSE OBJECTIVES:

- To equip the students with basic theory of econometrics and relevant applications of the methods.

COURSE OUTCOME:

CO 1: To know the basic knowledge of Econometrics.

CO 2:To understand the concepts like multicollinearity, heteroscedasticity. Autocorrelation and their applications.

CO 3:Helps the students to solve analytical problems related to regression.

MODULE I: NATURE OF ECONOMETRICS   14Hours

Chapter 1: Introductory to Econometrics: Nature, meaning and scope of econometrics, Relationship between Economic Theory, Statistics, Mathematics   and Econometrics – Goals of Econometrics - Methodology of Econometrics .

Chapter 2: Linear Regression Model: Two variable linear regression model —assumptions, estimation through OLS, properties of estimators — Mean and Variance of the Ordinary Least-squares Parameters -Finding Out Estimators Using Cramer's Rule - Gauss-Markov theorem - Measure of goodness of it – Adjusted & Multiple R^2 – The Sampling Distribution of the Least Squares Estimates – Mathematical Problems Related to Estimators Using Normal Equations and Cramer's Rule.

Chapter 3: Testing of Hypothesis: Type 1 and Type 2 Error - Standard Error Test, Z Test, Students t Test, F test and Chow test, chi-square test - Interpretation of Model – Practical's – using Excel and SPSS.

MODULE II: REGRESSION ANALYSIS   **14 Hours**

Chapter 4 : Classical Linear Regression Model: Meaning, Assumption- The Assumption of Randomness, zero mean, constant variance and normality of the disturbance variable –

Chapter 5: Homoscedasticity: Assumptions and Consequences of the Violation of Homoscedasticity - Heteroscedasticity – Reasons, Tests – Mathematical Problems related to Spearman's Rank Correlation, Goldfeld-Quandt& BPG - Generalized Least Square: Derivation from classical linear regression to GLS -Mean and Variance of Generalised least square – Difference between OLS and GLS

Chapter 6: Autocorrelation: Nature, Mean and Variance, tests – Mathematical problems related to Run ,Von – Neumann Ratio and Durbin – Watson test , consequences and remedial measures.

MODULE III: MULTIPLE REGRESSION MODEL 14 Hours

Chapter 7: Multiple Regression Model: Meaning, Assumptions, Mean and Variance – Derivation of Normal Equations - General Linear Regression Model —— Assumptions, estimation and properties of estimators.

Chapter 8: Multicollinearity: Nature, test, consequences and remedial measures – Practicals – using SPSS and AMOS

Chapter 9: Non – Linear Equations: Estimation of non-linear equations and some specific functions like parabolic, exponential, geometric, hyperbolic, modified exponential; geometry and logistic functions.

REFERENCES:

1. Baltagi, B.H. (1998) *Econometrics*, New York, Springer.
2. Bridge, J.L (1971) *Applied Econometrics*, North Holland Publishing Co.
3. C R Kothari, (1988) *Research Methodology: Methods and Techniques*, 2nd Ed., New Age International Ltd.
4. Green, W. (2000) *Econometrics*, New Delhi, Prentice Hall of India.
5. Gujarati, D.N (2016) *Basic Econometrics*, 5th Ed., New Delhi, McGraw Hill.
6. Hatekar N. R (2016) *Econometrics,* New Delhi, Sage Publications India Pvt. Limited.

7. Intrilligator, M.D. and Z. Griliches (2017) *Handbook of Econometrics*, Vol. I & II, North Holland, Amsterda.

8. Johnston, J. (1991) *Econometric Methods*3rdEdn., London, McGraw Hill.

9. Johnston, J. and J. Di Nardo (1997) *Econometric Methods*, McGraw Hill.

10. Kidder, L. H. and Judd, C.M (1986) *Research Method in Social Relations*, CBS College Publishing.

11. Kmenta, J. (1997) *Elements of Econometrics*, New York, University of Michigan Press.

12. Koutsoyannis, A. (1977) *Theory of Econometrics*, 2nd Ed., London,The Macmillan Press Ltd.

13. Kurian, C. T (1973) *A Guide to Research in Economics*, Madras,Sangam Publishers.

14. Labovitz, S and Hagdedorn, R (1971) *Introduction to Social Science Research*, New York, Mc.Graw Hill Company .

15. Maddala, G.S. (1997) *Econometrics*, New York, McGraw Hill.

16. Pindyek, R.S. and D.L. Rubinfield (1976) *Econometric Models and Economic Forecasts*, Tokyo, McGraw Hill-Kogakusha.

17. Theil, H. (1981) *Introduction to Econometrics*, New Delhi, Prentice Hall of India.

B.Sc. Economics OEC: SEMESTER III
TITLE OF THE COURSE:G 513 OE 1.3: ECONOMICS OF INSURANCE
3hours per week: Total: 42 hours

COURSE OBJECTIVES:

- This course attempts to give a fairly comprehensive view of the insurance the undergraduate students in Economics.
- The objective of the subject is to make the students acquainted with the insurance sector.

COURSE OUTCOME:

After the successful completion of the course, the student will be able to;

- Understand various types of Insurance
- Understand various risks and Benefits of Insurance

MODULE I: INTRODUCTION TO INSURANCE AND RISK MANAGEMENT   14Hours

Chapter I: Introduction to Insurance: Meaning and Definition of Insurance- Features of Insurance -Functions of insurance – Types of Insurance –Fundamental Principles of Insurance -Importance of Insurance - Profile of Insurance Companies in India – General Insurance - Classification of General Insurance - Insurance and Economic Development.

Chapter 2: Introduction to Risk Management: Definition of Risk – Selection of Risk or Underwriting of Risk - Classification of risk - Tools of the Risk - Risk Management Process- Determination of Objectives- Identifying Risk exposures - Evaluating Risks - Consideration of Alternatives and Selection of the Risk Treatment Device.

Chapter 3: Essentials of Insurance Contract: Essentials of a Valid Contract – Is Insurance a Contract - Principles of Insurable Interest – Principles of Contributions .

MODULE II: LIFE INSURANCE AND HEALTH INSURANCE   14 Hours

Chapter 4: Life Insurance: Meaning and Definition of Life insurance - - Features of Life Insurance – Advantages of Life Insurance-Fundamental Principles of Life Insurance-Procedure for effecting Life Insurance

Chapter 5: Meaning and Definition of Health Insurance- Types of Health Insurance Policies – Health Insurance schemes in India

Chapter 6: –Plans of Life Insurance -Individual plans - Group Insurance plans-Pension plans- Premium and its computation -Valuation and Distribution of surplus.

MODULE III :LEGAL DIMENSIONS OF INSURANCE AND INSURANCE MARKETING 14 Hours

Chapter 7: Legal Dimensions of Insurance and Growth of Insurance Business in India: Introduction- The Insurance Act, 1938 – Life Insurance Corporation Act, 1956 – General Insurance Business (Nationalisation) Act, 1972 – Consumer ProtectionAct, 1986 –Insurance Regulation and Development Authority (IRDA) - Growth ofGeneral Insurance after Nationalisation -Issues concerning Growth of Insurance -Future Potential.

Chapter 8: Insurance Marketing: Introduction - Concept of Insurance Market - Concept of Insurance Marketing- Marketing Strategies of Insurance Companies - Benefits of Bank Assurance –Benefits of Bank Assurance – Steps in Personal Selling or Selling Process.

Chapter 9: Insurance and Economic Development: Risk Management and Insurance in Economic Development-Insurance Institutions as Financial Intermediaries- Insurance Institutions as Investment Institutions-Insurance Institutions in Indian Capital Market.

REFERENCES:

1. Bodla, B.S., Garg, M.C.and Singh K.R. (2004), *Insurance, Fundamentals, Environment, Procedures*, Deep and Deep Publications Pvt Limited, New Delhi.

2. Dharmaraj,E. (2009), *Elements of Insurance*, SIMRES Publishers, Chennai.

3. Dionne, Georges, Harrington, Scott E. (Eds.)(1992), *Foundations of Insurance Economics, Readings in Economics and Finance*, Springer Netherlands

4. Emmett J.Vaughan and Therese Vaughan, (2007), *Fundamentals of Risk and Insurance*, Pasupathi Printers P.Ltd, New Delhi.

5. Howard C Kunreuther (2013), *Insurance and Behavioural Economics*, Cambridge Univerity Press.

6. JyotsnaSethi and Nishwan Bhatia, (2008), *Elements of Banking and Insurance*,PHI Learning Pvt Limited, New Delhi.

7. K. Borch, Knut K. AaseAndAgnarSandmo (1990), *Economics Of Insurance*, North Holland, Bergen.

8. Kanika Mishra, (2010), *Fundamental of Life Insurance Theories and Applications*, PHI Learning Pvt Limited, New Delhi.

9. MadhukarPawar, R. (2012), *Fundamentals of Insurance*, ChandralokPrakashan, Kanpur.

10. Muthy, A (2006), *Elements of Insurance*, Margham Publications, Chennai.

11. Periyasamy, P. (2005), *Principles and Practice of Insurance*, Himalaya Publishing House, Mumbai

12. Zweifel, Peter, Eisen, Roland (2012), *Insurance Economics*, Springer-Verlag, Berlin Heidelberg

B.Sc SEMESTER IV

TITLE OF THE COURSE: G 513 DC1.4: MACRO ECONOMICS II

3 hours per week: Total hours: 42

COURSE OBJECTIVES:

- 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.

COURSE OUTCOME:

CO 1: 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;

CO 2:Ability to identify and evaluate the main models of market structures and to appreciate the theories behind policy prescriptions.

CO 3: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: MACROECONOMIC CONCEPTS: 14 Hours   -

Chapter 1: Macro economy: Macro Economics - Meaning – Branches of Macro Economics – Scope, Uses & Limitations of Macro Economics –Concept of Welfare Economics- Social welfare and Economic welfare-Problems in Measuring Welfare- Role of Value judgments in Welfare Economics.

Chapter 2: Monetary Economy: Characteristics, Functions of money, the demand for money, the supply of money, credit creation.

Chapter 3: Inflation: Definition of inflation - Classification of Inflation - Types of inflation - Demand Pull Inflation, Cost-Push inflation, Mark- up inflation – causes and Effects of inflation- calculation of inflation rate- Inflationary Gap – Deflation-meaning, causes and Effects.

MODULE II: MACROECONOMIC CHALLENGES AND POLICIES   14 Hours

Chapter 4: Macroeconomic Challenges: Meaning and types, causes, measurement of Unemployment. Economic growth, Business Cycles –Meaning– Features, types - Phases- causes and effects.

Chapter 5: Fiscal Policy: Public finance: meaning, subject matter, public finance vs private finance, fiscal function and role of government: allocation, distribution and stabilisation. Characteristics of public goods, rationale of public provision of public goods.

Chapter 6: Public Finance: Sources of Public Revenue – Taxes – Canons of Taxation – Classification of Taxes. Public expenditure - Causes for Increasing Public Expenditure – Canons of Public Expenditure.

MODULE III: PUBLIC POLICY AND GLOBALISATION: 14 Hours

Chapter 7: Poverty and Public Policy: Meaning, measurement and types of poverty, poverty alleviation strategies in India.

Chapter 8: International Trade: The economic basis for trade- absolute and comparative advantage, terms of trade, exchange rates, Trade barriers- tariffs, subsidies and quotas, Balance of payments: the current and capital account.

Chapter 9: Globalisation: meaning, importance, pros and cons of globalisation.

REFERENCES:

1. Ahuja H.L. (1988) *Modern Economics*, New Delhi, S Chand and Co.Ltd.
2. Ahuja, H.L(2013) *Macro Economics* : Theory and Policy., New Delhi, S Chnad and Co Ltd.
3. Ahuja, H.L(2017), *Macro Economics* : Theory and Policy., New Delhi, S Chand and Co Ltd.
4. Burda Michael (2017) *Macro Economics*, 5th ed., Chennai, Oxford University Press.
5. David Romer (2011) *Advanced Macro Economics*, Irwin/McGraw-Hill.
6. Deepashree(2011) *Principles Of Micro Economics*, 3rd Ed., Ane Books Pvt.Ltd.
7. Dornbsch, Fischer, Startz(2017), *Macroeconomics,* 11th Ed, Chennai, McGraw Hill education Pvt Ltd.
8. Jhinghan, M.L (2014) *Advanced Economic Theory: Micro and Macro Economics,* 12th Ed., New Delhi, Vrinda Publications (P) Ltd.
9. Jingan M.L.(1987) *Macro Economic- Theory*. New Delhi, Konark Publishers.

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

11. KoutsoyiannisA(1983) *Modern Micro Economics*, 2nd edition, Hongkong, Macmillan Press.

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

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14. Samuelson P.A and NordhausW.D(2009) *Economics*19th Ed. New Delhi,TataMcGraw Hill Publishing Company Ltd.

15. Seth ,M L(2009):*Micro and Macro Economics,* Agra, Lakshmi Narayan Agarwal Education Publishers.

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18. Shapiro Edward (2016):   *Macro Economic Analysis,* 5th Ed, New Delhi, Galgotia Publications.

19. SoumyenSikdar(2009) *Principles of Macro Economics*, New Delhi, Oxford University Press.

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

TITLE OF THE COURSE: G 513 DC 2.4: APPLIED ECONOMETRICS

3 hours per week: Total hours: 42

COURSE OBJECTIVES:

- To equip the students with application of Econometrics and the methods in real life problems.

COURSE OUTCOME:

CO 1:To know the basic knowledge of Econometrics.

CO 2:To understand the dynamic econometric models.

CO 3:Helps to improve analytical skills.

MODULE I: DYNAMIC ECONOMETRIC AND SIMULTANEOUS EQUATIONS MODEL 14 Hours

Chapter 1: Dynamic Econometric Model: Autoregressive and distributed lag models —Koyck's approach, partial adjustment and adaptive expectations model, instrumental variables.

Chapter 2: Autocorrelation : Problem of auto-correlation ⸺ Application; Almon approach to distributed-lag models, Introduction to Time Series Analysis.

Chapter 3: Simultaneous Equations Model : Nature of simultaneous equations, simultaneous equations bias and inconsistencies of OLS estimation – the identification problem, rules of identification, Indirect Least Square Methods (ILS) , Method of Two stage least squares(2SLS).

MODULE II : LOGISTIC REGRESSION MODEL   14 Hours

Chapter 4: Dummy variable and Non – Linear Equations: Testing structural stability of regression models. Dummy variable trap,   Regression with dummy independent variables ⸺ ANOVA and ANCOVA – Dummy Variable as an alternative to the Chow Test – Dummy Variable in Seasonal Analysis – Mathematical Problems Related to Dummy variable.

Chapter 5: Logistic Model: Concepts related to logistic model - Assumptions of logistic regression - Logit and Logistic transformation- Model for Logistic Model- Inference for logistic regression-Confidence interval and Significance test – Fitting regression model

Chapter 6 : Multiple Logistic Model: Meaning, Methods, Assumptions, Model diagnostics and Running model on SPSS.

MODULE III: RESEARCH METHODOLOGY   14 Hours

Chapter 7 : Introduction to Research Methodology: The Meaning of 'Research' – Specific Features of Research in Social Sciences as Opposed to Physical and Natural Sciences – Objectivity in Research - Basic Categories In Scientific Method – Facts – Concepts – Causality – Uncertainty – Probability. Steps in Research – Formulation of a Research problem – Guiding principles in the choice of a Research topic.

Chapter 8: Interpretative Paradigms of Qualitative Research: Strategies of Qualitative Enquiry – Methods of Qualitative Research – PRA and RRA Techniques- Compilation of Qualitative Data- Formatting and Processing of Qualitative Data – Analysis and Presentation of Qualitative Data.

Chapter 9: Game Theory and its Applications The 2-person, Zero sum game – Nash Equilibrium – Prisoners' Dilemma - Significance and Limitations of Game Theory – Formation of Input output model and application in Economic analysis.

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1. Baltagi, B.H. (1998) *Econometrics*, New York, Springer.
2. Bridge, J.L (1971) *Applied Econometrics*, North Holland Publishing Co.
3. C R Kothari, (1988) *Research Methodology: Methods and Techniques*, 2nd Ed., New Age International Ltd.
4. Green, W. (2000) *Econometrics*, New Delhi, Prentice Hall of India.
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8. Johnston, J. (1991) *Econometric Methods*3rdEdn., London, McGraw Hill.
9. Johnston, J. and J. Di Nardo (1997) *Econometric Methods*, McGraw Hill.
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17. Theil, H. (1981) *Introduction to Econometrics*, New Delhi, Prentice Hall of India.

TITLE OF THE COURSE: G 513 OE 1.4: ENTREPRENEURIAL ECONOMICS

3hours per week: Total: 42 hours

COURSE OBJECTIVES:

- To provide knowledge about the Entrepreneurship
- To equip the students to understand the Entrepreneurial Environment

COURSE OUTCOME: After the successful completion of the course, the student will be able to;

- Understand various concepts of entrepreneurship
- Absorb Skills of entrepreneurship
- Understand various sources of financing project

MODULE I: INTRODUCTION TO ENTREPRENEUR   14 Hours

Chapter –I: Entrepreneur–meaning and definition –Nature of Entrepreneur- Risk faced by an Entrepreneur–Qualities of an Entrepreneur - Functions -and kinds of Entrepreneurs-Role of Entrepreneur-Difference between Entrepreneur and manager – Case study.

Chapter -2 Entrepreneurial Class: Societal Perspective of Entrepreneurial growth – Socio-Economic variables of Entrepreneurs- Socio-Economic origins of Entrepreneurship in India - Case study.

Chapter-3 Economic System and Entrepreneurial Behaviour: Nature of Economic System-Determinants of Economic System-Criteria for Economic System-Capitalism –Features of Capitalism-Merits of Capitalism-Limitation of Capitalism-Socialism –Definition of Socialism-Features of Socialism-Merits of Socialism-Limitation of Socialism-Mixed Economy –Features of Mixed Economy- Economic System and Entrepreneurial Behaviour-Case Study

MODULE   II: THEORIES OF ENTREPRENEURSHIP AND ENTREPRENEURIAL ENVIRONMENT   14Hours

Chapter-4:Entrepreneurship: Concept of Entrepreneurship-Definition of Entrepreneurship-Characteristics of Entrepreneurship-Entrepreneur and Entrepreneurship- Intrapreneurship-Economic and Social Benefits of Entrepreneurship-Role of Entrepreneurship in Developing Economy –Barriers of Entrepreneurship-Case study.

Chapter-5: Theories of Entrepreneurship: Innovation Theory –Need for Achievement Theory –Critical Evaluation –Status Withdrawal Theory - Critical Evaluation-Theory of Social Change - Critical Evaluation-Theory of Social Behaviour-Critical Evaluation-Theory of Leadership - Critical Evaluation-Theory of Systematic Innovation - Critical Evaluation-Case study.

Chapter-6: Entrepreneurial Environment: Political Environment-Legal Environment-Economic Environment-Technological Environment-Social Environment-Cultural Environment-International Environment-Case Study.

MODULE-III: SMALL SCALE INDUSTRY AND FINANCIAL ANALYSIS   14 Hours

Chapter 7: Steps for Starting a Small Scale Industry - selection of types of organization -Export and Import - State Trading Corporation - Liberalization - Privatization- Small Scale Industry - Problems and sickness of small scale industry - Government Policy.

Chapter 8: Women Entrepreneur - Concept of women entrepreneur - Growth and Development of entrepreneurs - Functions - Rural women entrepreneurs -Problems of Women Entrepreneur - Role of Women's Association.

Chapter 9: Financial Analysis - Social Cost and Benefit Analysis - Sources of Project Finance - Institutions helping entrepreneurs - Role of Commercial Banks -New Entrepreneurial Development Agencies

REFERENCES:

1. Bhatia B.S. and Batra G.S.(2006)"*Entrepreneurers and Small BusinessManagement*", Regal Publications Kerala.

2. CharantimathP.M.(2005)."*Entrepreneurship Development in Small Business Enterprises*", Publisher, Pearson Education India.

3. Desai, Vasant (2013)"*Dynamics of Entrepreneurship Development in Management*", Himalayan Publication,New Delhi

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6. M.B.Shukla (2009): "*Entrepreneurship and Small Business Management* ", KitabMahal, Delhi.

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